2017 ANNUAL OPERATION & MAINTENANCE (O&M) AND MONITORING REPORT AREA OF CONTAMINATION 50

FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MA

DECEMBER 2018

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2017 ANNUAL

OPERATION & MAINTENANCE (O&M)

AND MONITORING REPORT

AREA OF CONTAMINATION 50

Devens, Massachusetts

December 2018

CERTIFICATION:

I hereby certify that the enclosed Report, shown and marked in this submittal, is that proposed to be incorporated with Contract Number W912WJ-15-C-0002. This document was prepared in accordance with the U.S. Army Corps of Engineers (USACE) Scope of Work and is hereby submitted for Government approval.

Reviewed By:

12/19/18

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TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION 1-1
1.1 PURPOSE AND OBJECTIVES 1-1
1.2 SITE DESCRIPTION AND HISTORY 1-1
1.3 SITE HYDROGEOLOGY 1-4
1.4 REMEDIAL SYSTEM OPERATIONS AND MODIFICATIONS 1-4

2.0 REMEDIAL SYSTEM 2-1
2.1 ENHANCED REDUCTIVE DECHLORINATION (ERD) SYSTEM 2-1
2.1.1 Area 1 2-1
2.1.2 Area 3 2-2
2.1.3 Area 4 2-2
2.1.4 Area 4/5 2-2
2.1.5 Area 5 2-2
2.2 IN-WELL STRIPPING SYSTEM 2-3

3.0 LONG-TERM MONITORING EVENT METHODOLOGY 3-1
3.1 GROUNDWATER SAMPLING AND ANALYSIS 3-1
3.2 DECONTAMINATION PROCEDURES 3-1
3.3 INVESTIGATIVE-DERIVED WASTE HANDLING 3-2
3.4 LONG-TERM MONITORING EVENTS 3-2
3.4.1 Monitoring Well Inspection 3-2
3.4.2 Water Level Measurements 3-2
3.5 WELL MAINTENANCE ACTIVITIES 3-3

4.0 GROUNDWATER MONITORING RESULTS 4-1
4.1 GROUNDWATER CHEMISTRY FOR MONITORING EVENTS 4-1
4.1.1 Field Parameters 4-1
4.1.2 Volatile Organic Compounds 4-2
4.1.3 Inorganic Metals 4-4
4.1.4 Other Analytes 4-6
4.1.5 Data Evaluation Summary 4-7
4.2 QUALITY ASSURANCE/QUALITY CONTROL 4-8
4.3 LABORATORY AND FIELD CORRECTIVE ACTIONS 4-8

5.0 LAND-USE CONTROL MONITORING 5-1
5.1 ON-SITE INSPECTIONS 5-2
5.2 LAND-USE CONTROL INTERVIEW 5-2
5.3 LAND-USE CONTROL MONITORING SUMMARY 5-3

6.0 SUMMARY 6-1

7.0 REFERENCES 7-1

FIGURES

Figure 1-1 Site Location, AOC 50
Figure 1-2 Site Layout, AOC 50
Figure 1-3 Site Layout, Source Area, AOC 50
Figure 2-1 ERD Injection Locations, July 2017
Figure 3-1 Groundwater Contour Map, AOC 50, May 15, 2017
Figure 3-2 Groundwater Contour Map, AOC 50, October 2, 2017
Figure 4-1 Dissolved Oxygen and Oxidation Reduction Potential Trend Graphs
Figure 4-2 Tetrachloroethene Concentrations in Groundwater, 2004, AOC 50
Figure 4-3 Tetrachloroethene Concentrations in Groundwater, 2010, AOC 50
Figure 4-4 Tetrachloroethene Concentrations in Groundwater, October 2015, AOC 50
Figure 4-5 Tetrachloroethene Concentrations in Groundwater, October 2017, AOC 50
Figure 4-6 Cross-Section Plan View, AOC 50
Figure 4-7 Cross-Section Plan View, AOC 50, Area 1
Figure 4-8 Tetrachloroethene Plume in Groundwater - Cross Section, A-A' AOC 50, October 2017
Figure 4-9 Tetrachloroethene Plume in Groundwater Cross Section, B-B' AOC 50, October 2017
Figure 4-10 Tetrachloroethene Plume in Groundwater Cross Section, C-C' AOC 50, October 2017
Figure 4-11 Area 1 PCE Concentration Trend Graphs
Figure 4-12 Area 2 PCE Concentration Trend Graph
Figure 4-13 Area 3 PCE Concentration Trend Graph
Figure 4-14 Areas 4 and 5 PCE Concentration Trend Graphs
Figure 4-15 Dissolved Arsenic in Groundwater AOC 50, 2017
Figure 4-16 Methane Concentrations in Groundwater AOC 50, October 2017

TABLES

Table 1-1 AOC 50 Cleanup Levels
Table 2-1 AOC 50 2017 ERD Injection Program
Table 3-1 Sample Preparation and Analysis Methods, Containers, Preservatives and Holding Times
Table 3-2 Groundwater Level Data, Spring 2017
Table 3-3 Groundwater Level Data, Fall 2017
Table 4-1 Monitoring Wells Selected for 2017 Sampling Events
Table 4-2 Groundwater Analytical Results Spring 2017
Table 4-3 Groundwater Analytical Results Fall 2017

APPENDICES

APPENDIX A	GROUNDWATER FIELD ANALYSIS FORMS	
	A.1:	Spring 2017 LTM Event
	A.2:	Fall 2017 LTM Event
APPENDIX B	LABORATORY ANALYTICAL REPORTS (on CD)	
	B.1:	Spring 2017 LTM Event
	B.2:	Fall 2017 LTM Event
APPENDIX C	ANALYTICAL DATA VALIDATION REPORTS (on CD)	
	C.1:	Data Validation Reports – Spring 2017 LTM Event
	C.2:	Data Validation Reports – Fall 2017 LTM Event
APPENDIX D	HISTORICAL GROUNDWATER RESULTS	
APPENDIX E	ANNUAL LAND USE CONTROL PLAN CHECKLIST	
APPENDIX F	RESPONSES TO COMMENTS	

ACRONYMS AND ABBREVIATIONS

ABC®	Anaerobic BioChem®
ABC® Ole'	Anaerobic BioChem® + Oleic Acid
ABC® Ole'+	Anaerobic BioChem® + Oleic Acid + Zero Valent Iron
amsl	above mean sea level
AOC	area of contamination
ARCADIS	ARCADIS U.S., Inc./G&M, Inc.
Army	U.S. Army
bgs	below ground surface
BCT	Base Realignment and Closure Cleanup Team
BRAC	Base Realignment and Closure
°C	degrees Celsius
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cis-1,2-DCE	cis-1,2-dichloroethene
COC	contaminant of concern
CVOC	chlorinated volatile organic compound
CY	calendar year
1,2-DCA	1,2-dichloroethane
1,1-DCE	1,1-dichloroethene
1,2-DCP	1,2-dichloropropane
DTW	depth-to-water
DO	dissolved oxygen
DoD	Department of Defense
DPT	direct push technology
DRFTA	Devens Reserve Forces Training Area
ELAP	Environmental Laboratory Accreditation Program
ERD	enhanced reductive dechlorination
FDSA	Former Drum Storage Area
ft	feet
ft/day	feet per day
HGL	HydroGeoLogic, Inc.
IDW	investigation-derived waste
IRZ	in-situ reactive zone
IWS	in-well stripping
J	estimated result
KGS	KOMAN Government Solutions, LLC
LTM	long-term monitoring
LTMMP	Long-Term Monitoring and Maintenance Plan
LUC	land-use control
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
MAAF	former Moore Army Airfield
MassDevelopment	Massachusetts Development and Finance Agency
MiHPT	Membrane Interface Probe-Hydraulic Profiling Tool
MS	matrix spike
MSD	matrix spike duplicate

NELAP	National Environmental Laboratory Accreditation Program
O&M	operation and maintenance
ORP	oxidation-reduction potential
PARCCS	precision, accuracy, representativeness, comparability, completeness, and sensitivity
PCE	tetrachloroethene
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
QSM	Quality Systems Manual
RAWP	Remedial Action Work Plan
TCE	trichloroethene
trans-1,2-DCE	trans-1,2-dichloroethene
µg/L	micrograms per liter
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VC	vinyl chloride
VOC	volatile organic compound
ZVI	zero valent iron

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1.0 INTRODUCTION

This 2017 Annual Operation & Maintenance (O&M) and Monitoring Report was prepared by KOMAN Government Solutions, LLC (KGS) for the U.S. Army Corps of Engineers (USACE) under contract number W912WJ-15-C-0002, to detail the operation and performance of on-going remediation activities and groundwater monitoring results at Area of Contamination (AOC) 50 at the former Fort Devens Army Installation (Devens), Devens, Massachusetts. Remediation activities were performed in accordance with the *Final Long-Term Monitoring and Maintenance Program AOC 50* (LTMMP) [HydroGeoLogic, Inc. (HGL), 2012] and the Area of Contamination 50, 2017 Injection Program Summary (KGS, 2017b).

1.1 Purpose and Objectives

The purpose of this Annual O&M and Monitoring Report is to document the O&M activities conducted at AOC 50 and to summarize the results of the long-term monitoring (LTM) for groundwater conducted during 2017. The Annual Report for AOC 50 also includes information regarding remedial actions performed at the site. The Army conducted groundwater monitoring events during the spring and fall of 2017 and completed an enhanced reductive dechlorination (ERD) injection event in July 2017.

1.2 Site Description and History

The AOC 50 site is located on the northeastern boundary of the former Moore Army Airfield (MAAF), within the former North Post of the former Fort Devens Army Installation, in the town of Ayer, Massachusetts (**Figure 1-1**). Fort Devens was identified for cessation of operations and closure under Public Law 101-510, the Defense Base Realignment and Closure (BRAC) Act of 1990, and was officially closed in March 1996. Portions of the property formerly occupied by Fort Devens were retained by the U.S. Army (Army) for reserve forces training and was renamed the Devens Reserve Forces Training Area (DRFTA). Areas not retained as part of the DRFTA were transferred to new owners (the Massachusetts Development and Finance Agency [MassDevelopment] and the U.S. Fish and Wildlife Service [USFWS]) for reuse and redevelopment. In 2009, the DRFTA was renamed the U.S. Army Garrison Fort Devens.

All but approximately 14 acres of the former MAAF (approximately 246 acres total) were transferred to MassDevelopment for reuse in 1997. Currently, the airfield is closed to aircraft traffic and is used by the Massachusetts State Police for training purposes and vehicle storage. The former MAAF is zoned for Special Use II and Innovation and Technology Business. Under the Devens Reuse Plan dated 14 November 1994, Special Use II and Innovation and Technology Business includes a broad range of industrial, light industrial, office, and research and development uses. MassDevelopment is considering repairs and upgrades for the Massachusetts State Police's use of the airfield, but the plans are still under development. The Devens Army Installation retained approximately nine acres of the former airfield for vehicle storage and maintenance and approximately four acres in and around the AOC 50 Source Area for remediation activities.

The primary area of groundwater contamination at AOC 50 is referred to as the Southwest Plume, which extends from the Source Area approximately 3,000 feet (ft) downgradient towards the Nashua River. Sources of groundwater contamination at AOC 50 include two World War II fueling systems, a drywell formerly connected to the parachute shakeout tower, and the tetrachloroethene (PCE) Former Drum Storage Area (FDSA); these sources are collectively referred to as the AOC 50 Source Area. The AOC 50 Source Area is comprised of less than two acres and surrounds

Building 3803 (the former parachute shop), Building 3840 (the former parachute shakeout tower), Building 3824 (a gazebo), and Building 3801 (the former 10th Special Forces airplane parachute simulation building). Although these sources have been removed or taken out of commission, groundwater underlying AOC 50 contains elevated concentrations of VOCs, most notably PCE. The AOC 50 site layout with existing monitoring wells is depicted in **Figures 1-2** and **1-3.**

The *Final Record of Decision, AOC 50* (ARCADIS, 2004) identified the groundwater contaminants of concern (COCs) and their interim cleanup levels (**Table 1-1**).

Table 1-1
AOC 50 Cleanup Levels

Chemical	Cleanup Level (µg/L)
Arsenic	10
Benzene	5
1,2-dichloroethane (1,2-DCA)	5
1,1-dichloroethene (1,1-DCE)	7
cis-1,2-dichloroethene (cis-1,2-DCE)	70
1,2-dichloropropane (1,2-DCP)	5
Iron	3,129
Lead	15
Manganese	1,460
Methylene Chloride	5
Nitrate	10,000
PCE	5
Trichloroethene (TCE)	5
Vinyl Chloride (VC)	2

Some of the contaminants were designated COCs because they were present at concentrations above the applicable maximum contaminant level (MCL) or state groundwater quality standard (i.e., cis-1,2-DCE, iron, methylene chloride, and 1,2-DCP). Benzene was designated as a COC due to past releases. Cis-1,2-DCE and nitrate were identified as COCs due to their contribution to risk. Lead was identified as a COC due to its potential to pose ecological risks. Arsenic was designated as a COC because it may be solubilized (mobilized) by the selected remediation technology, even though it was not predicted to pose significant risks under baseline conditions.

The selected remedy for AOC 50, documented in the ROD (ARCADIS, 2004), was Alternative 6: Soil Vapor Extraction, ERD (with solubilized inorganic controls), In-Well Striping/Aerobic Bioremediation, Monitoring, and Institutional Controls. In addition, Geochemical additives and In-situ Chemical Oxidation were included as contingencies to address inorganics and volatile

organic compounds, respectively, in the event that monitoring data indicate that implementation of these contingencies was warranted. It was estimated that ERD injections was expected to be phased out after approximately 10 to 15 years. Approximately 27 years were estimated as the amount of time necessary to achieve the goals consistent with unrestricted land use and potable use of groundwater for the entire site (ARCADIS, 2004).

Summary of Past Groundwater Treatment at AOC 50

In September 2004, ARCADIS U.S., Inc./G&M, Inc. (ARCADIS) implemented a full-scale remedial action at AOC 50 that included soil vapor extraction in the source area, ERD throughout the plume, and an in-well stripping (IWS) system at the western edge of the plume. The first ERD injection event was conducted in October 2004 utilizing molasses as the ERD substrate. ARCADIS discontinued the soil vapor extraction system in November 2005, as the monitoring program indicated that the recoverable mass of chlorinated volatile organic compounds (CVOCs) was removed from the vadose zone. The IWS was shut off in March 2013 once it was clear that it was not needed to treat dissolved arsenic or to "polish" the CVOC plume (Sovereign Consulting, Inc., 2013).

HydroGeoLogic, Inc. (HGL) revised the ERD injection program in November 2008 by changing the substrate from molasses to a product called Anaerobic BioChem® (ABC®). Semi-annual injections of ABC® continued in Areas 1 through 5 of the AOC 50 plume through 2014.

Throughout most of the plume, CVOC concentrations were reduced substantially in response to the ERD injections. However, some areas did not respond as well to the remedy, so in 2013 and 2014 investigations were performed within the source area and at locations within the plume to support remedy optimization. In calendar year (CY) 2013 vertical profiling using direct push technology (DPT) probing was performed in the source area of AOC 50 ("Area 1") as well as in several of the other Areas of the plume (Sovereign Consulting, Inc., 2015). Based on the results of the vertical profiling in Area 1 a Membrane Interface Probe Hydraulic Profiling Tool (MiHPT) investigation was conducted in 2014 to further assess potential residual source(s). Specifically, the MiHPT investigation was intended to improve the overall understanding of the location/source of residual CVOC contamination both vertically and laterally in the saturated soils in the source area where elevated concentrations of PCE (over 1,000 µg/L[1]) remained, as well as to better understand the relative permeability of those soils. Those data were used to recommend modifications of the existing remedy to more effectively treat the source area.

In 2015, the substrate injection strategy was optimized based on review of the historical data and MiHPT results (Sovereign Consulting, Inc., 2015). The 14th ERD injection event using ABC® was performed in July 2015. Modified substrates Anaerobic BioChem® + Oleic Acid (ABC® Ole') and Anaerobic BioChem® + Oleic Acid + Zero Valent Iron (ABC® Ole'+) were also added to the 14th event. ABC® Ole' includes oleic acids, which are long-chained compounds that persist for a longer period of time in the aquifer formation, and therefore may improve the effectiveness of the injections. ABC® Ole'+ includes the oleic acids plus zero valent iron (ZVI) which is intended to enhance the rate of degradation in the less permeable impacted source area soils. Substrate injections using ABC® Ole' were injected into existing injection wells in Areas 1, 2, and 3. ABC® was injected into existing injection wells in Areas 4 and 5. ABC® Ole'+ was directly injected using DPT via a Geoprobe® into targeted locations in Area 1.

[1] 1 µg/L = 1 part per billion

The 15th ERD injection event was performed in July 2017. During this injection event the ERD substrate was a combination of ABC® Ole'\ and ABC® Ole'+. Injection wells in Areas 3 and 4 received ABC® Ole'. To treat contamination that was not readily affected by the existing permanent injection wells, ABC® Ole'+ was injected directly into soils using a Geoprobe® in Areas 1, 3, 4, 4/5, and 5. The details of the 2017 injection event are presented in **Section 2.0** of this Annual Report.

1.3 Site Hydrogeology

A single groundwater aquifer is present within the overburden deposits at the former MAAF and AOC 50. Restrictions to vertical groundwater flow, such as silty clay layers, are present, but are not prevalent or continuous in soil borings conducted within the kame glacial deposit or along the Nashua River. Some silty clay layers were encountered within the aquifer in the AOC 50 Source Area. These thin, silty clay layers appear to reduce the vertical permeability, contribute to a slight increase in the water table elevation, and increase the difference between shallow and deep water levels.

Depth to groundwater measurements have been collected from a network of monitoring wells and sampling points on a regular basis since 1997. Groundwater is encountered at approximately 3 ft below ground surface (bgs) in the AOC 50 Source Area and at approximately 64 ft bgs at the southwestern end of the former MAAF. Groundwater elevations within deeper wells and to the north of AOC 50 typically have lower total heads than wells screened at shallower depths, indicating that there is a downward hydraulic gradient within this area.

The Nashua River is the controlling hydrologic feature of AOC 50 and the former MAAF area. As groundwater beneath AOC 50 moves downgradient in a southwesterly direction toward the Nashua River (**Figure 1-2**), vertical gradients become neutral. Vertical gradients reverse and become upward along the Nashua River, as would be expected near such a discharge feature. These changes in gradient indicate that groundwater is recharged near the AOC 50 Source Area, travels below the former MAAF, and discharges to the Nashua River.

Hydraulic conductivities at the site range from 1 to over 50 ft per day (ft/day), with seepage velocities ranging from 0.024 to 1.19 ft/day.

1.4 Remedial System Operations and Modifications

The overall O&M approach and remedial system configuration at AOC 50 is adjusted over time to achieve optimum remedial performance. During the 2017 reporting period, the Army conducted the following routine activities and modifications:

- Collected semi-annual water level measurements (spring and fall);
- Conducted semi-annual and annual LTM groundwater monitoring events in May 2017 (spring) and October 2017 (fall).

System modifications/updates performed during the 2017 reporting period included:

- Modified the ERD substrate injection strategy based on an evaluation of groundwater and VOC trends observed in groundwater, and
- Performed ERD substrate injection event using six injection wells (IW) and 41 Geoprobe direction push soil injection locations (GP) in July 2017.

2.0 REMEDIAL SYSTEM

The current remedial system consists of ERD. The IWS was turned off in March 2013 and is currently non-functional.

2.1 Enhanced Reductive Dechlorination (ERD) System

The 2017 ERD injections at AOC 50 were implemented by Redox Tech, LLC and monitored by KGS. The 2017 injection event occurred from July 10-25, 2017 and was performed in accordance with *Area of Contamination 50, 2017 Injection Program Summary* (KGS, 2017b), with exceptions described in the subsections below. ABC® Ole' was injected into injection wells in Areas 3 and 4 to increase persistence and prolong treatment of VOCs. ABC® Ole'+ was injected to enhance VOC reduction and stimulate long-term release of the components for bioremediation and create a more reductive environment. This combination was injected directly into soils using a Geoprobe® in Areas 1, 3, 4, 4/5, and 5.

The 2017 injection strategy was adjusted based on the historical LTM data, the MiHPT results (Sovereign Consulting, Inc., 2015), and the 2015 ERD injection event. The strategy consisted of performing injections into existing injection wells and using direct push injections via a Geoprobe® to reach deeper impacted zones. The direct injections were conducted by directly injecting the ERD substrate through 1.5-inch diameter grouting rods. Injections were performed at:

- five Area 1 direct push injection locations in the FDSA,
- 16 Area 1 direct push injection locations adjacent to Building 3803/3840,
- three Area 3 direct push injection locations,
- three Area 3 injection wells,
- three Area 4 injection wells,
- five direct push locations southwest of Area 4 injection wells,
- at five direct push locations west of Area 4/5 injection wells; and
- at seven direct push locations southwest of Area 5 injection wells.

An injection log provided in **Table 2-1** identifies each injection location (DPT injection point or existing injection well), quantity and type of injected product, and measured field parameters (i.e., flame ionization detection and photoionization detector measurements of headspace for the injection wells as indicators of biodegradation processes). Injection locations are presented on **Figure 2-1.**

2.1.1 Area 1

The Area 1 injection program consisted of direct injection locations at the FDSA and near Building 3803/3840. **Figure 2-1** shows the injections locations. A concentration of 20 wt% solution of ABC®-Ole'+ was directly injected into each of the locations in Area 1. At the 16 locations near Building 3803/3840, the injections were planned to be conducted starting at approximately 40 feet below ground surface (bgs) (GP-22 to GP-37). An estimated 125 gallons of ABC® Ole'+ solution was injected at 4 ft intervals from approximately 40 to 64 ft bgs, for an approximate total of 875 gallons per location. At seven of the locations in this area, refusal occurred at five to seven feet shallower than the planned injection depth, which are specified in **Table 2-1**. Each location

received the full volume of ABC®-Ole'+ that was planned. The volume of substrate that was planned for the depth that was not reached was injected into the deepest interval that was reached. The locations where the planned injection depth was not achieved are in the western portion of the Area near G6M-13-05X (**Figure 2-1**). It is likely that the target depths were not achieved due to fine-grained sediments at depth. The Geoprobe® refusal depths of the seven locations were similar with the MiHPT Investigation (Sovereign Consulting, Inc., 2015), which encountered refusal depths ranging from approximately 47 ft to 65 ft bgs in the same area.

At the FDSA, five injections were conducted (GP-17 to GP-21). Approximately 125 gallons of ABC®-Ole'+ solution was injected at 4 ft intervals from approximately 23 to 47 ft bgs, for an approximate total of 875 gallons per location (**Table 2-1**).

2.1.2 Area 3

The 2017 injections in Area 3 were conducted at three existing injection wells in Area 3 (IW-25 to IW-27) and three direct injection locations. The volume of ERD solution injected at existing Area 3 injection wells was approximately 450 gallons of a ABC® Ole' mixture at 20 wt% solution. ZVI was not used in the existing injection wells due to potential of clogging the well screens.

Three direct injections were conducted upgradient of G6M-04-02X, just east of Bldg. 3813 (GP-38 to GP-40). A concentration of 15 wt% solution of ABC® Ole'+ was directly injected. Approximately 133 gallons of ABC® Ole'+ solution was injected across six intervals from approximately 70 to 95 ft bgs, for an approximate total of 800 gallons per location.

2.1.3 Area 4

The 2017 injections in Area 4 were conducted at three existing injection wells in Area 4 (IW-35, IW-36, and G6M-06-01X) and five direct injection locations. The volume of ERD solution injected at existing Area 4 injection wells was approximately 450 gallons of a ABC® Ole' mixture at 20 wt% solution. ZVI was not used in the existing injection wells due to potential of clogging the well screens.

Five direct injections were conducted upgradient of G6M-13-02X (GP-41 to GP-45). A concentration of 15 wt% solution of ABC® Ole'+ was directly injected. Approximately 130 gallons of ABC® Ole'+ solution was injected across five intervals from approximately 105 to 125 ft bgs, for an approximate total of 650 gallons per location.

2.1.4 Area 4/5

The 2017 injections were conducted at five direct injection locations (GP-46 to GP-50) west of Area 4/5 injection wells. A concentration of 15 wt% solution of ABC® Ole'+ was directly injected. Approximately 130 gallons of ABC® Ole'+ solution was injected across five intervals from approximately 110 to 130 ft bgs, for an approximate total of 650 gallons per location.

2.1.5 Area 5

The 2017 injections were conducted at seven direct injection locations southwest of Area 5 injection wells, upgradient of G6M-97-05B and adjacent to G6M-13-01X (GP-51 to GP-57). A concentration of 15 wt% solution of ABC® Ole'+ was directly injected. Approximately 130 gallons of ABC® Ole'+ solution was injected across five intervals from approximately 120 to 135 ft bgs, for an approximate total of 650 gallons per location.

2.2 In-Well Stripping System

The Army operated the IWS system from 2004 to March 2013. Operation of the system was discontinued in 2013 with regulatory concurrence (Sovereign, 2013) and has not been fully operational since that time. In 2017, an assessment of the system was performed. The assessment was limited due to the lack of functionality. Visual inspection of system components revealed corrosion of pumps and blowers. In order for the IWS system to be returned to full functionality, it is likely the central processing unit along with various pumps, blowers, and other system components will need to be replaced. At the BCT meeting on January 18, 2018, the Army and EPA agreed that the system could be repaired in the future if it was found to be needed again.

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3.0 LONG-TERM MONITORING EVENT METHODOLOGY

The LTM program at AOC 50 was conducted in accordance with the *Final Long-Term Monitoring Plan, AOC 50* (HGL, 2012) to monitor COC trends over time in groundwater. Modifications have been made to the LTM monitoring network based on ongoing remedial actions and historical results and the *Final Long-Term Monitoring and Maintenance Plan (LTMMP) Area of Contamination 50* (KGS, 2017a) will be implemented in 2018. KGS performed semi-annual LTM groundwater sampling events in spring (May) and fall (October) 2017. The AOC 50 site layout, showing the Southwest Plume area, ERD injection well transects, and LTM monitoring wells is depicted on **Figure 1-2**. The layout of the AOC 50 Source Area is presented on **Figure 1-3**.

3.1 Groundwater Sampling and Analysis

The groundwater sampling events were performed in accordance with the low-flow procedures documented in *Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells* [U.S. Environmental Protection Agency (USEPA) Region 1, 2010], and included the following activities:

- A combination of dedicated and non-dedicated, stainless steel bladder pumps and peristaltic pumps were used for groundwater purging and sampling. The bladder pump intake screens were placed approximately in the center, or slightly below the center, of the submerged well screen interval. The pump intakes were placed a minimum of 2 feet above the bottom of the monitoring wells.
- Previously installed, dedicated, dual bonded, ¼-inch Teflon-lined polyethylene sample tubing was used in each LTM well.
- Each monitoring well was purged at a rate between 100 and 500 milliliters per minute. The purge rate was established to maintain a stable depth-to-water (DTW) and/or total draw down less than 0.3 ft (about 3.6 inches).
- The pump discharge was monitored for field parameters [pH, specific conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), temperature, and turbidity]. The DTW was measured every five minutes during purging. The purging of the monitoring well was determined to be complete when field parameters stabilized.
- Turbidity samples were collected via a "Y" or "T" connector with a shut-off valve located after the pump, but before the flow-through cell.
- Dissolved metals samples were field-filtered using 0.45-micron filters.
- Investigation-derived waste (IDW) was handled following established procedures in place at AOC 50.

Groundwater samples were collected from the monitoring wells for the analytical parameters discussed in **Section 4** of this report. Details on analytical sample container and preservation requirements are presented in **Table 3-1**. Completed groundwater low flow sampling forms for the 2017 events are presented in **Appendix A**.

3.2 Decontamination Procedures

Bladder pumps were decontaminated between wells by using the following five-step process: 1) rinse with potable water, 2) wash with a non-phosphate detergent solution, 3) rinse with potable

water, 4) rinse again with isopropyl alcohol, and 5) rinse with distilled water. The bladder pumps were disassembled prior to decontamination. The single use bladder was also removed from the bladder pump and replaced during the decontamination process. The same five-step process was used to decontaminate other non-dedicated sampling equipment.

3.3 Investigative-Derived Waste Handling

Investigative-derived waste (i.e., low-flow purge water and decontamination water) was containerized at each wellhead during groundwater sampling events. During sampling events, purge water from monitoring wells was discharged back to the ground at the site of generation after sampling was completed, as per the 2003 *Waste Management Plan* (ARCADIS, 2003) and the May 1995 *Project Operations Plan* (ABB Environmental Services, Inc. 1995).

3.4 Long-term Monitoring Events

A summary of the methodology used during the 2017 sampling events is outlined below.

3.4.1 Monitoring Well Inspection

Prior to sampling, the following procedures were used to inspect the LTM wells at AOC 50:

- The monitoring well location was identified, and the well identification number was confirmed;
- The wellhead was inspected for signs of damage and any damage noted, as warranted; and,
- The monitoring well gripper seal was removed, and the wellhead was allowed to vent prior to well inspection.

No tampering of the wells was apparent during the 2017 sampling events. Several wells had missing protective casing locks and plugs that were subsequently replaced in July 2017 (**Section 3.5**).

3.4.2 Water Level Measurements

The depth to water in the AOC 50 monitoring wells was measured and recorded within a 24-hour period as part of the spring and fall LTM events. A summary of the water level measurements and the corresponding water elevation data is presented in **Table 3-2** for spring event, and **Table 3-3** for fall event. Groundwater elevation contours are presented on **Figure 3-1** (May 2017) and **Figure 3-2** (October 2017).

Consistent with previous LTM event, the groundwater flow direction was observed to be toward the southwest during the spring and fall sampling events. Groundwater was encountered at approximately 9 to 11 ft bgs in Area 1 (at wells G6M-04-10X/A) and approximately 51 to 53 ft bgs at the southwestern end of the former MAAF (at well G6M-03-08X).

The groundwater hydraulic gradient between Area 1 well G6M-04-10A and downgradient well G6M-03-08X (southeast edge of plume) was calculated to be 0.0029 ft/ft in May 2017 and 0.0037 ft/ft in October 2017.

3.5 Well Maintenance Activities

On July 5 and 6, 2017, locks were added to unsecured wells and monitoring well plugs were added where necessary based on the spring inspection results. At the same time, flush mount monitoring well pads were replaced at G6M-92-03X and G6M-13-03X based on the spring inspection results.

On September 26 and 27, 2017, accumulated sediment was removed from the bottom of MicroWells® XSA-12-95X, -96X, -97X, -98X, and monitoring well G6M02-07X. The sediment was removed from the wells using an inertial pump.

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4.0 GROUNDWATER MONITORING RESULTS

Sampling was conducted for the continued monitoring of chemical and geochemical parameters in AOC 50 groundwater in accordance with the LTMMP (HGL, 2012). Laboratory analytical results for the groundwater samples collected during LTM events in the spring (May) and fall (October) 2017 are discussed in the following subsections. The laboratory analytical reports are in **Appendix B**. Analytical results judged to be laboratory contaminants originating in the sampling and analytical processes are not considered representative of site conditions. The effects of contamination in the laboratory and field blanks, as well as the effects of other quality control (QC) issues associated with the analytical results, are reported in the data validation reports for the 2017 sampling events (**Appendix C**).

4.1 Groundwater Chemistry for Monitoring Events

The spring 2017 LTM event included the sampling of 19 wells. The fall 2017 LTM event included the sampling of 45 wells.

The frequency, sampling locations, and analytical parameters for the two LTM sampling events conducted in 2017 are summarized in **Table 4-1**. The spring and fall 2017 LTM analytical results and field parameters are presented in **Tables 4-2** and **4-3**, respectively. Historical laboratory analytical results and groundwater field parameters, including the 2017 sampling results, are presented in **Appendix D.**

4.1.1 Field Parameters

Field parameter measurements collected during the 2017 LTM sampling events are summarized below.

Observed pH levels ranged from 5.51 to 6.85 in May 2017 and from 5.56 to 7.88 in October 2017, which is suitable to support the ERD process. Five of wells sampled in May 2017 had unusually high pH values (pH>10): G6M-03-01X (12.52), G6M-13-05X (11.40), G6M-02-08X (12.31), IW-17D (11.10), and IW-18D (11.00). Even though the instrument measuring pH was appropriately calibrated each morning and the afternoon calibration check was within 1 percent of the three pH references, the pH values are suspicious and were eliminated from the evaluation. During previous and subsequent sampling events at the same monitoring wells pH values ranged from 5.27 to 6.66 suggesting that the high pH values are a result of a faulty pH probe. The other water quality parameters measured using the same instrument were consistent with previous and subsequent measurements at the same wells.

The wells with lower pH were present within and downgradient of in-situ reactive zones (IRZ), especially in the FDSA/Area 1 and Former Dry Well Area/Area 1. IRZs are formed as a result of the ERD treatment, the placement of which is shown on Figure 2-1. Reduced pH is expected due to ERD treatment; pH reduction occurs due to generation of carbonic and supplementary acid (e.g., fatty acids, propionic acid) from organic carbon fermentation that occurs in the ERD processes.

In general, low DO levels and negative ORP values were recorded downgradient and within the IRZs formed as a result of the ERD treatment. Low DO [less than 1 milligram per liter (mg/L)] and negative ORP values (reducing conditions) are indicators of the anaerobic breakdown of CVOCs. Reducing conditions are present throughout most of Area 1 where ERD injections have occurred or downgradient of injections. The impact of the ERD injections is clearly seen by an

increase of anaerobic biodegradation evidenced by a decrease in DO to below 1 mg/L and a decrease of ORP to negative values at G6M-13-05X (near Building 3840) and G6M-07-02X (FDSA) in October 2017. Both of these locations were the focus of direct injections of the ERD substrate in July 2017. Reducing conditions in the FDSA are also present at G6M-04-10A but are not present at nearby locations G6M-04-10X and G6M-04-13X.

Upgradient of the Former Dry well, where numerous rounds of injections occurred in previous years, reducing conditions persist at G6M-02-08X. The DO levels at G6M-03-01X continue to fluctuate between aerobic and anaerobic conditions. At G6M-03-02X DO levels increased in October 2017 indicating a return to aerobic conditions. Downgradient of the Former Dry Well reducing conditions continue to persist at G6M-04-09X, G6M-13-06X, and G6M-04-31X.

In Area 2, reducing conditions persist at G6M-04-03X, G6M-04-01X and G6M-02-01X in 2017 in the IRZ. In Area 3, reducing conditions persist at G6M-03-07X and G6M-04-04X in 2017. Within the small portion of the plume remaining at Area 3 (G6M-04-02X), aerobic conditions were present in May 2017 after reducing conditions were observed in 2016. After the ERD injections in July 2017 directly upgradient of G6M-04-02X, reducing conditions were observed at G6M-04-02X in October 2017. The flame ionization detector measurements from the headspace of the Area 3 injection wells measured prior to the injections (**Table 2-1**) indicate the presence of organic compounds in the air (including methane), which is a result of anaerobic biodegradation.

Anaerobic conditions persist in most of Areas 4 and 5 where ERD injections have occurred in the eastern portion of the plume. Anaerobic biodegradation occurring in this area is evident by the high FID results from headspace monitoring of the Area 4 injection wells (**Table 2-1**). The FID results are indicative of methane produced from fermentation of the injected substrate. Within the western portion of the plume in Areas 4 and 5 there are some areas of low DO (i.e., G6M-13-02X, G6M-13-01X, G6M-97-05B) but reducing conditions are not consistently present. It is anticipated reducing conditions will become more prevalent as the injected substrate migrates through the aquifer. In the most downgradient portion of the plume, a similar condition is observed, area of low DO but reducing conditions are not consistently present. DO and ORP trend graphs for select locations are presented on **Figure 4-1**. The date of 2017 injections was added to trend graphs with locations that were directly affected by the 2017 injections.

Specific conductivity data above 2.0 milliSiemens per centimeter (mS/cm) were generally recorded for wells southwest of Route 2A and in the gravel parking lot for Area 1, which may be the result of the introduction of de-icing salt applied to roadways during snow removal activities.

4.1.2 Volatile Organic Compounds

Groundwater samples were collected from 19 monitoring wells during the spring 2017 sampling event and 45 monitoring wells during the fall 2017 sampling event and submitted for VOC analyses. **Figures 4-2** through **4-5** present PCE concentration contours over time and demonstrate continued cleanup of PCE in AOC 50 groundwater. However, it should be noted that the interpretation of plume contours is affected by the distribution of data used to construct the contours, which changes over time, specifically the monitoring well network has changed from 2004 (Figure 4-2) to 2017 (Figure 4-5). The remediation of the groundwater plume at AOC 50 will continue to be monitored over time to verify that remedial goals are being achieved across the site.

Figure 4-2 shows a continuous PCE plume across AOC 50 in 2004, extending from the AOC 50 Source Area to downgradient Area 5, with the highest detected PCE concentrations, up to 17,000 µg/L at location G6M-94-18X, in the AOC 50 Source Area. These data were collected prior to full-scale remedy implementation. Location G6M-94-18X has since been converted to an injection well (IW-38).

Figure 4-3 shows PCE concentrations in 2010, after six years of the remedial action. The PCE plume decreased substantially over all areas at AOC 50, and was no longer continuous over the area. Residual pockets of PCE levels remained around the ERD injection transects. The highest concentrations continued to be present at the AOC 50 Source Area, with PCE detected at 1,000 µg/L at location G6M-04-09X.

Figure 4-4 shows PCE concentrations from the fall 2015 LTM sampling event. These samples were collected following an ERD injection in July 2015. The PCE concentrations continued to be highest in the AOC 50 Source Area with a maximum of 1,120 µg/L at location G6M-13-05X. PCE concentrations in Areas 2 and 3 continued to decrease. The PCE concentrations, west of the Areas 4 and 5 injection well transects, were the highest in well G6M-97-05B (117 µg/L).

Figure 4-5 shows PCE concentrations from the fall 2017 LTM sampling event. The plume contours are based on current and historic data presented in previous annual reports, groundwater flow patterns, and groundwater fate and transport processes. The PCE concentrations are also shown in cross-sections (**Figures 4-6, 4-7, 4-8, 4-9,** and **4-10**). The cross-sections also show vertical profiling results from 2013; the profiling results are for informational purposes only and were not directly used in contouring 2017 PCE concentrations.

- PCE concentrations in the source area (Area 1) have decreased in many of the wells; however, PCE concentrations continue to be the highest in Area 1 at locations G6M-13-05X and G6M-07-02X. PCE decreases were evident following the July 2017 ERD injections, from 1,300 µg/L (May 2017) to 280 µg/L (October 2017) at G6M-13-05X and from 1,800 µg/L (May 2017) to 910 µg/L (October 2017) at G6M-07-02X (**Figure 4-11**).
- PCE concentrations in Area 2, both upgradient and downgradient of the injections wells remained non-detect in 2017 (**Figure 4-12**).
- In Area 3, PCE concentrations at G6M-04-02X decreased from 280 µg/L (May 2017) to 97 µg/L (October 2017) after the July 2017 ERD injections conducted upgradient of G6M-04-02X. PCE concentrations remain non-detect in monitoring wells downgradient of the injection wells (**Figure 4-13**).
- Downgradient of most of the Area 4 and Area 5 injection wells, specifically at G6M-02-13X, MW-7, MW-3, G6M-02-11X, G6M-02-12X, G6M-04-05X, G6M-03-08X, G6M-03-09X, and G6M-03-10X, the PCE concentrations were non-detect or below the 5 µg/L cleanup goal in 2017. There was an increase of PCE concentrations at G6M-13-04X to 40 µg/L (October 2017) from non-detect (May 2017). PCE concentrations at G6M-13-04X have previously fluctuated between non-detect (May 2017, June 2015) to a maximum concentration of 41 µg/L (January 2014) (**Figure 4-14**).
- West of the Areas 4 and 5 injection wells, the plume has not changed significantly from 2016 and PCE concentrations continue to persist at low levels. The PCE concentrations in this portion of the plume have decreased in 2017 in G6M-13-02X from 84 µg/L (November 2016) to 79 µg/L (May 2017) and to 65 µg/L (October 2017) (**Figure 4-14**). The highest

PCE concentrations in this portion of the plume at G6M-97-05B increased slightly from November 2016 (140 µg/L) to May 2017 (190 µg/L) and then decreased in October 2017 (140 µg/L). There was a decrease in PCE concentrations at G6M-04-07X from 78 µg/L (November 2016) to 38 µg/L (October 2017) and a slight increase in PCE concentrations at XSA12-95X from 23 µg/L (November 2016) to 36 µg/L (October 2017), however these concentrations have decreased from 290 µg/L (October 2012). Most of the other wells had steady PCE concentrations in the furthest downgradient portion of the plume including PCE concentrations at G6M-04-06X [set 16 feet shallower, 168.07 to 158.07 ft above mean sea level (amsl), than G6M-04-07X (142.68 to 132.68 ft amsl)] where PCE concentrations have remained below 5 µg/L since 2014.

TCE concentrations have decreased below the MCL (5 µg/L) in most of the plume, but there are some remaining areas where TCE concentrations are above the MCL. All of the areas with TCE above the MCL are areas where PCE is currently or previously above the MCL.

- In Area 1, TCE concentrations have decreased but are present above the MCL at G6M-03-01X [9.7J (estimated result) µg/L, October 2017] and IW-17D (6.1 µg/L, May 2017), both of which are areas where PCE was previously above the MCL and current methane and TOC concentrations suggest biodegradation is occurring. At G6M-13-05X, TCE increased from 7.2J µg/L (November 2016) to 69 µg/L (October 2017), which is likely an indication of PCE degradation due to the July 2017 injections immediately surrounding the monitoring well. The cis-1,2-DCE concentrations at G6M-13-05X also increased from 31 µg/L (November 2016) to 750 µg/L (October 2017), indicating the degradation of TCE.
- In Area 3, TCE is present above the MCL at G6M-04-02X (26 µg/L, October 2017), and variation in the TCE concentration is approximately commensurate with the fluctuations in PCE concentration **(Appendix D)**.
- Downgradient of the Area 4 injection wells at G6M-02-13X, TCE concentrations have increased above the MCL since February 2016 to the current concentration of 21 µg/L (October 2017). At the same time cis-1,2-DCE and vinyl chloride (VC) concentrations have also gradually increased from below 1 µg/L in 2012 to 57 µg/L and 17 µg/L, respectively, in October 2017, indicating degradation is occurring. Reducing conditions are present at G6M-02-13X but the methane concentrations are low (1,500 µg/L, October 2017) and TOC concentrations are low (1.8 mg/L, October 2017). The results suggest incomplete degradation of the VOC compounds, and although reducing conditions are favorable for degradation, it appears there is minimal degradation occurring potentially due to a lack of carbon to support degradation. The last injection in Area 4 injection wells upgradient of G6M-02-13X was completed in July 2015.
- TCE is also present above the MCL in wells west of the Areas 4 and 5 injection wells, co-located with elevated PCE concentrations, specifically at G6M-13-02X, G6M-13-04X, G6M-97-05B, XSA-12-96X, XSA-12-95X, and G6M-04-07X.

4.1.3 Inorganic Metals

Groundwater samples were collected from 19 wells during spring 2017 sampling event and from 45 wells during the fall 2017 sampling event. The samples were submitted for dissolved metals (arsenic, iron, and manganese) analysis; except for wells G6M-04-22X and G6M-04-31X, which were submitted for dissolved arsenic analysis only.

Metals solubilization associated with the ERD process, particularly arsenic and manganese which are mobilized under reducing groundwater conditions, appears to be occurring within the IRZs across AOC 50. The resulting desorption naturally occurring metals from aquifer soils is directly correlated with the geochemically reducing conditions within the IRZ for each injection area. This relationship is observed throughout the AOC 50 treatment area and was an expected by-product of the selected remedial action.

The dissolved metals concentrations will likely continue to fluctuate within an IRZ and are not anticipated to significantly diminish until the IRZ reverts to an oxidizing state. As the aquifer becomes oxic (i.e., has a positive ORP) the geochemical conditions will promote the oxidation and precipitation of the dissolved metals. Metal hydroxides form and precipitate out of solution; in such areas, dissolved arsenic sorbs to metal hydroxides and is immobilized.

Areas with dissolved arsenic concentrations above the MCL of 10 ug/L are primarily in areas where ERD injections have occurred and downgradient of ERD injection areas, specifically in Areas 1, 2, 3, and in the eastern portion of Areas 4 and 5. During the 2017 monitoring events, the maximum concentration of dissolved arsenic detected was 970 µg/L at G6M-04-22X (Area 1) in October 2017, with an ORP of -66.9 millivolts and a DO of 0.48 mg/L (i.e., reducing conditions).

In wells where conditions are primarily oxidizing, the dissolved arsenic concentrations are generally non-detect or below the regulatory criterion of 10 µg/L. These areas include areas upgradient or cross-gradient of areas where injections were conducted (Area 1 – G6M-95-19X, Area 3 - G6M-13-03X), and other areas where oxidizing conditions are present [G6M-04-10X (FDSA) and G6M-04-13X (FDSA)]. Dissolved arsenic concentrations for the 2017 sampling events are presented in **Figure 4-15**. This includes wells downgradient of the Area 5 injection wells, specifically G6M-04-05X, G6M-04-06X, and G6M-02-06X. Groundwater monitoring performed at the Area 5 downgradient well locations, XSA-12-97X, XSA-12-96X, XSA-12-98X, and XSA-12-95X indicates dissolved arsenic concentrations in groundwater close to the Nashua River are below the regulatory limit of 10 µg/L. Also, groundwater monitoring performed at the Area 5 downgradient well locations G6M-02-06X and G6M-02-07X, indicates dissolved arsenic concentrations in groundwater close to the Nashua River are below the regulatory limit of 10 µg/L. Downgradient of the Area 5 IRZ, the proximity of wells with elevated arsenic to wells with low arsenic can be explained by the observed changes in the redox conditions in those wells. For example, the elevated arsenic in well G6M-02-12X (670 µg/L) corresponds with the reducing conditions observed in that well (DO of 0.25 mg/L and ORP of -117.9 mV; see **Table 4-3**) whereas the rapid change to oxidizing conditions (DO of 2.03 mg/L and ORP of 143.1 mV) in the shallower well G6M-03-09X had a substantially lower dissolved arsenic concentration (3 U µg/L).

There were increases in arsenic concentrations in Area 1 wells close to July 2017 injection locations, specifically at G6M-13-05X arsenic increased from non-detect (May 2017) to 35 µg/L (October 2017), at G6M-07-02X arsenic increased from non-detect (May 2017) to 37 J µg/L (October 2017). Arsenic concentrations in wells in the western plume by Areas 4 and 5 (G6M-13-01X, G6M-13-02X, G6M-97-05), which have not been affected by injections and continue to be below 10 µg/L but may increase due to the July 2017 injections.

Dissolved arsenic concentrations are variable, but as injections are ceased in areas where plume CVOC concentrations have decreased below cleanup levels (e.g., Area 2 and the eastern portions of Areas 4 and 5), dissolved arsenic concentrations are expected to decrease as these areas begin to return to aerobic conditions.

4.1.4 Other Analytes

Samples were submitted for analysis of dissolved gases (methane, ethene, ethane), TOC, alkalinity, nitrate, sulfide, and sulfate from 19 wells during the spring 2017 event, and from 27 wells during the fall 2017 event.

- The highest methane concentration was 24,000 µg/L in groundwater sampled from monitoring well G6M-02-01X (Area 2, May 2017) and IW-17D (Area 1) (May 2017) (**Figure 4-16**).
- The highest ethane concentration was 24 µg/L in groundwater sampled from G6M-07-02X (Area 1) in October 2017.
- The highest ethene concentration was 120 µg/L in groundwater sampled from G6M-03-01X (Area 1) in May 2017.
- The highest TOC concentration was 3,400 mg/L in groundwater sampled from G6M-07-02X (Area 1) in October 2017.

In Area 1, the high methane concentrations at IW-17D (24,000 µg/L, May 2017), IW-18D (21,000 µg/L, May 2017), G6M-02-08X (15,000 µg/L, May 2017, and 16,000 µg/L, October 2017), G6M-03-02X (15,000 µg/L, October 2017), and G6M-13-06X (17,000 µg/L, May 2017) indicate biodegradation is continuing at these locations. TOC concentrations at these locations are above 20 mg/L indicating sufficient carbon is available for the biodegradation process.

There was a substantial increase in TOC concentrations at G6M-07-02X from non-detect (May 2017) to 3,400 mg/L (October 2017) as a direct result of the July 2017 injections. A moderate increase in methane from 1.8 µg/L to 1,200 µg/L is expected to increase in the future as biodegradation continues in this area. At G6M-13-05X (focus of injections by Building 3803), moderate increases in TOC and methane were observed in October 2017.

Methane concentrations in Area 2 wells remained elevated in 2017 ranging from 9,100 to 24,000 µg/L indicating there may be some biodegradation occurring in the area. The Area 2 monitoring wells also have TOC concentrations ranging from 3.3 to 5.1 mg/L indicating that some carbon is available for the biodegradation process, although the concentrations are below the ideal TOC range of 20 to 50 mg/L.

Methane concentrations in Area 3 wells remained elevated in 2017 ranging from 4,800 to 21,000 µg/L indicating there may be some biodegradation occurring in the area. TOC concentrations range from 2.5 J µg/L to 24 mg/L indicating carbon is available for the biodegradation process, although lower TOC concentrations at G6M-04-02X (3.3 mg/L, October 2017) are below the ideal TOC range for biodegradation. But the increase in methane concentrations at G6M-04-02X from 4,800 µg/L (May 2017) to 16,000 µg/L (October 2017) indicates the July 2017 ERD injections have increased the biodegradation in this area.

TOC concentrations in Area 4 were low and methane concentrations are low-to-moderate, indicating there is minimal anaerobic biodegradation occurring due to a lack of carbon available for the biodegradation process. Most of the locations in Area 4 had PCE concentrations that decreased to below the cleanup level, except at G6M-13-02X where residual PCE concentrations remain. The July 2017 injections were conducted approximately 50 feet upgradient of G6M-13-02X. It is not anticipated that the injected material traveled sufficiently downgradient in the three months after the injection event to effect a change in the groundwater at G6M-13-02X. It is

anticipated that methane and TOC concentrations at G6M-13-02X will increase due to the July 2017 injections.

Currently the portions of the plume in Area 5 with the highest PCE concentrations have low TOC concentrations. Some of these locations have elevated, but not very high, concentrations of methane indicating that the injections may be causing biodegradation upgradient of those areas. Organic carbon may migrate to these wells given more time (i.e., with greater travel time) or after future injections. CVOCs are expected to decrease as biodegradation takes place in the areas around and downgradient of the injection points. Methane, TOC, and CVOCs will continue to be monitored to assess biodegradation in these areas.

4.1.5 Data Evaluation Summary

Overall PCE concentrations in groundwater continue to decrease due to the ERD treatment. As shown in **Figure 4-5**, residual pockets of PCE in groundwater remain in Area 1, in Area 3, and along the western edge of Areas 4 and 5. The PCE concentrations in the Area 5 downgradient locations, XSA-12-97X, XSA-12-96X, XSA-12-98X, and XSA-12-95X, remain above the 5 µg/L action level for PCE.

The maximum observed PCE concentration across AOC 50 has decreased from November 2016 (3,200 µg/L) to May 2017 (1,800 µg/L in Area 1, G6M-07-02X), which is consistent with previous sporadic PCE concentrations. The variation in PCE concentration may be a result of PCE desorbing from nearby low hydraulic conductivity units (**Figure 4-10**). After the July 2017 injections, PCE concentrations in well G6M-07-02X further decreased to 910J µg/L, methane concentrations increased to 1,200 µg/L, TOC concentrations increased to 3,400 mg/L, DO decreased to 0.51 mg/L, and ORP decreased to -161.2 mV. These results indicate reducing conditions are present, carbon is available for the biodegradation process, fermentation is occurring, and PCE concentrations are decreasing as a result of the July 2017 injections. Because PCE concentrations are decreasing as a result of the ERD injections and biodegradation has increased in this area, additional investigation is not warranted at this time and COC concentrations and biodegradation will continue to be evaluated through monitoring.

In wells where conditions are primarily oxidizing, the dissolved arsenic concentrations are generally below the regulatory criterion of 10 µg/L. This includes shallow wells downgradient of the Area 5 IRZ. Deeper groundwater downgradient of the Area 5 IRZ does have arsenic concentrations above the regulatory limit, but concentrations are beginning to decrease in some of the monitoring wells, indicating geochemistry in the deeper portion of the aquifer is beginning to return to aerobic conditions.

TOC concentrations were measured in the ERD injection areas to monitor the substrate distribution. TOC is an indicator of natural organic carbon present at site during baseline characterization and is an indicator of substrate distribution during performance monitoring. An ideal range of TOC to support ERD is 20 to 50 mg/L. TOC concentrations increased in specific areas as a result of the 2017 injections.

The presence of methane in groundwater in the injection areas indicates fermentation is occurring in a highly anaerobic environment and favorable reducing conditions are present. Methane concentrations greater than 500 µg/L are indicative of favorable reducing conditions [Environmental Security Technology Certification Program (ESTCP), 2004]. These areas include portions of the Source Area, Area 2, Area 3, downgradient of the Area 5 injection wells. Areas

outside of the injection areas have lower concentrations of methane indicating less fermentation is occurring in those areas.

4.2 Quality Assurance/Quality Control

TestAmerica Laboratories, Inc. (TestAmerica) of Savannah, Georgia was the primary contract laboratory used for the analysis of groundwater samples for the spring and fall 2017 LTM events. TestAmerica is compliant with the *Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (DoD, 2013) under the DoD National Environmental Laboratory Accreditation Program (ELAP) and holds current National Environmental Laboratory Accreditation Program (NELAP) accreditation for all applicable analytical methods.

As part of the 2017 groundwater sampling events, quality assurance/quality control (QA/QC) samples were collected to ensure that the data quality objectives were met for the laboratory analysis. Field duplicate samples were collected during sampling events to evaluate field precision at the rate of 10% (1 per 10 samples). Matrix spike (MS)/matrix spike duplicate (MSD) pairs were also submitted at a rate of 5% (1 per 20 samples) to evaluate matrix effects on analytical precision and accuracy. Trip blank samples were submitted with VOC samples to assess the potential for contamination during the sampling and shipping process.

The analytical results from the 2017 sampling events were evaluated for data acceptability in accordance with the USEPA Region 1 data validation guidelines (USEPA New England, 2013) and the *Quality Assurance Project Plan (QAPP) for the Annual Long-Term Monitoring (LTM) Program* (KGS, 2016). The method requirements from the *DoD QSM* version 5.0 (DoD, 2013) and the USEPA SW-846 QC guidance (USEPA, 2014) were also used as supplemental information. The data validation reports for the 2017 AOC 50 LTM sampling events are presented in **Appendix C**. Specific QC deviations requiring qualification in the 2017 data sets included:

- Holding times for a two VOC samples due to laboratory error;
- Field duplicate precision for four VOC field duplicates and paired samples, one dissolved gases field duplicate and paired sample, one metals field duplicate and paired sample, and three miscellaneous parameter (alkalinity, nitrogen/nitrate, sulfate, sulfide, and total organic carbon) field duplicate and paired samples were outside the acceptable range;
- Low level method blank cross-contamination for TOC and/or alkalinity; and,
- MS and MSD recovery and precision results outside the acceptance criteria.

The MS/MSD recovery and precision non-compliances are due to matrix effects from high levels of target compounds in select samples which were greater than four times the matrix spike levels. The percent recoveries could not be calculated for these compounds. Associated blank spike recoveries were within acceptance limits and sample results were acceptable with noted qualifications. Appropriate qualifiers have been added to the 2017 analytical data in **Table 4-2, Table 4-3,** and **Appendix D.**

4.3 Laboratory and Field Corrective Actions

<u>Laboratory</u>

Analyses were performed in general compliance with the precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) requirements listed in the LTMMP

Quality Assurance Project Plan (QAPP) (KGS, 2016). Good analytical practices and method requirements were followed, and the laboratory was determined to be performing properly. No significant QC deficiencies were noted. Although some results required qualification based on the issues listed above; useable analyte results are reported for 99.9% of samples from the 2017 LTM sampling events.

Field

There were no major field corrective actions required in 2017. Discrepancy issues were identified real time by review of chains of custody and laboratory logins as they were received by the project chemist. If discrepancies were noted, the project chemist notified the laboratory project manager via email and/or verbal communication and the issue was resolved immediately

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5.0 LAND-USE CONTROL MONITORING

Land Use Controls (LUCs) were a key component of the *Final Record of Decision, AOC 50* (ARCADIS, 2004) and *Final Remedial Action Work Plan, AOC50* (ARCADIS, 2005) (RAWP) and were developed to restrict or prevent potential human exposure to groundwater COCs at AOC 50. The RAWP outlined the plan for implementation of the LUCs at AOC 50. LUCs are implemented in the North Plume, the Source Area, and the Southwest Plume. LUCs in the form of Institutional Controls are necessary to restrict land and groundwater use at the site to mitigate unacceptable risks to human health until the site is suitable for unlimited exposure and unrestricted use.

The RAWP established the LUC objectives for each area. The basic objectives for all areas include:

- Restricting potential residential and/or commercial/industrial receptors from ingesting contaminated groundwater;
- Restricting groundwater pumping and/or storm water discharge/recharge to avoid drawing the contaminated groundwater from the Source Area;
- Limiting construction in specified areas over the contaminated groundwater that would interfere with the operation of the remedy and providing access to the site for the monitoring/remediation.

Additional objectives in the Source Area include:

- Protecting commercial/industrial workers from inhaling vapors released from groundwater used as "open" process water;
- Preventing potential construction/occupation of residential dwellings, schools/child care facilities and inhalation of vapors released from groundwater to indoor air.

The objectives of the LUCs for AOC 50 are imposed through legal mechanisms, which have been set up to establish environmental use restrictions and controls to limit activities that would interfere with the operation of the remedy. The legal mechanisms are enforced through incorporation of lease provisions into deeds and permits and through negotiations and agreements with local towns and developers.

Property inspections and interviews with stakeholders are conducted annually to verify the continued compliance with LUC objectives. Annual LUC compliance reports are prepared and include a summary of the interviews and inspections and identify any deficiencies to the site controls. The annual evaluation addresses whether the use restrictions and controls were communicated in the deed(s), whether the owners and state and local agencies were notified of the use restrictions and controls affecting the property, and whether use of the property has conformed to such restrictions and controls. The AOC 50 annual LUC inspection and interview results are included in **Appendix E**.

The September 2007 Addendum to the Real Property Master Plan included supplemental information on LUCs established under BRAC and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) programs that are applicable to Area G (Regional Training Site Maintenance), as well as, for three other deeded areas located at the DRFTA.

Any proposed actions that affect the AOC 50 property must consider following the ROD requirements, which include:

- Provide continued access to treatment transects and monitoring wells and access to install additional injection or monitoring wells, if necessary;
- Coordinate construction plans with the Base Realignment and Closure Cleanup Team (BCT) to facilitate ongoing remediation and future access to plume areas;
- No groundwater extraction or injection for any purpose; and,
- Coordinate construction plans for modifications to storm water systems with the BCT.

Furthermore, the deed notices provided at the time of property transfer to USFWS, Henry Woodle of Groton Ayer Realty Trust, and Ron Ostrowski of MassDevelopment, inform each owner of their property use restrictions.

Monitoring activities performed for the 2017 reporting period included a review of the documentation and records, on-site inspections, and annual LUC interviews with AOC 50 property owners.

5.1 On-site Inspections

LUCs were verified during an annual physical inspection of the site. The physical inspection included the following observations:

- Any signs of increased exposure potential to the public from groundwater contaminants;
- Any evidence that groundwater extraction wells had been installed at the site;
- Any evidence of site use changes; and,
- Any site access issues related to monitoring and remediation activities.

No evidence of increased exposure potential or the installation of groundwater extraction wells was observed. There is no evidence of any new activity in the area. There were no issues encountered related to site access for monitoring and remediation activities during the 2017 physical property inspection.

5.2 Land-Use Control Interview

Telephone interviews were conducted with each property owner, manager, or other designee familiar with "day-to-day" activities of the property. During the interviews, the KGS team personnel inquired about the following:

- The owner's familiarity regarding LUCs imposed upon the property and documentation of these controls;
- Sources of water used at the property; and,
- Proposed plans for property sale, future development, construction, or demolition activities at AOC 50.

Mr. Robert Simeone, BRAC Environmental Coordinator, stated that no change in the property use has occurred during 2017 and that the Army continues to implement the cleanup remedy at the site.

Mr. Ron Ostrowski of MassDevelopment, reiterated the same information stating that no change had occurred on the property during 2017.

Mr. Tom Eagle replaced Ms. Libby Herland (retired) of USFWS in the Fall 2017. He stated that he was not aware of any changes to the property during 2017.

Mr. Henry Woodle of the Groton Ayer Realty Trust stated that there have been no changes to his property during 2017.

5.3 Land-Use Control Monitoring Summary

Results of the annual compliance monitoring indicate that no breaches to the LUCs were evident and corrective action(s) were not necessary since there were no changes in site conditions or land use. There are no proposed changes to inspection and reporting frequency at this time.

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6.0 SUMMARY

The LTM and O&M activities were successfully performed in 2017 in accordance with the LTMMP (HGL, 2012) and QAPP (KGS, 2016). LTM activities included semiannual groundwater sampling resulting in the collection of 64 samples across both events (Area 1 – 26 samples, Area 2 – 4 samples, Area 3 – 6 samples, Area 4 – 4 samples, and Area 5 – 24 samples). O&M activities included ERD injections by direct injection at 41 locations and by injection at six permanent injection wells. The direct injections consisted of injecting a total of 31,825 gallons of ABC®-Ole'+ at a 15 or 20 wt% solution at 21 locations in Area 1, at three locations in Area 3, at five locations in southwest of the Area 4 injection wells, at five locations west of the Area 4/5 injection wells, and at seven locations southwest of the Area 5 injection wells. At the permanent monitoring wells, three wells in Area 3 were injected with approximately 450 gallons of a ABC® Ole' mixture at 20 wt% solution and three wells in Area 4 were injected with approximately 450 gallons of a ABC® Ole' mixture at 20 wt% solution.

Additional maintenance activities performed in 2017 included: replacement of well locks and plugs, replacement of flush-mount well pads, and removal of sediment from selected monitoring wells. A preliminary evaluation of the IWS system was also performed in 2017. The LUCs were verified through inspection and interviews.

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7.0 REFERENCES

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FIGURES

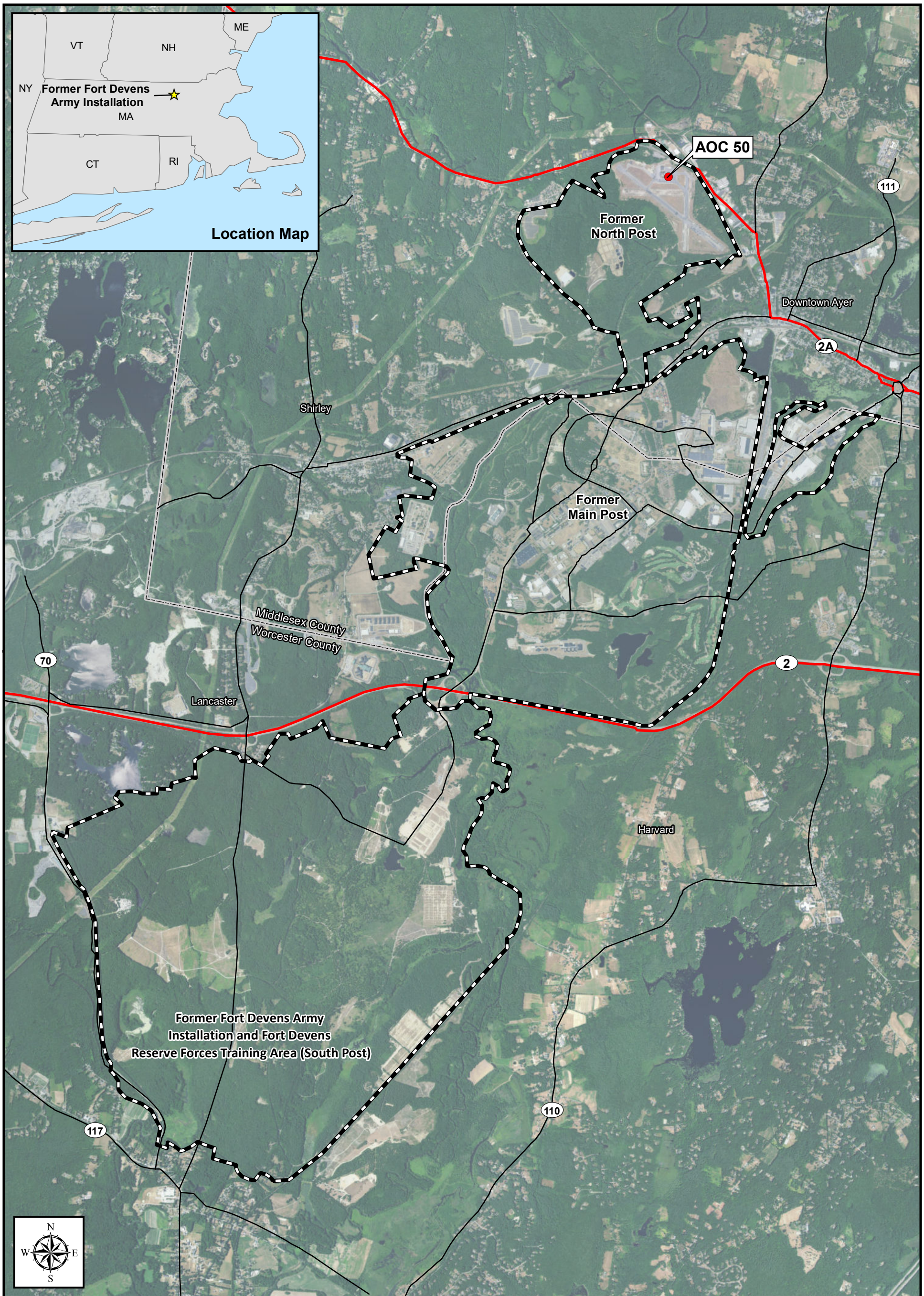


Figure 1-1
Site Location
AOC 50

References: LTMMP (HGL/Sovereign 2015)
Aerial Sources: 2016, Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend
- Area of Contamination (AOC)
- Highway
- Major Road
- County Line
- Former Fort Devens Boundary

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Fort Devens Reserve Forces Training Area, Devens MA

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

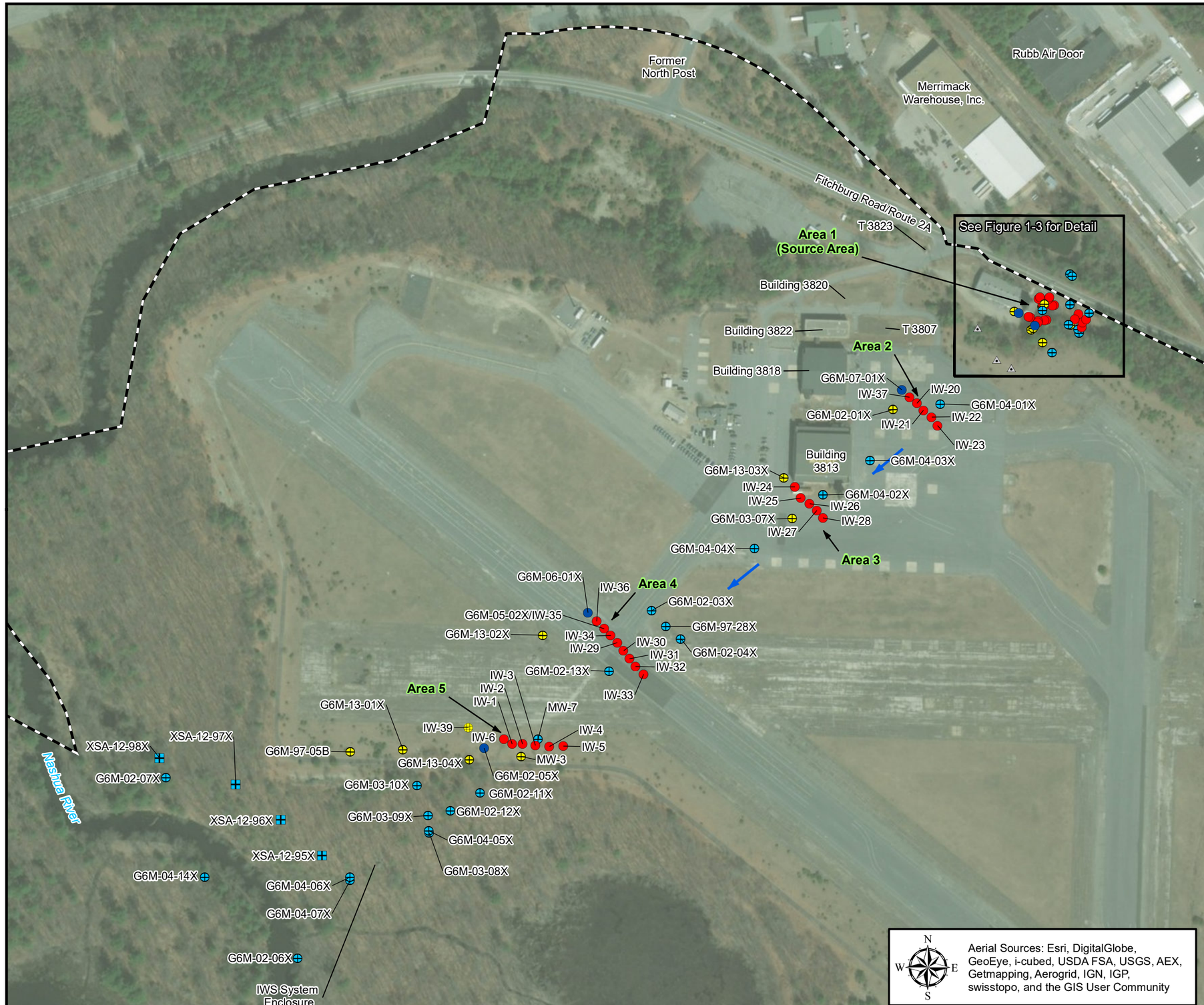
0 1,750 3,500
Feet

Date: 01/04/2018

Figure 1-1

File: AR2017_FFD.mxd

Figure 1-2
Site Layout
AOC 50



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Groundwater Flow Direction
- Former Fort Devens Boundary

Notes:
ERD = Enhanced reductive dechlorination
IWS = In-well stripping
LTM = Long-term monitoring

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

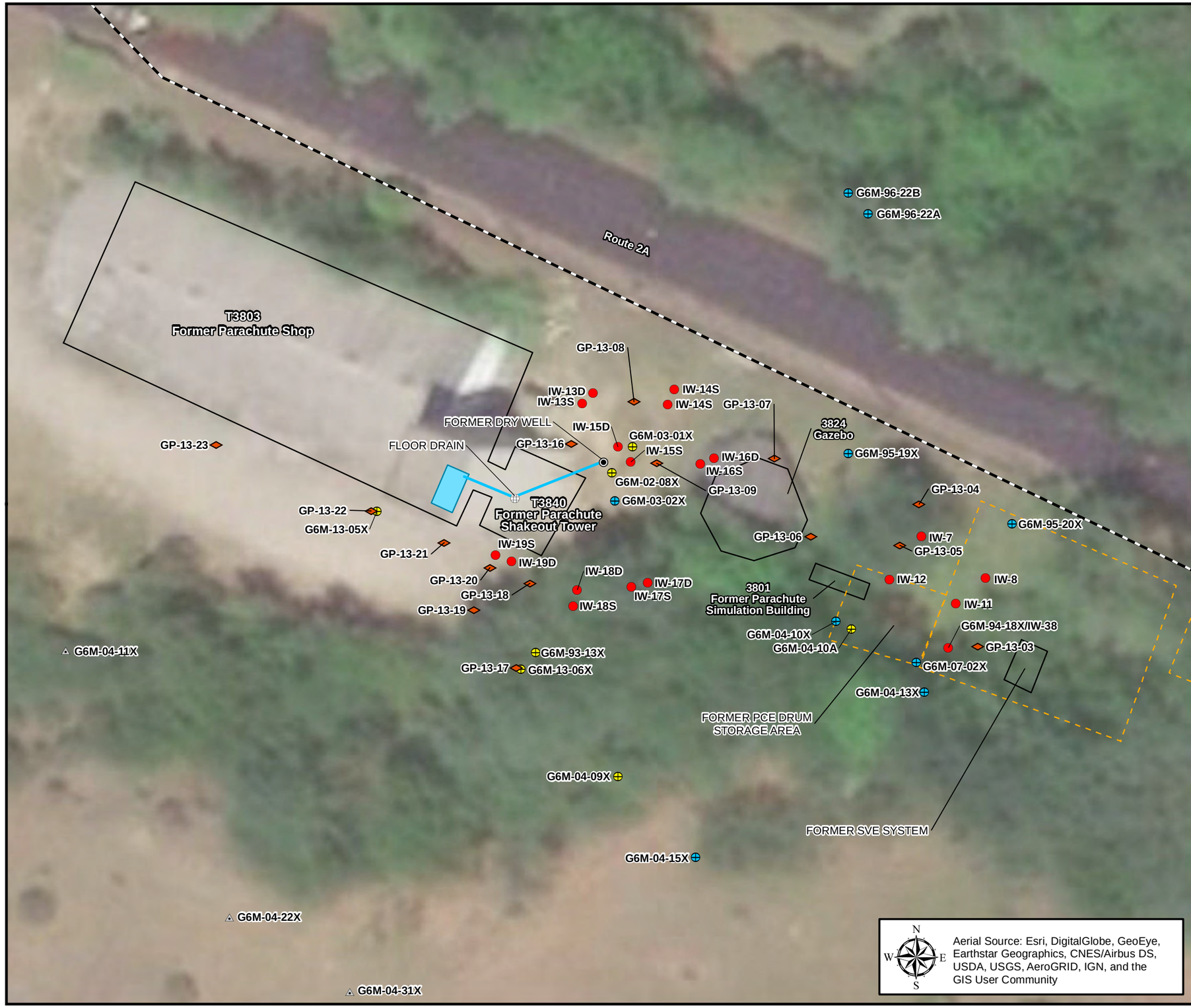
0 150 300
Feet

Date: 01/16/2018

Figure 1-2

File: AR2017_AOC50_Layout1.mxd

Figure 1-3
Site Layout, Source Area
AOC 50



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Injection Well
- Vertical Groundwater Profiling Location
- Former Dry Well
- Floor Drain
- Floor Drain Piping
- Janitor Sink
- Building Footprint
- Former Feature
- Former Fort Devens Boundary

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

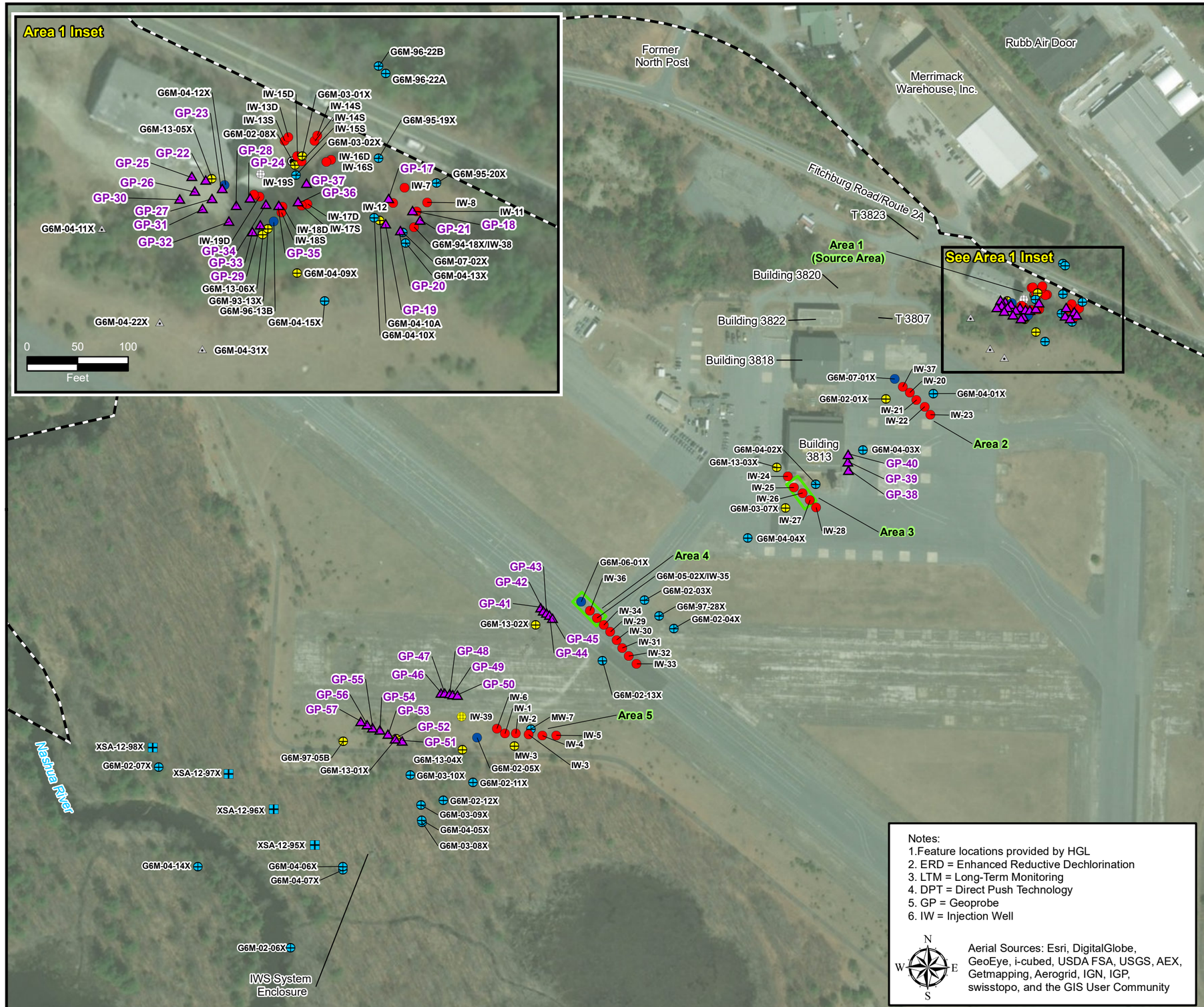
0 17.5 35
Feet

Date:
07/18/2018

Figure
1-3

File: AR2017_AOC50_Layout2.mxd

Figure 2-1
ERD Injection Locations
July 2017



Legend

- Geoprobe Injection Location - July 2017
- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- ERD Injection Well Transect
- Former Fort Devens Boundary

Notes:
1. Feature locations provided by HGL
2. ERD = Enhanced Reductive Dechlorination
3. LTM = Long-Term Monitoring
4. DPT = Direct Push Technology
5. GP = Geoprobe
6. IW = Injection Well

N W E S

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
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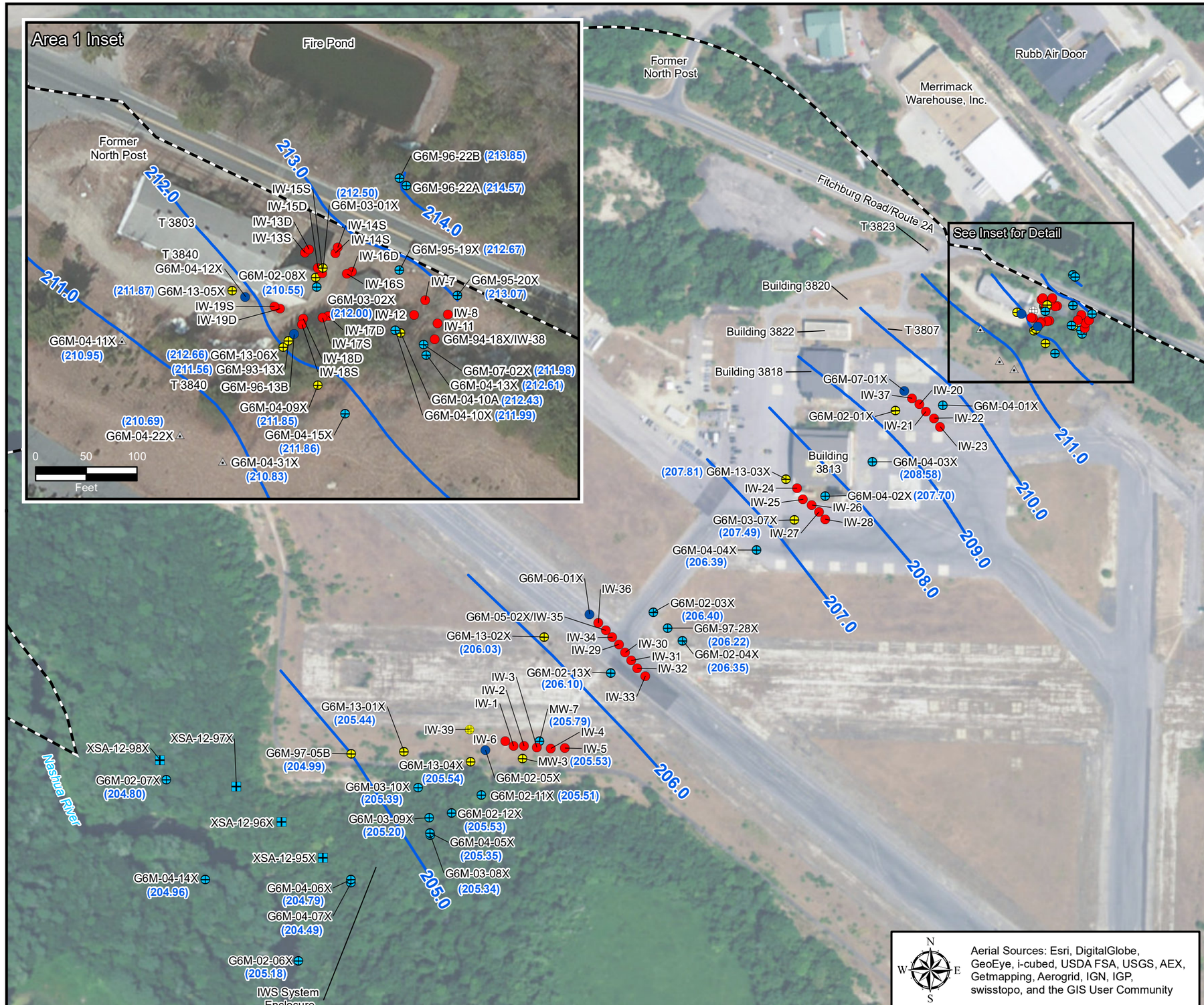
0 150 300
Feet

Date: 01/16/2018

Figure 2-1

File: AR2017_AOC50_ERD_InjectionLoc.mxd

Figure 3-1
Groundwater Contour Map
AOC 50
May 15, 2017



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- (211.85) Groundwater Elevation (ft AMSL)
- Groundwater Contour (ft AMSL) (Interval = 1 FT)
- Former Fort Devens Boundary

Notes:
G6M-02-06X and G6M-02-08X were not used in contouring
ERD = Enhanced reductive dechlorination
IWS = In-well stripping
LTM = Long-term monitoring

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

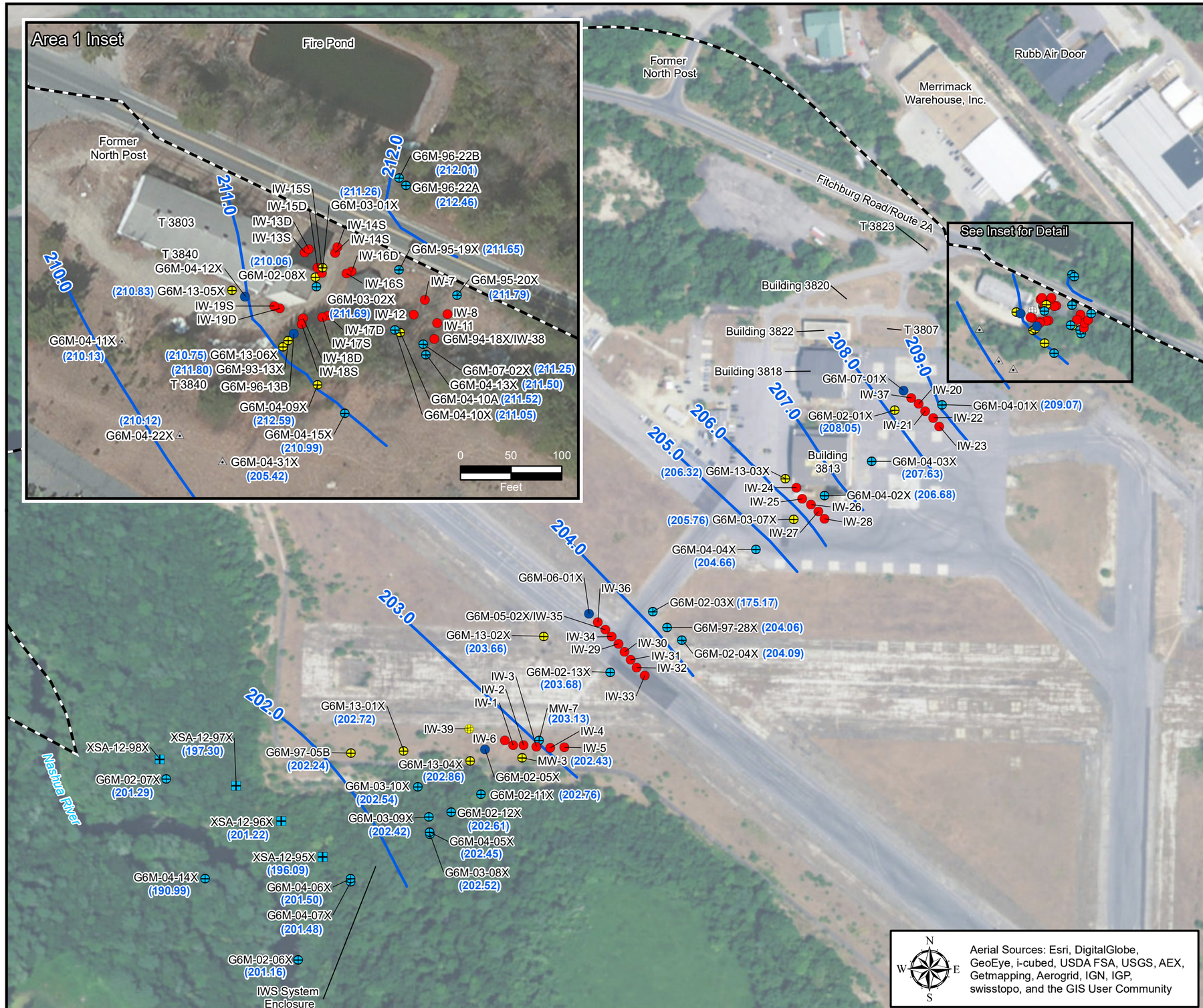
0 150 300 Feet

Date: 01/04/2018

Figure 3-1

File: AR2017_AOC50_May2017_GWC.mxd

Figure 3-2
Groundwater Contour Map
AOC 50
October 2, 2017



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- (211.52) Groundwater Elevation (ft AMSL)
- Groundwater Contour (ft AMSL) (Interval = 1 FT)
- Former Fort Devens Boundary

Notes:
G6M-04-09X, G6M-04-31X, G6M-02-08X, G6M-02-03X,
XSA-12-95X, XSA-12-97X and G6M-04-14X were not used in contouring
ERD = Enhanced reductive dechlorination
IWS = In-well stripping
LTM = Long-term monitoring

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
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0 150 300
Feet

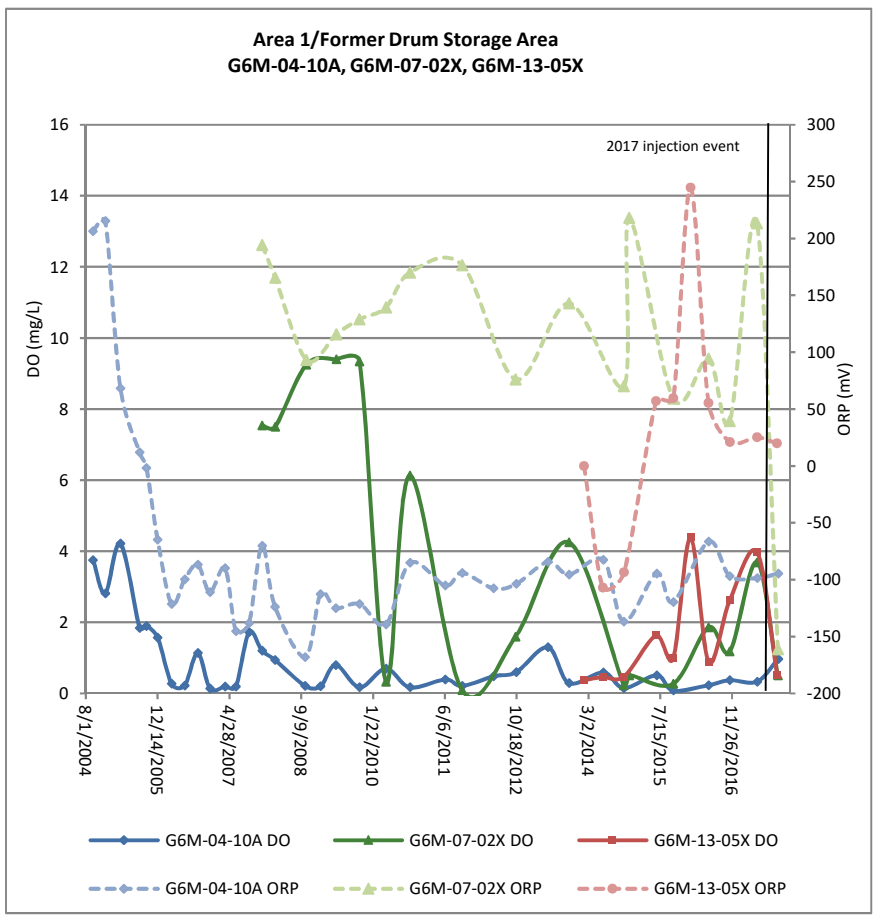
Date: 01/04/2018

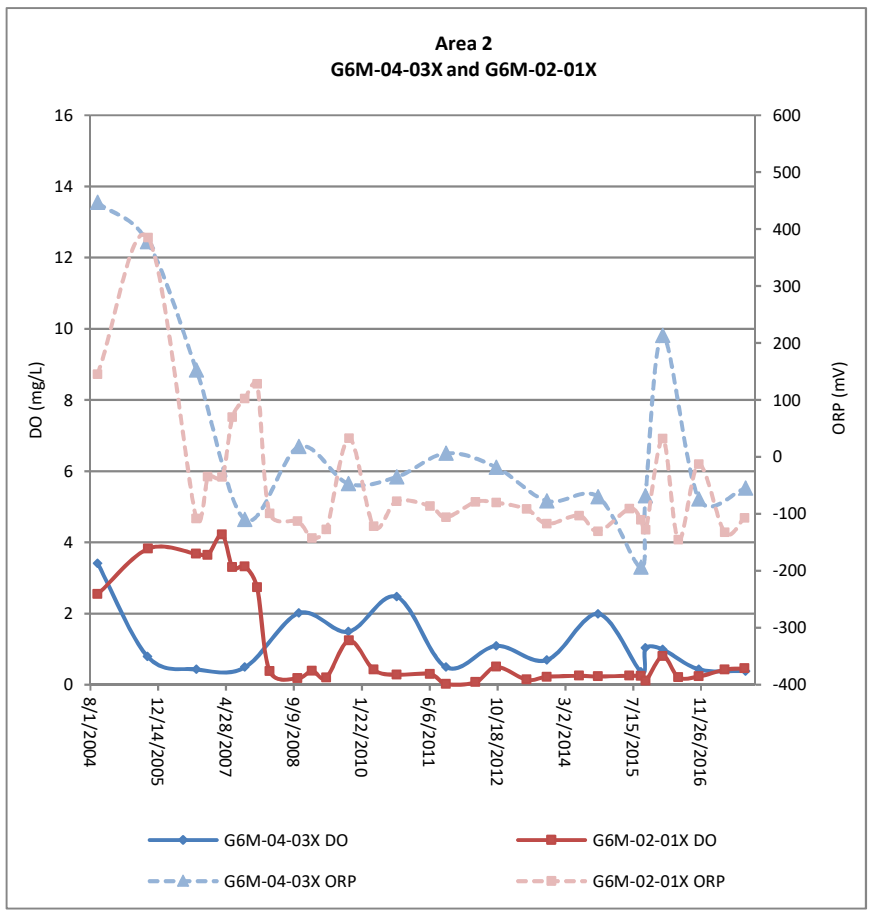
Figure 3-2

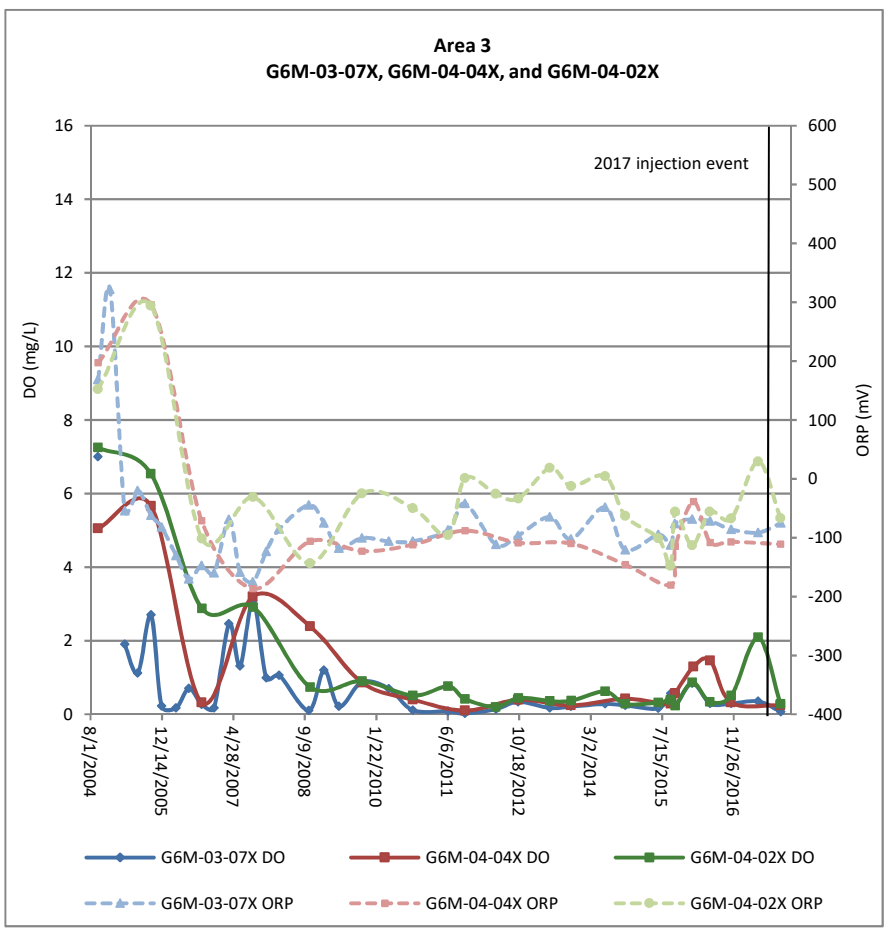
KGS

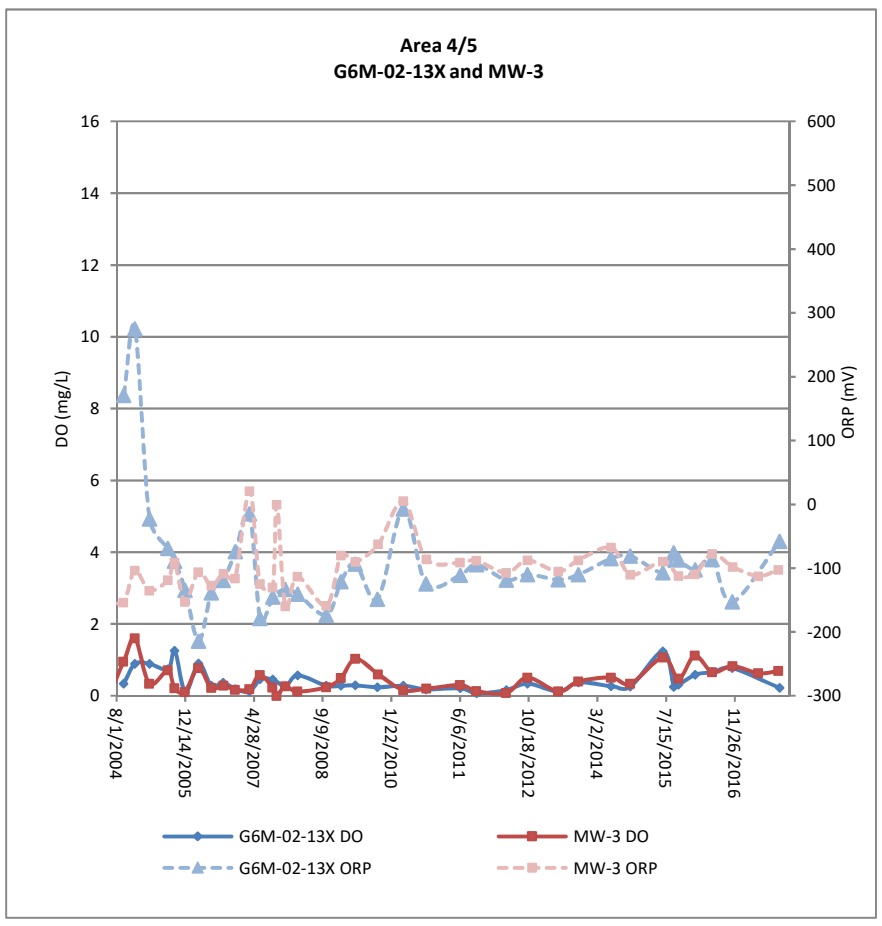
File: AR2017_AOC50_Oct2017_GWC.mxd

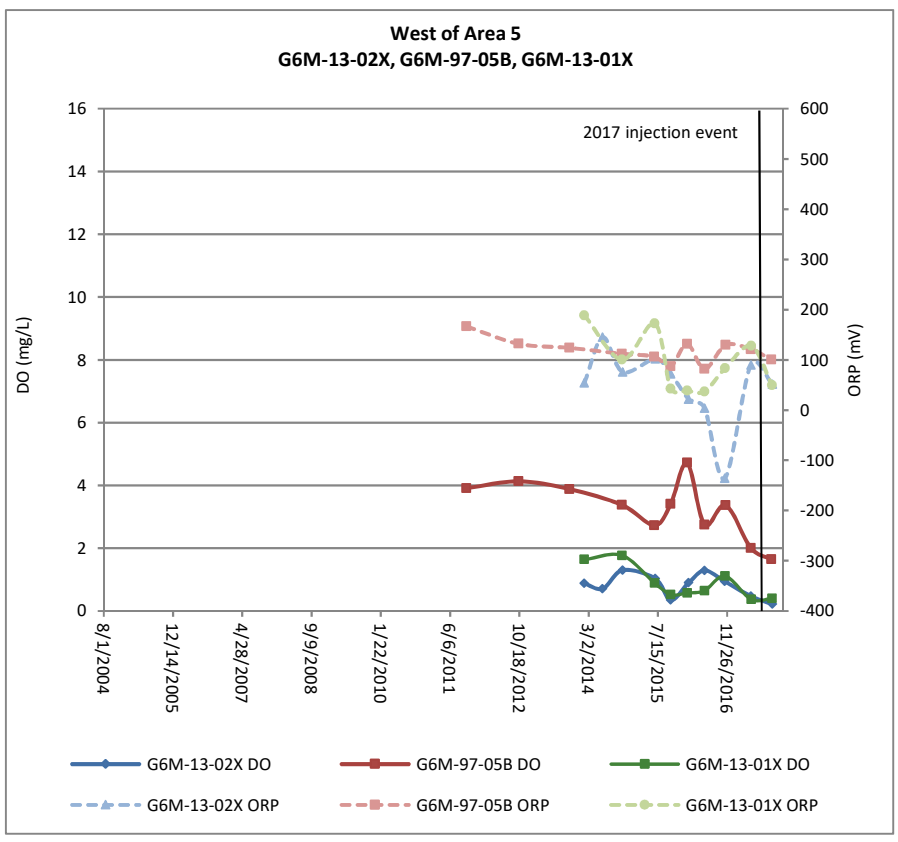
Figure 4-1
Dissolved Oxygen and Oxidation Reduction Potential Trend Graphs

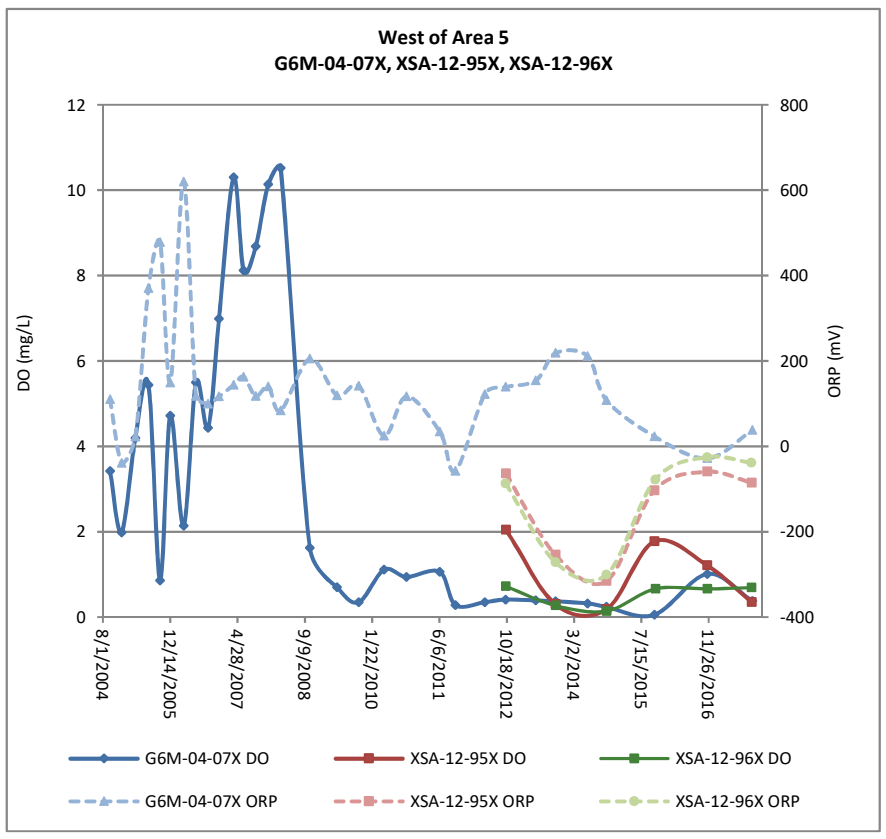






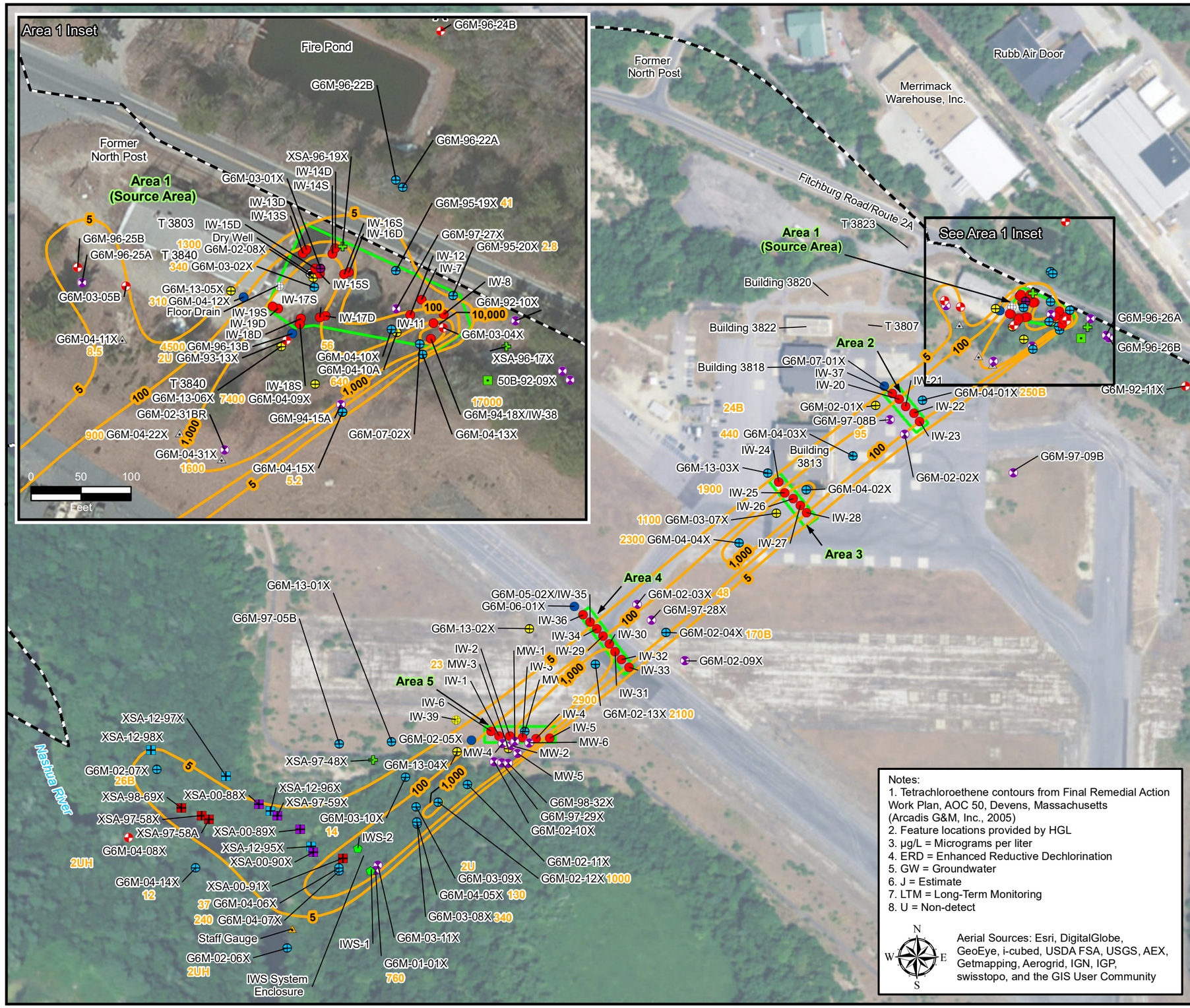






DO = dissolved oxygen mV = milli Volts
mg/L = milligrams per liter ORP = oxidation reduction potential

Figure 4-2
Tetrachloroethene Concentration in Groundwater 2004 AOC 50



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- ERD LTM Well - Sampled Every 3 Years
- LTM Well - Gauge Only
- Monitoring Well
- Monitoring Well Converted to Injection Well
- In-Well Stripping System Well
- MicroWell®- Sampled Annually
- MicroWell®- Gauge Only
- MicroWell®
- Injection Well
- Staff Gauge
- Historic Vertical Groundwater Profiling Location
- Historic Soil Boring
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- Tetrachloroethene Contour (µg/L)
- 1.7 Tetrachloroethene Concentration (µg/L)
- Former Fort Devens Boundary
- ERD Injection Well Transect

Notes:
1. Tetrachloroethene contours from Final Remedial Action Work Plan, AOC 50, Devens, Massachusetts (Arcadis G&M, Inc., 2005)
2. Feature locations provided by HGL
3. µg/L = Micrograms per liter
4. ERD = Enhanced Reductive Dechlorination
5. GW = Groundwater
6. J = Estimate
7. LTM = Long-Term Monitoring
8. U = Non-detect

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 150 300 Feet

Date: 01/04/2018

Figure 4-2

KGS

File: AR2017_AOC50_PCE_2004.mxd

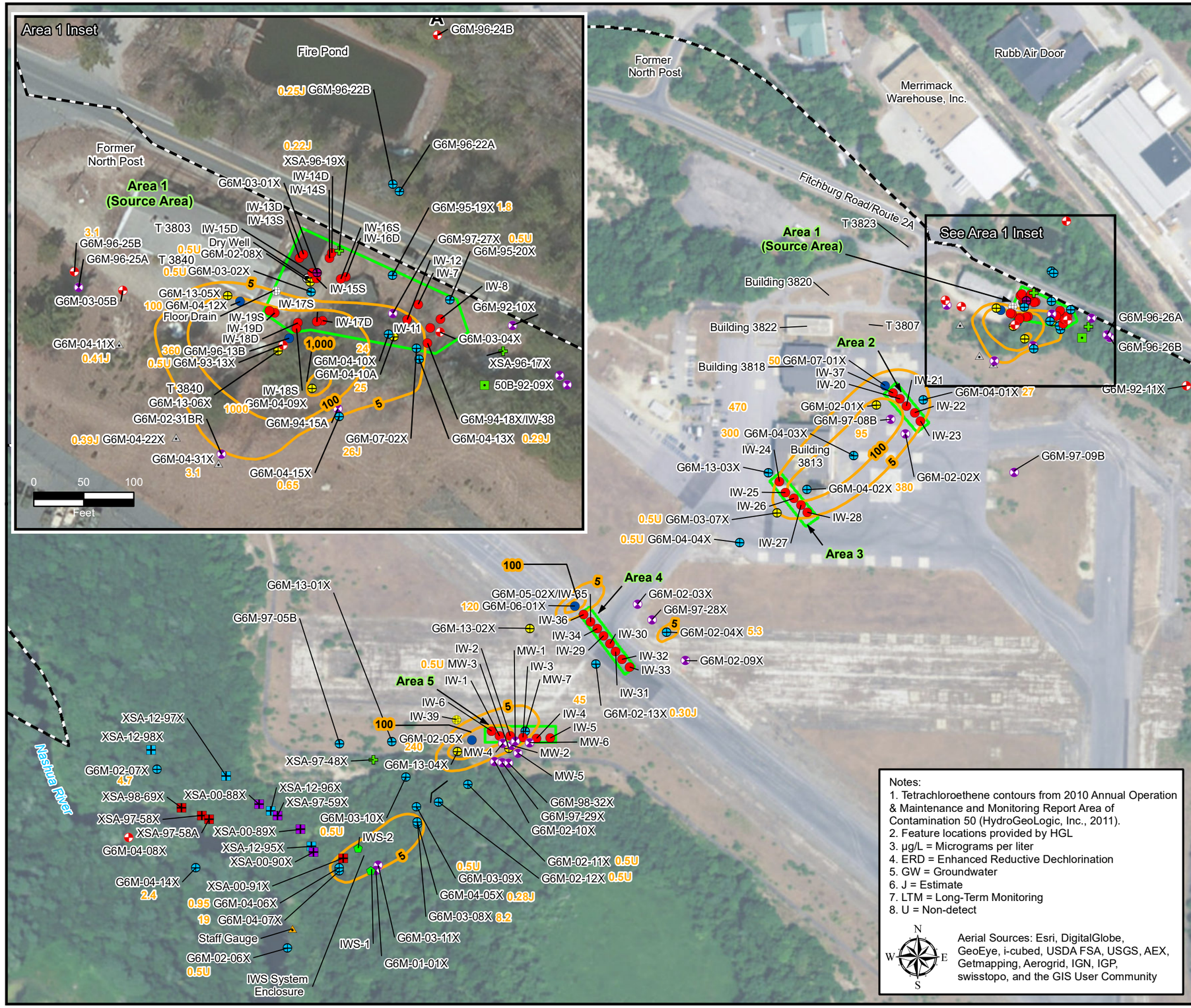


Figure 4-3
Tetrachloroethene Concentration in Groundwater 2010 AOC 50

Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- ERD LTM Well - Sampled Every 3 Years
- LTM Well - Gauge Only
- Monitoring Well
- Monitoring Well Converted to Injection Well
- In-Well Stripping System Well
- MicroWell®- Sampled Annually
- MicroWell®- Gauge Only
- MicroWell®
- Injection Well
- Staff Gauge
- Historic Vertical Groundwater Profiling Location
- Historic Soil Boring
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- Tetrachloroethene Contour (µg/L)
- 1.7 Tetrachloroethene Concentration (µg/L)
- Former Fort Devens Boundary
- ERD Injection Well Transect

Notes:
1. Tetrachloroethene contours from 2010 Annual Operation & Maintenance and Monitoring Report Area of Contamination 50 (HydroGeoLogic, Inc., 2011).
2. Feature locations provided by HGL
3. µg/L = Micrograms per liter
4. ERD = Enhanced Reductive Dechlorination
5. GW = Groundwater
6. J = Estimate
7. LTM = Long-Term Monitoring
8. U = Non-detect

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 150 300 Feet

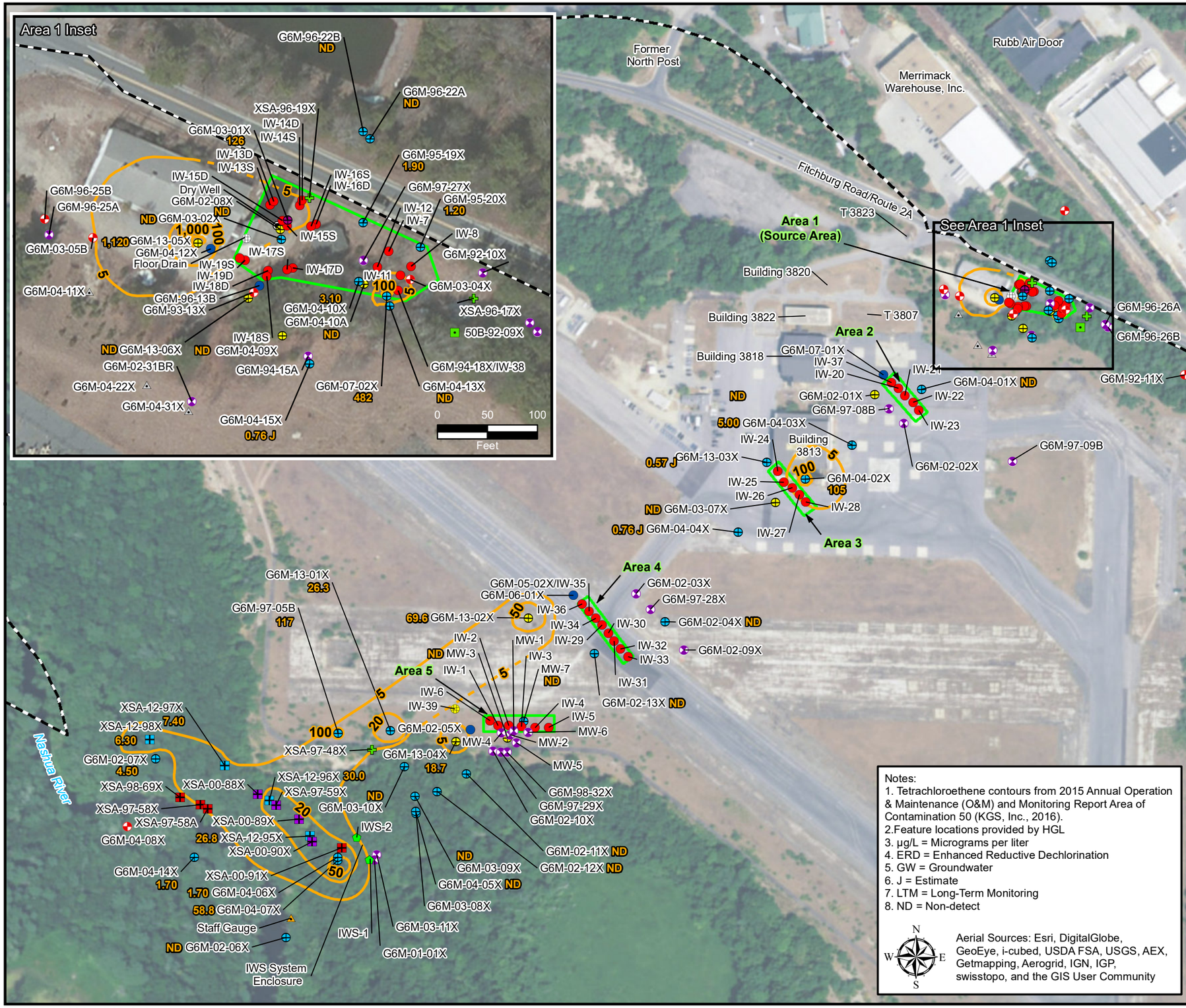
Date: 01/04/2018

Figure 4-3

KGS

File: AR2017_AOC50_PCE_2010.mxd

Figure 4-4
Tetrachloroethene Concentrations in Groundwater, October 2015, AOC 50



Notes:
1. Tetrachloroethene contours from 2015 Annual Operation & Maintenance (O&M) and Monitoring Report Area of Contamination 50 (KGS, Inc., 2016).
2.Feature locations provided by HGL
3. µg/L = Micrograms per liter
4. ERD = Enhanced Reductive Dechlorination
5. GW = Groundwater
6. J = Estimate
7. LTM = Long-Term Monitoring
8. ND = Non-detect

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- ERD LTM Well - Sampled Every 3 Years
- LTM Well - Gauge Only
- Monitoring Well
- Monitoring Well Converted to Injection Well
- In-Well Stripping System Well
- MicroWell® - Sampled Annually
- MicroWell® - Gauge Only
- MicroWell®
- Injection Well
- Staff Gauge
- Historic Vertical Groundwater Profiling Location
- Historic Soil Boring
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- 5 — Tetrachloroethene Contour (µg/L)
- Inferred Tetrachloroethene Contour (µg/L)
- 69.6 — Tetrachloroethene Concentration (µg/L)
- Former Fort Devens Boundary
- ERD Injection Well Transect

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 150 300 Feet

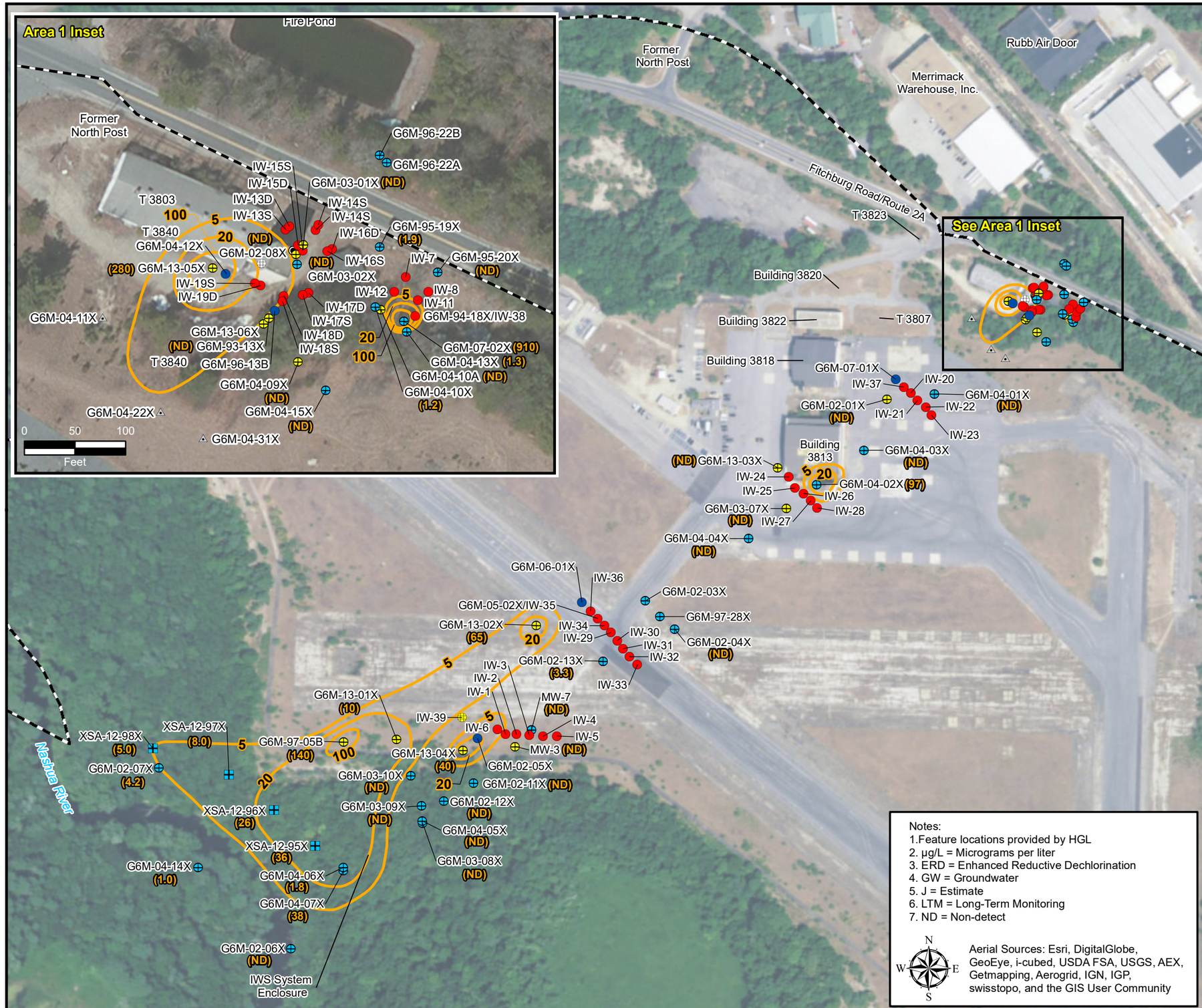
Date: 01/04/2018

Figure 4-4

KGS

File: AR2017_AOC50_PCE_Oct2015.mxd

Figure 4-5
Tetrachloroethene Concentration in Groundwater, October 2017, AOC 50



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- 5 — Interpretive Tetrachloroethene (PCE) Contour (µg/L)
- 280 — Tetrachloroethene (PCE) Concentration (µg/L)
- Former Fort Devens Boundary

Notes:
1. Feature locations provided by HGL
2. µg/L = Micrograms per liter
3. ERD = Enhanced Reductive Dechlorination
4. GW = Groundwater
5. J = Estimate
6. LTM = Long-Term Monitoring
7. ND = Non-detect

N W E S

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 150 300
Feet

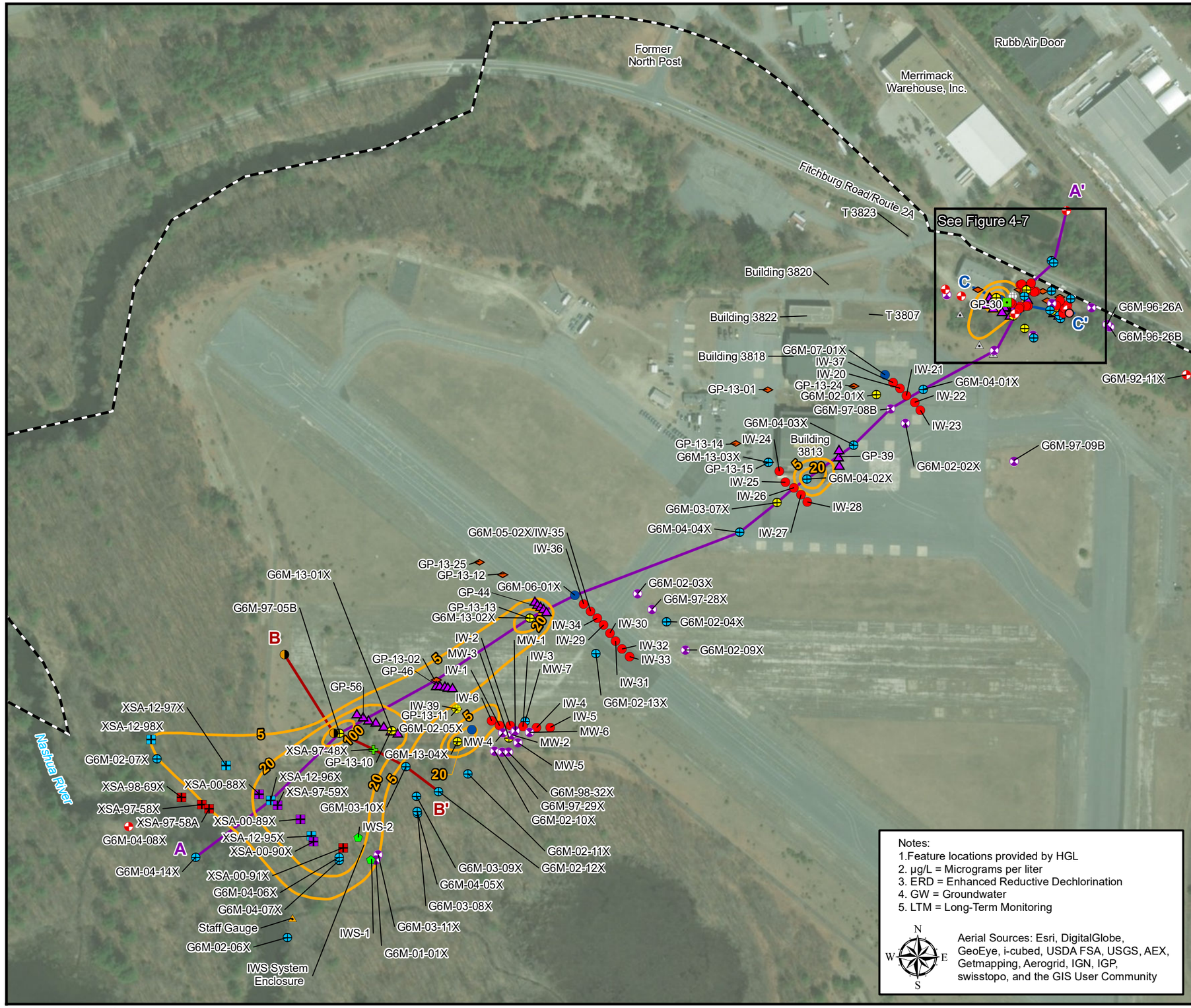
Date: 01/04/2018

Figure 4-5

KGS

File: AR2017_AOC50_PCE_Oct2017.mxd

Figure 4-6
Cross-Section Plan View
AOC 50



Legend

- Geoprobe Injection Location - July 2017
- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Abandoned Well
- Historic Soil Boring
- Historic Vertical Groundwater Profiling Location
- In-Well Stripping System Well
- Injection Well
- Abandoned Injection Well
- Injection Well Installed 01/2014
- LTM Well - Gauge Only
- MicroWell
- MicroWell - Gauge Only
- MicroWell - Sampled Annually
- Monitoring Well
- Monitoring Well Converted to Injection Well
- Staff Gauge
- MiHPT Investigation Location
- Vertical Groundwater Profiling Location
- Dry Well
- Floor Drain
- October 2017 Interpretive Tetrachloroethene (PCE) Contour (µg/L)
- Cross-Section A-A'
- Cross-Section B-B'
- Cross-Section C-C'
- Former Fort Devens Boundary

Notes:
1. Feature locations provided by HGL
2. µg/L = Micrograms per liter
3. ERD = Enhanced Reductive Dechlorination
4. GW = Groundwater
5. LTM = Long-Term Monitoring

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

2017 Annual Report
AOC 50

Former Fort Devens Army Installation and Sudbury Annex
Devens, Massachusetts

KOMAN Government Solutions, LLC
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

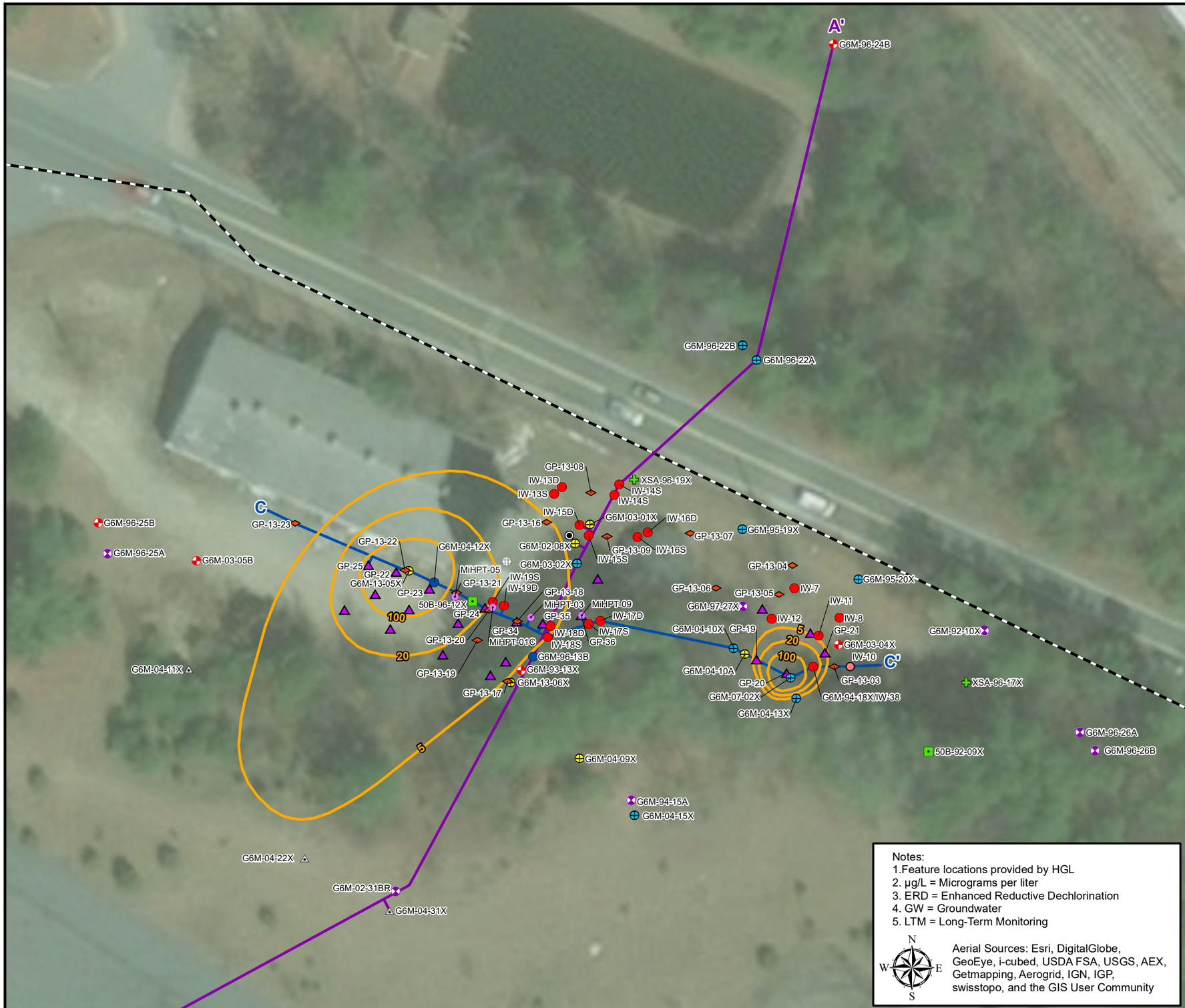
0 150 300 Feet

Date: 05/25/2018

Figure 4-6

File: AR2017_AOC50_XSectLoc.mxd

Figure 4-7
Cross-Section Plan View
AOC 50 - Area 1



Notes:
1. Feature locations provided by HGL
2. µg/L = Micrograms per liter
3. ERD = Enhanced Reductive Dechlorination
4. GW = Groundwater
5. LTM = Long-Term Monitoring

N W E S

Aerial Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

- Geoprobe Injection Location - July 2017
- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Abandoned Well
- Historic Soil Boring
- Historic Vertical Groundwater Profiling Location
- In-Well Stripping System Well
- Injection Well
- Abandoned Injection Well
- Injection Well Installed 01/2014
- LTM Well - Gauge Only
- MicroWell
- MicroWell - Gauge Only
- MicroWell - Sampled Annually
- Monitoring Well
- Monitoring Well Converted to Injection Well
- Staff Gauge
- MiHPT Investigation Location
- Vertical Groundwater Profiling Location
- Dry Well
- Floor Drain
- October 2017 Interpretive Tetrachloroethene (PCE) Contour (µg/L)
- Cross-Section A-A'
- Cross-Section C-C'
- Former Fort Devens Boundary

2017 Annual Report
AOC 50

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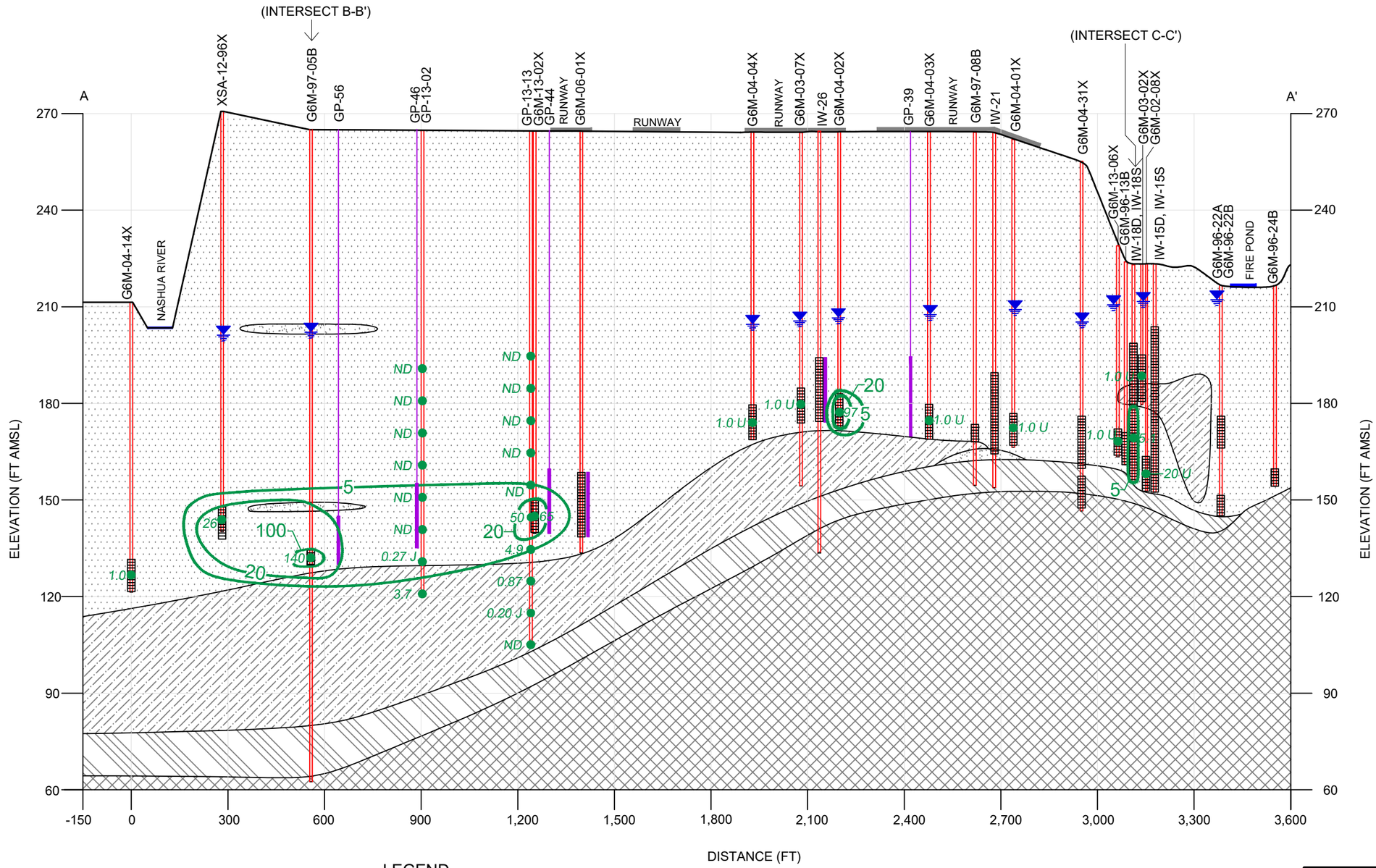
0 25 50
Feet

Date: 05/23/2018

Figure 4-7

KGS

File: AR2017_AOC50_AREA1_XSectLoc.mxd



NOTES:

FT = FEET
FT AMSL = FEET ABOVE MEAN SEA LEVEL
J = THE ANALYTE WAS DETECTED AT THE REPORTED CONCENTRATION; THE QUANTITATION IS AN ESTIMATE
µg/L = MICROGRAMS PER LITER

ND = NON-DETECT

GROUNDWATER PROFILING RESULTS AT GP-13-02 AND GP-13-13 WERE FROM 2013.

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

CROSS SECTION FEATURES INCLUDING WELL LOCATIONS, SCREEN LOCATION AND LITHOLOGY FOR THE EASTERN PORTION OF THE CROSS-SECTION (G6M-04-04X TO G6M-96-24) BASED ON "FIGURE 4.10 TETRACHLOROETHENE PLUME IN GROUNDWATER (CROSS SECTION A-A') PRIOR TO ERD INJECTIONS" BY HGL ON 03/31/2014.

LEGEND

- FINE SAND
- COARSE SAND
- SILTY SAND
- GLACIAL TILL
- BEDROCK
- GW ELEVATION ON 10/02/2017
- WELL SCREEN INTERVAL
- BORING
- 2017 INJECTION INTERVAL
- G6M-13-02X BORING/WELL IDENTIFICATION
- 4.3 ● TETRACHLOROETHENE SAMPLE CONCENTRATION (µg/L)
- TETRACHLOROETHENE CONTOUR (µg/L)
- LITHOLOGY BOUNDARY

Tetrachloroethene Plume in Groundwater - Cross Section, A-A'
AOC 50, October 2017

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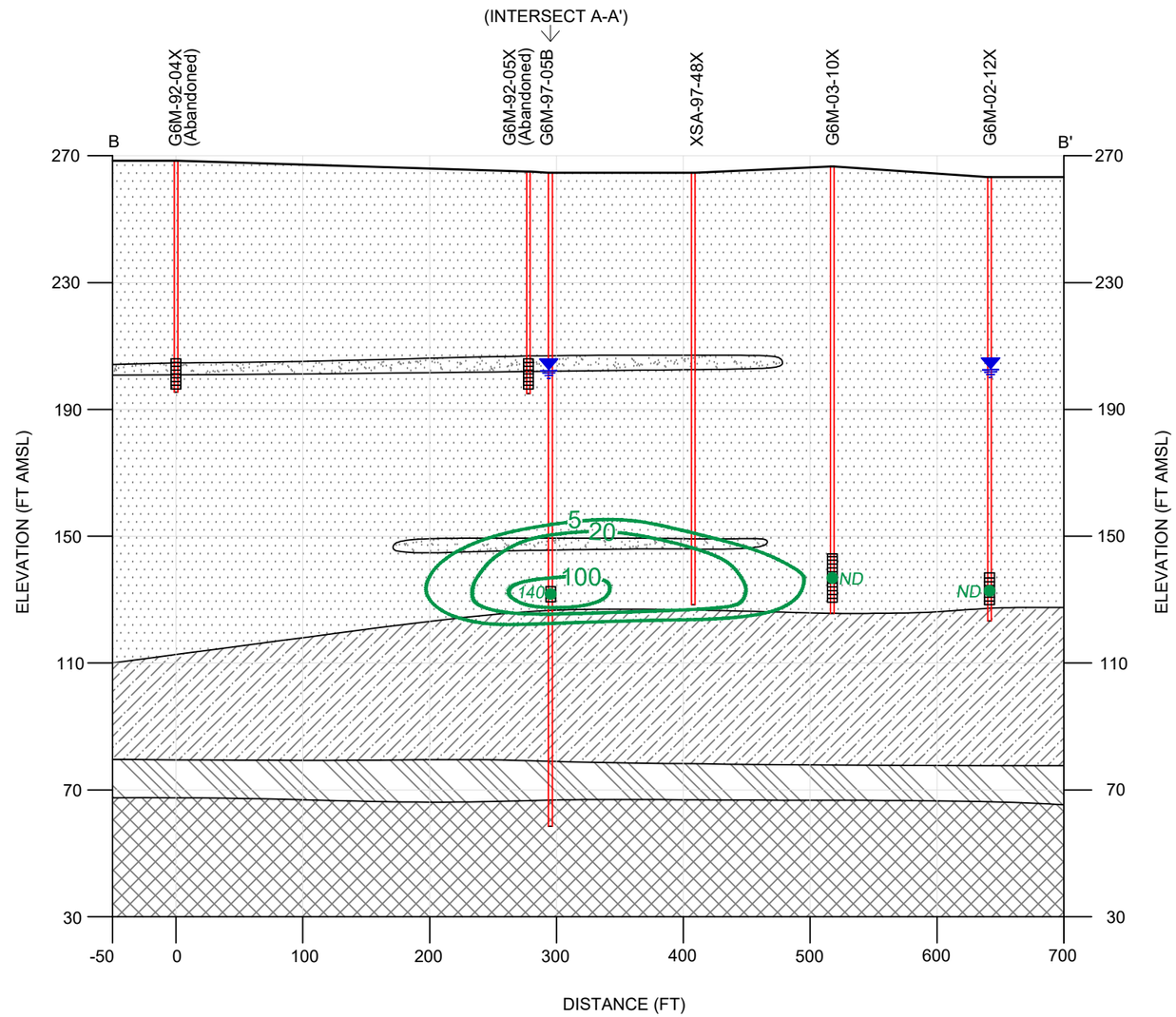
Date:	Figure
05/23/2018	4-8

X:\HS_Environmental\FortDevens_Mass\Drawings\AOC50_XSections\AR2017_AOC50_XSections_V3.dwg



LEGEND

- FINE SAND
- COARSE SAND
- SILTY SAND
- GLACIAL TILL
- BEDROCK
- GW ELEVATION ON 10/02/2017
- WELL SCREEN INTERVAL
- BORING
- LITHOLOGY BOUNDARY
- G6M-03-10X — BORING/WELL IDENTIFICATION
- 140 ● — TETRACHLOROETHENE SAMPLE CONCENTRATION (µg/L)
- TETRACHLOROETHENE CONTOUR (µg/L)

NOTES:

FT = FEET
FT AMSL = FEET ABOVE MEAN SEA LEVEL
µg/L = MICROGRAMS PER LITER

ND = NON-DETECT

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

CROSS SECTION FEATURES INCLUDING WELL LOCATIONS, SCREEN LOCATION AND LITHOLOGY AT G6M-92-04X, G6M-97-05B AND XSA-97-78X BASED ON "FIGURE 6 TETRACHLOROETHENE PLUME IN GROUNDWATER (CROSS SECTION C-C') OCTOBER 2013" BY HGL ON 03/31/2014.

Tetrachloroethene Plume in Groundwater - Cross Section, B-B'
AOC 50, October 2017

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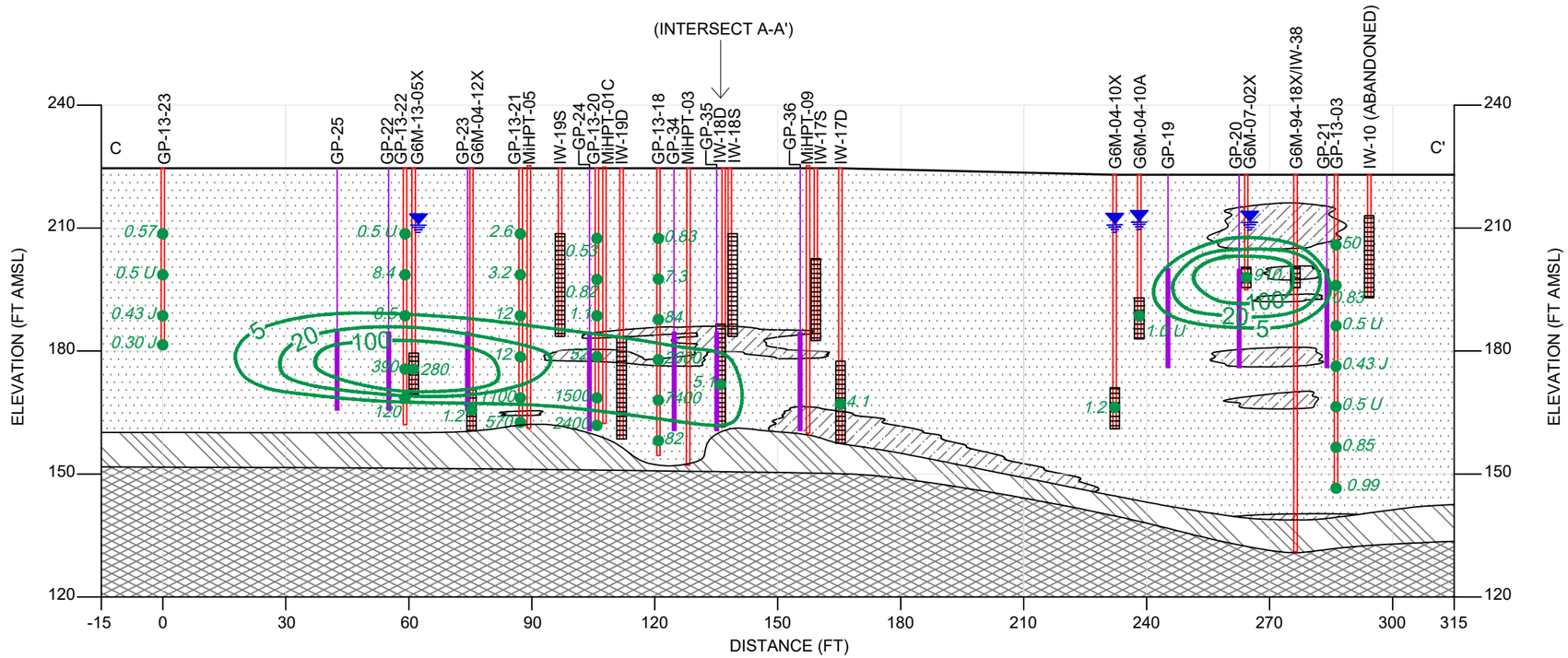
	Date: 05/23/2018	Figure 4-9	KGS

X:\HS_Environmental\FortDevens_Mass\Drawings\AOC50_XSections\AR2017_AOC50_XSections_V3.dwg



NOTES:

FT = FEET
FT AMSL = FEET ABOVE MEAN SEA LEVEL
J = THE ANALYTE WAS DETECTED AT THE REPORTED CONCENTRATION; THE QUANTITATION IS AN ESTIMATE
U = ANALYTE WAS DETECTED BELOW LABORATORY DETECTION LIMIT
µg/L = MICROGRAMS PER LITER

GROUNDWATER PROFILING RESULTS AT GP LOCATIONS WERE FROM 2013.

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

LEGEND

- FINE SAND
- SILTY SAND
- GLACIAL TILL
- BEDROCK
- GW ELEVATION ON 10/02/2017
- WELL SCREEN INTERVAL
- BORING
- 2017 INJECTION INTERVAL
- G6M-13-05X — BORING/WELL IDENTIFICATION
- 910 ● — TETRACHLOROETHENE SAMPLE CONCENTRATION (µg/L)
- TETRACHLOROETHENE CONTOUR (µg/L)
- LITHOLOGY BOUNDARY

Tetrachloroethene Plume in Groundwater - Cross Section, C-C'
AOC 50, October 2017

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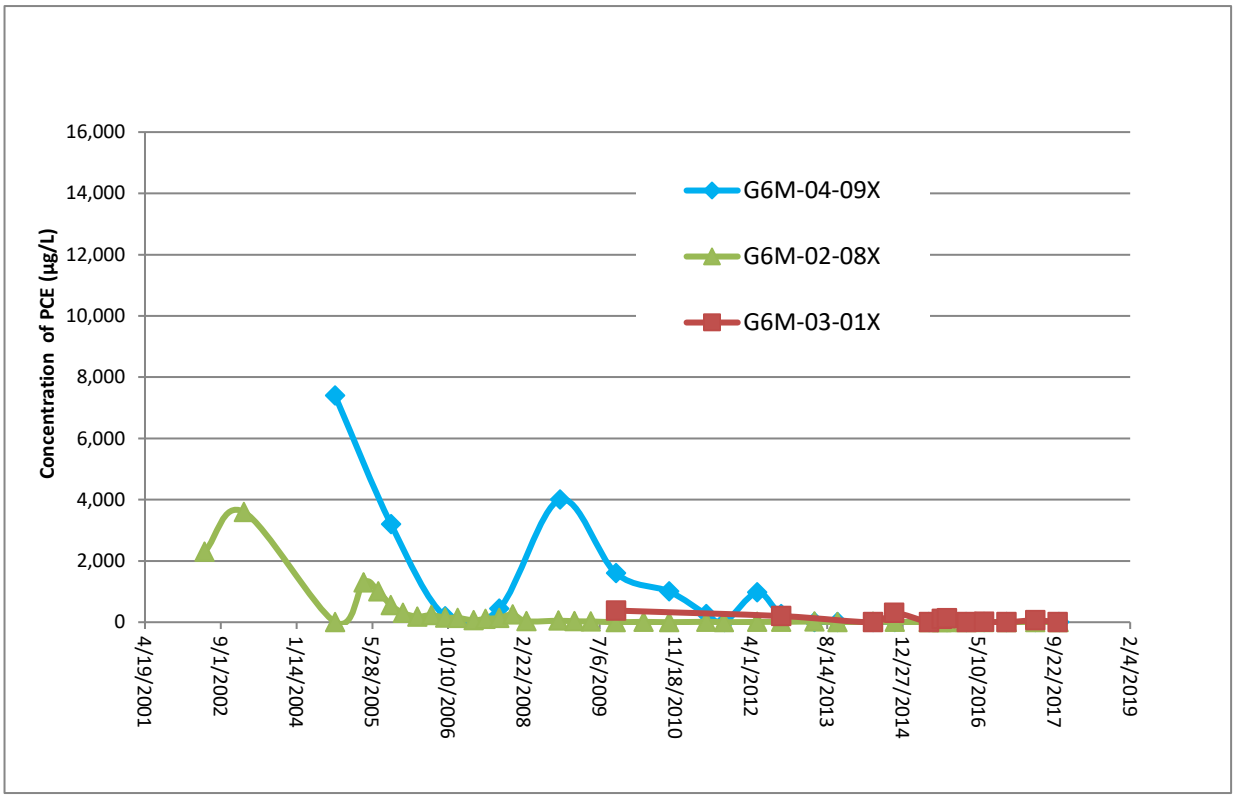
	Date:	Figure
	05/23/2018	4-10

X:\HS_Environmental\FortDevens_Mass\Drawings\AOC50_XSections\AR2017_AOC50_XSections_V3.dwg

Figure 4-11
Area 1 PCE Concentration Trend Graphs



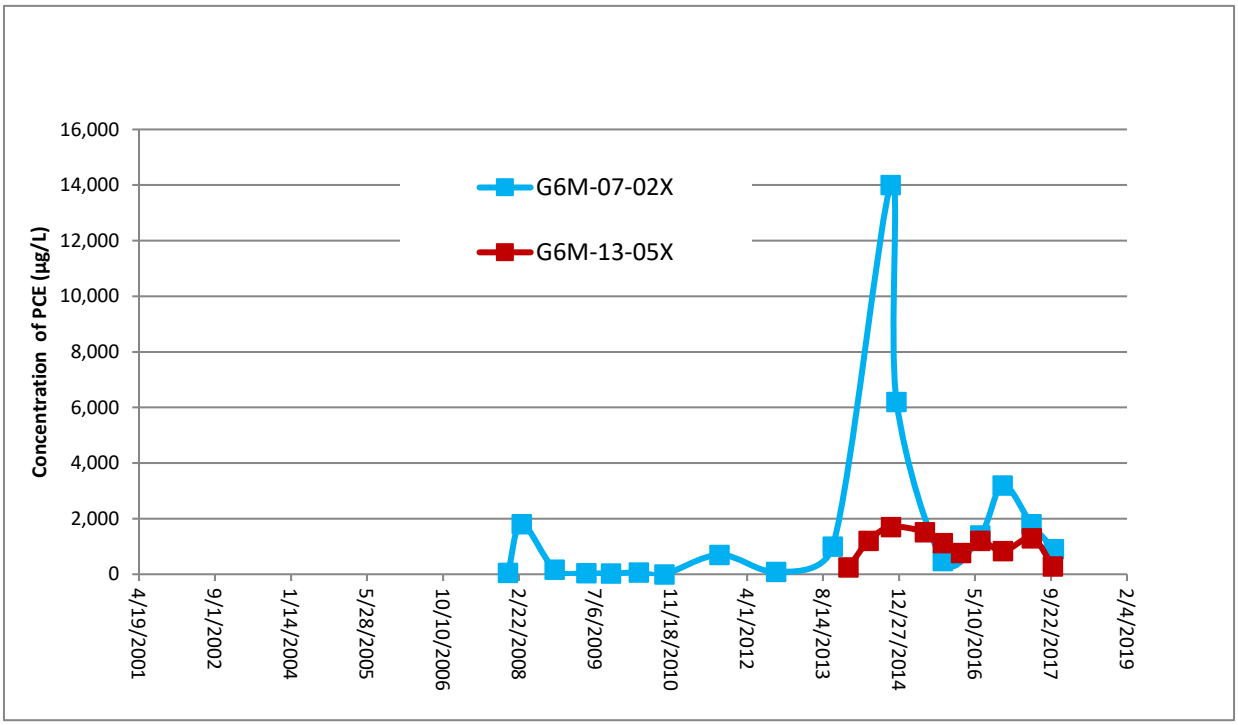


Figure 4-12
Area 2 PCE ConcentrationTrend Graph

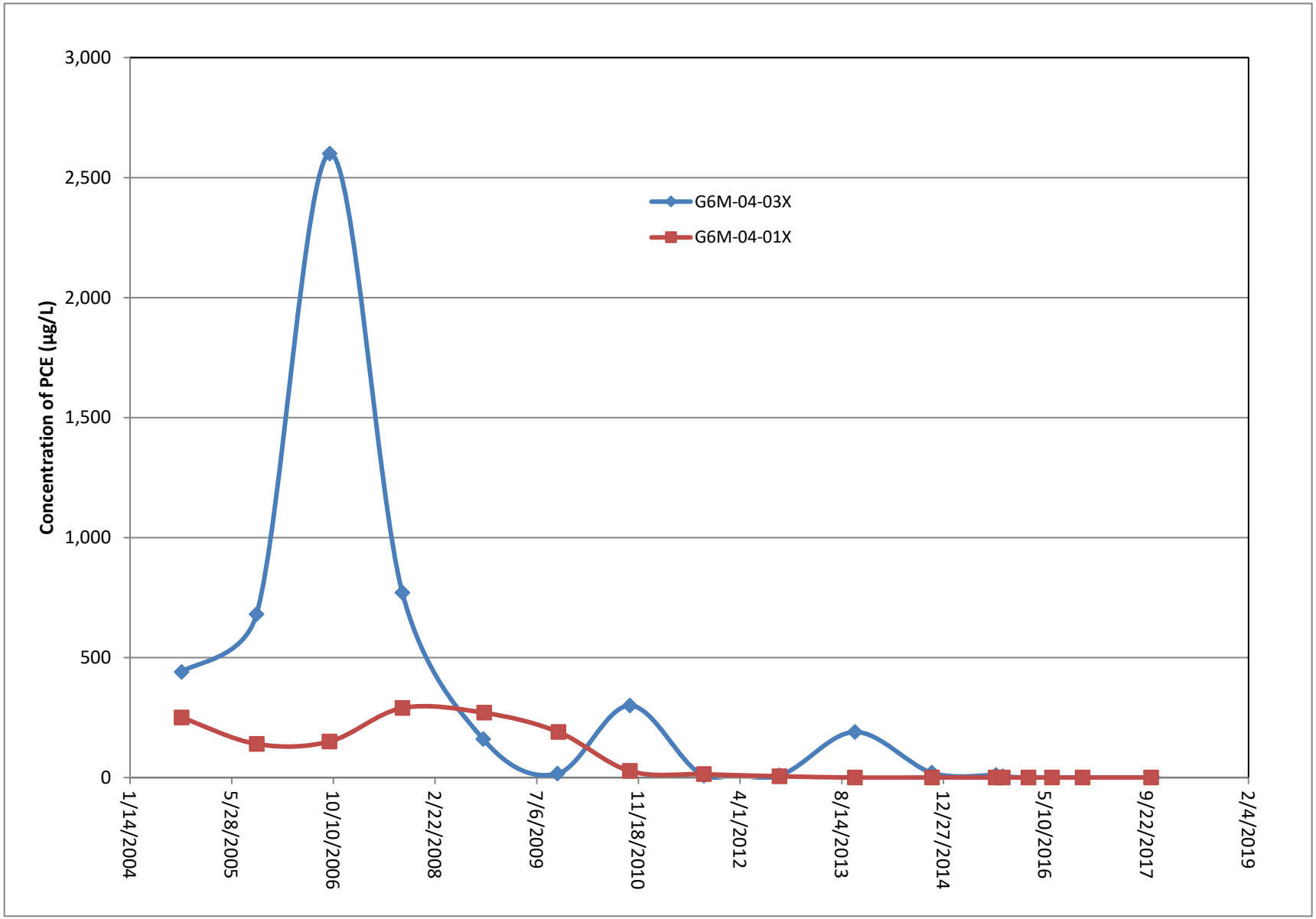


Figure 4-13
Area 3 PCE Concentration Graph

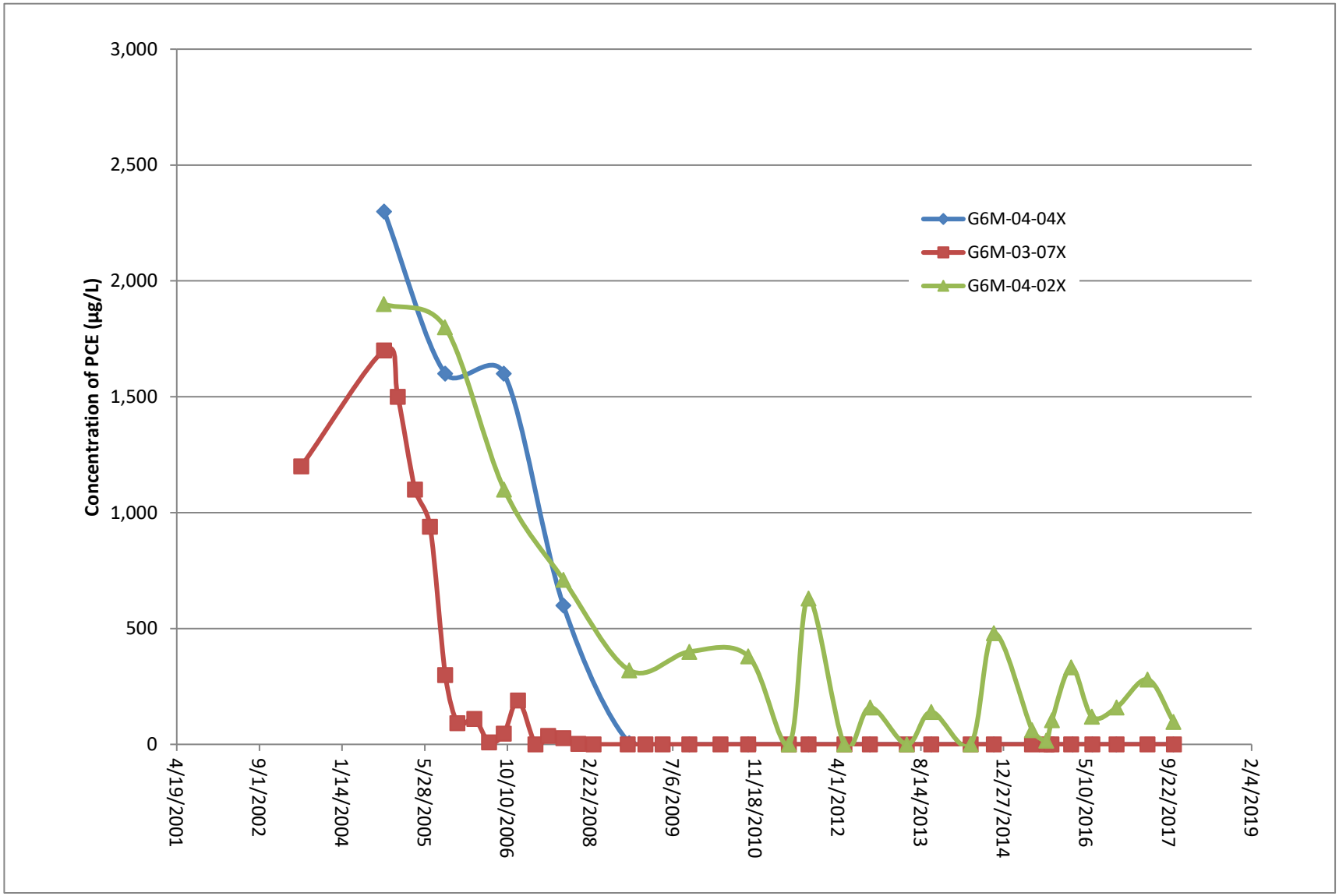
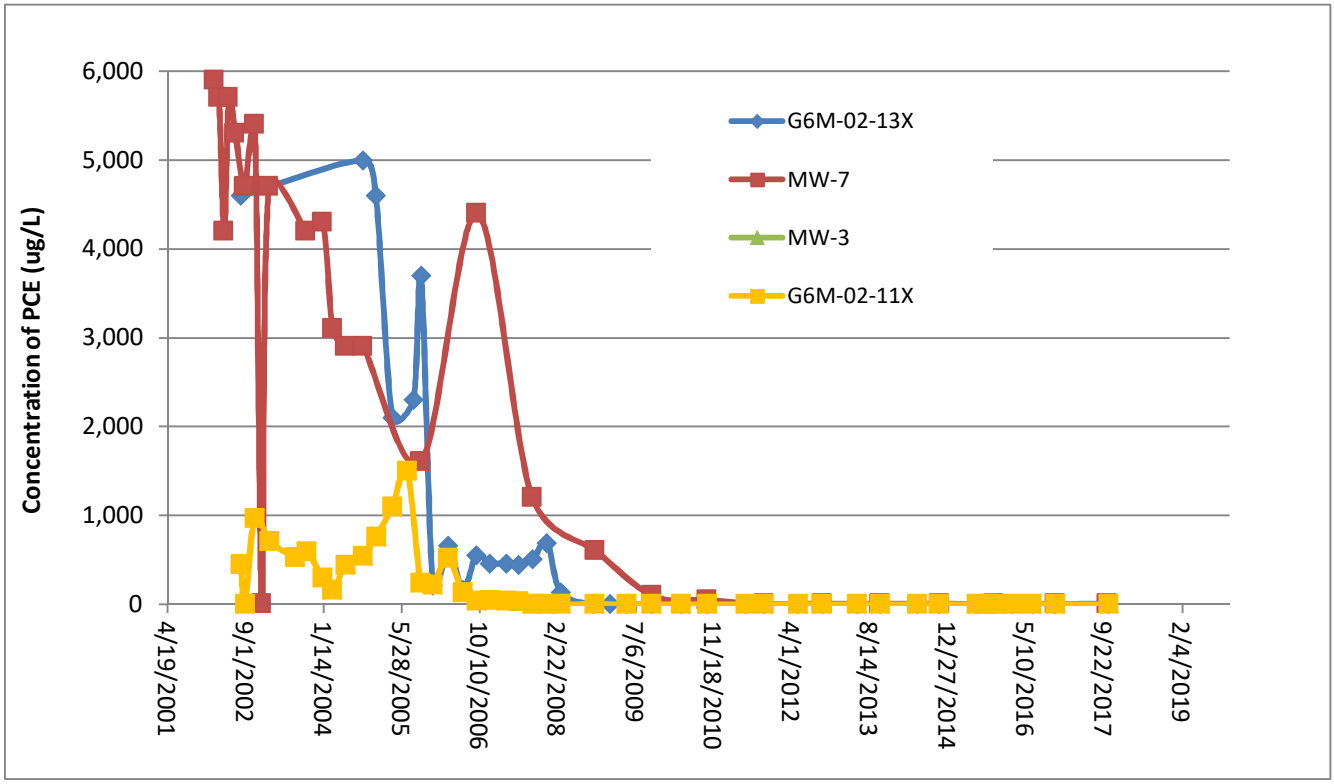
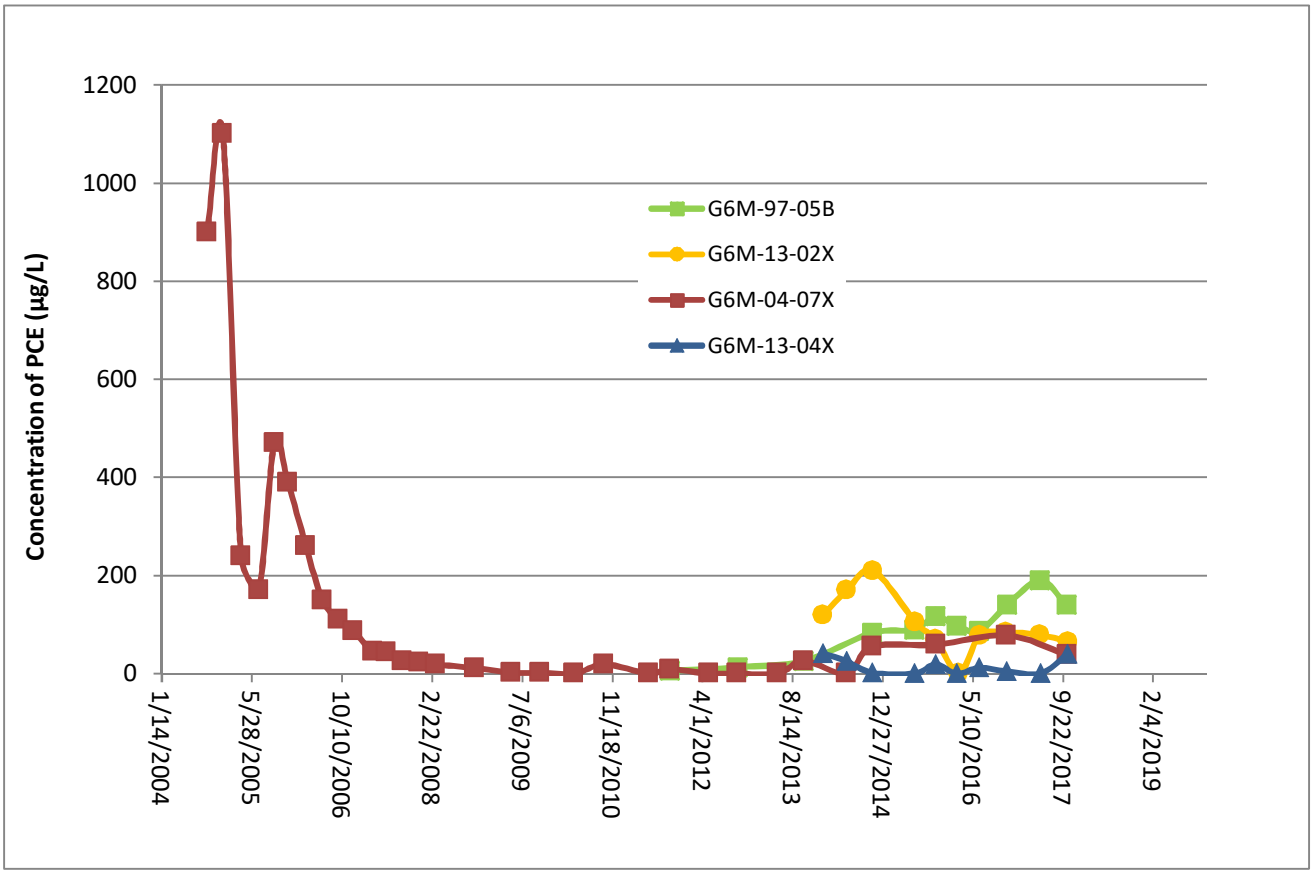


Figure 4-14
Areas 4 and 5 PCE Concentration Trend Graphs





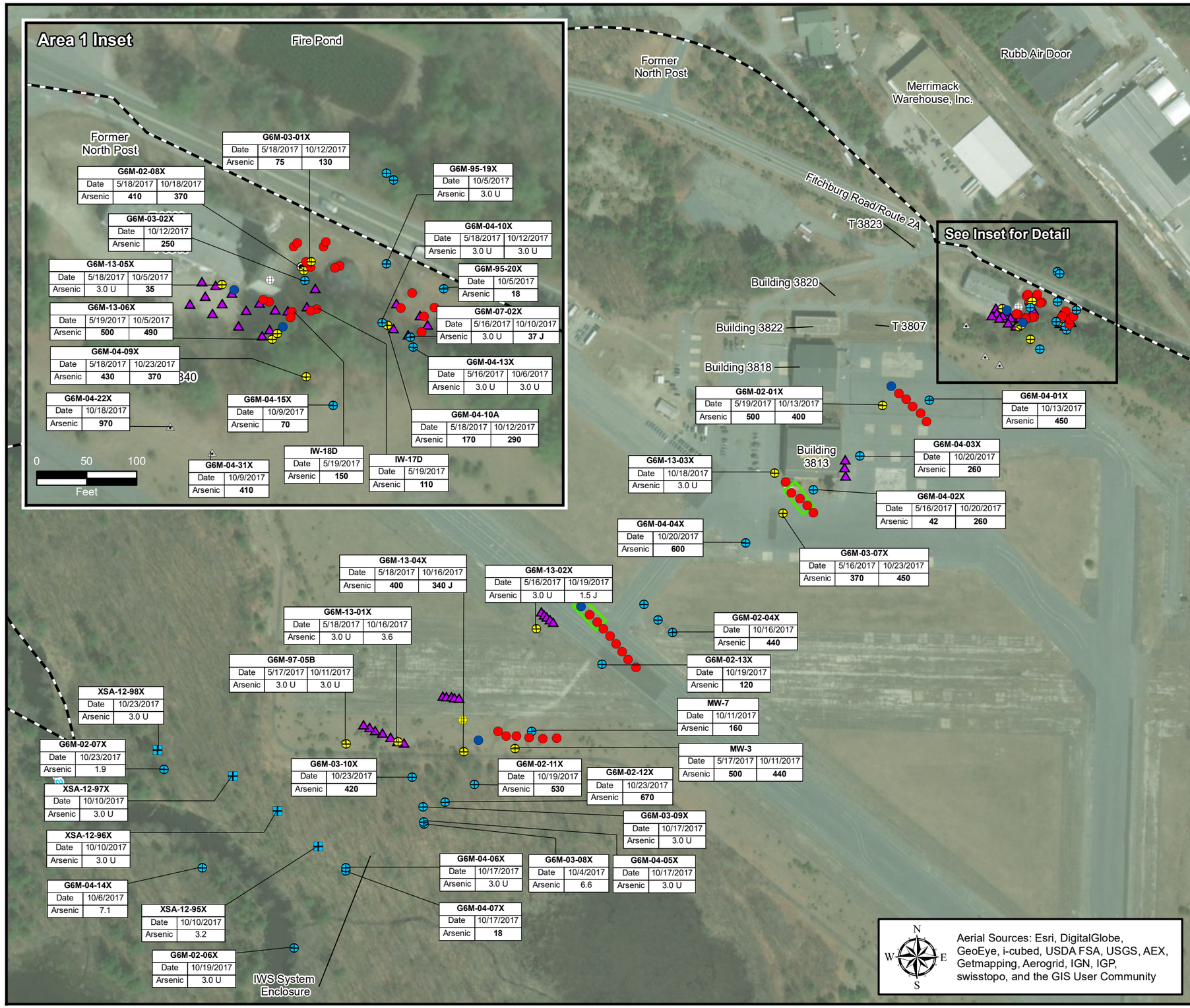


Figure 4-15
Dissolved Arsenic in Groundwater, AOC 50, 2017

Legend

- Geoprobe Injection Location - July 2017
- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- ERD Injection Well Transect
- Former Fort Devens Boundary

Notes:
All concentrations in micrograms per liter (µg/L)
J = Estimated Results
U = Non-detect
Arsenic Clean-Up Goal = 10 µg/L
BOLD values indicate Clean-Up Goal exceedances

ERD = Enhanced reductive dechlorination
IWS = In-well stripping
LTM = Long-term monitoring

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AOC 50

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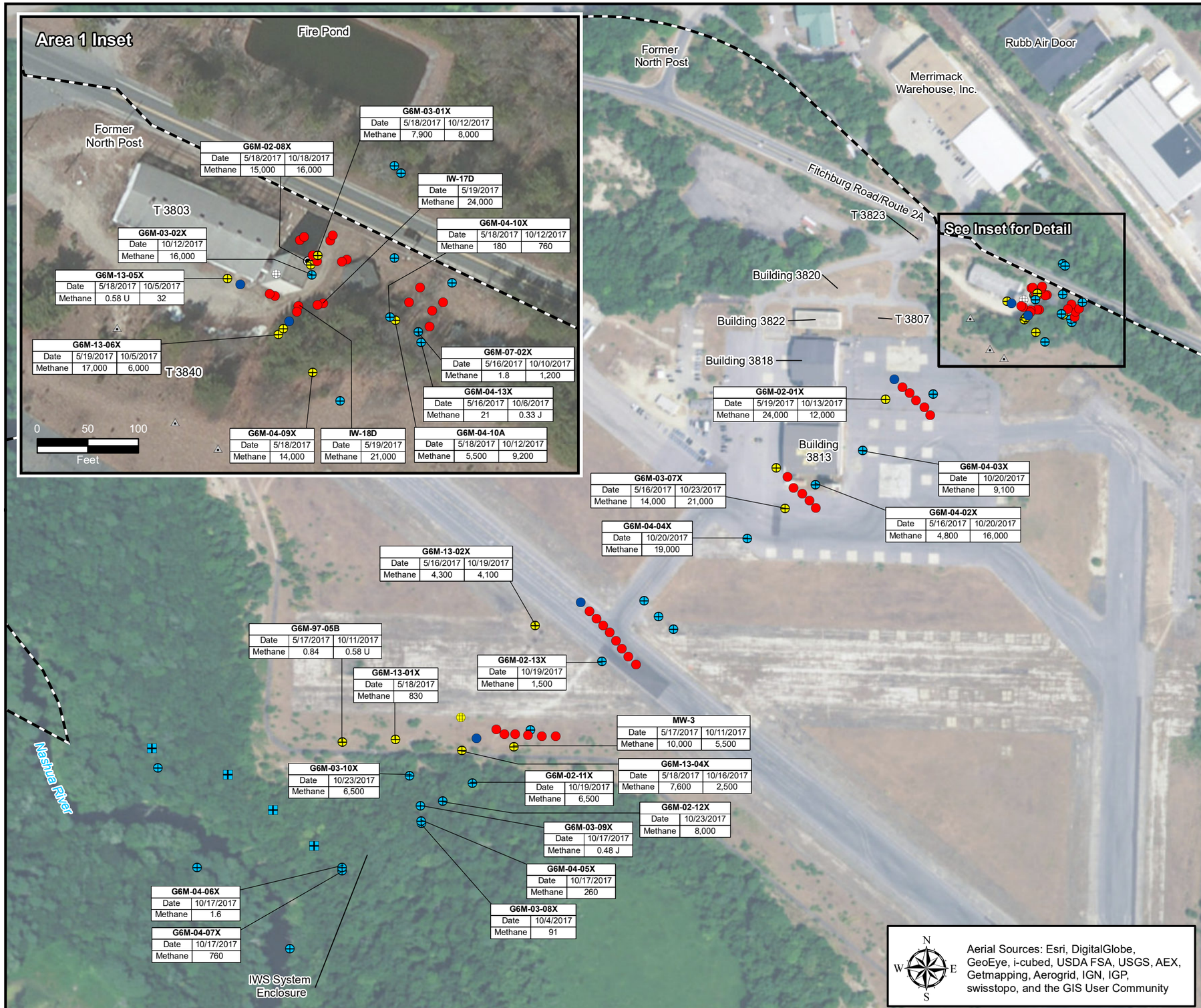
0 150 300
Feet

Date: 05/23/2018

Figure 4-15

File: AR2017_AOC50_2017_Arsenic.mxd

Figure 4-16
Methane Concentration in Groundwater, AOC 50, 2017



Legend

- ERD LTM Well - Sampled Semi-Annually
- ERD LTM Well - Sampled Annually
- ERD LTM Well - Sampled Biennially
- Monitoring Well Converted to Injection Well
- MicroWell - Sampled Annually
- Injection Well
- Injection Well Installed 01/2014
- Dry Well
- Floor Drain
- G6M-92-11X Well/Gauge/Piezometer Identification
- Former Fort Devens Boundary

Notes:
All concentrations in micrograms per liter (µg/L)
J = Estimated Results
U = Non-detect

ERD = Enhanced reductive dechlorination
IWS = In-well stripping
LTM = Long-term monitoring

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AOC 50

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0 150 300
Feet

Date: 01/04/2018

Figure 4-16

File: AR2017_AOC50_Methane_2017.mxd

TABLES

Table 2-1
AOC 50 2017 ERD Injection Program
AOC 50, Former Fort Devens Army Installation, Massachusetts

Location	Location Type	AOC 50 Area	Injection Product (and water)	Injection Volume (gal)	Injection Depth (ft bgs)*	Injection Date	FID (PPM)	PID (PPM)	Notes
Existing Injection Well Network									
IW-27	Injection Well	Area 3	ABC+Ole'	450	70 - 90	7/19/2017	2,917	134.7	
IW-26	Injection Well	Area 3	ABC+Ole'	450	70 - 90	7/18/2017	Over	0.1	
IW-25	Injection Well	Area 3	ABC+Ole'	450	70 - 90	7/18/2017	Over	2.1	
IW-35	Injection Well	Area 4	ABC+Ole'	450	104 - 124	7/21/2017	Over	0.6	
IW-36	Injection Well	Area 4	ABC+Ole'	450	106 - 126	7/21/2017	Over	1.6	
G6M-06-01X	Injection Well	Area 4	ABC+Ole'	450	109 - 129	7/21/2017	Over	74.5	
DPT Injection Locations									
GP-17	DPT Injection	FDSA Area 1 - G6M-07-02X	ABC+Ole'+Fe	875	23 - 47	7/17/2017	NM	NM	
GP-18	DPT Injection		ABC+Ole'+Fe	875	23 - 47	7/17/2017	NM	NM	
GP-19	DPT Injection		ABC+Ole'+Fe	875	23 - 47	7/17/2017	NM	NM	
GP-20	DPT Injection		ABC+Ole'+Fe	875	23 - 47	7/17/2017	NM	NM	
GP-21	DPT Injection		ABC+Ole'+Fe	875	23 - 47	7/17/2017	NM	NM	
GP-22	DPT Injection	Area 1 - G6M-13-05X to IW-18/IW-17	ABC+Ole'+Fe	875	40 - 59	7/13/2017	NM	NM	refusal
GP-23	DPT Injection		ABC+Ole'+Fe	875	40 - 60	7/14/2017	NM	NM	refusal
GP-24	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/12/2017	NM	NM	
GP-25	DPT Injection		ABC+Ole'+Fe	875	40 - 59	7/11/2017	NM	NM	refusal
GP-26	DPT Injection		ABC+Ole'+Fe	875	40 - 59	7/12/2017	NM	NM	refusal
GP-27	DPT Injection		ABC+Ole'+Fe	875	40 - 60	7/13/2017	NM	NM	refusal
GP-28	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/11/2017	NM	NM	
GP-29	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/12/2017	NM	NM	
GP-30	DPT Injection		ABC+Ole'+Fe	875	40 - 58	7/13/2017	NM	NM	refusal
GP-31	DPT Injection		ABC+Ole'+Fe	875	40 - 59	7/12/2017	NM	NM	refusal
GP-32	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/12/2017	NM	NM	
GP-33	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/14/2017	NM	NM	
GP-34	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/13/2017	NM	NM	
GP-35	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/14/2017	NM	NM	
GP-36	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/13/2017	NM	NM	
GP-37	DPT Injection		ABC+Ole'+Fe	875	40 - 64	7/14/2017	NM	NM	
GP-38	DPT Injection	Area 3 - G6M-04-02X	ABC+Ole'+Fe	800	70 - 95	7/18/2017	NM	NM	
GP-39	DPT Injection		ABC+Ole'+Fe	800	70 - 95	7/18/2017	NM	NM	
GP-40	DPT Injection		ABC+Ole'+Fe	800	70 - 95	7/18/2017	NM	NM	
GP-41	DPT Injection	Area 4 - G6M-13-02X	ABC+Ole'+Fe	650	105 - 125	7/19/2017	NM	NM	
GP-42	DPT Injection		ABC+Ole'+Fe	650	105 - 125	7/19/2017	NM	NM	
GP-43	DPT Injection		ABC+Ole'+Fe	650	105 - 125	7/19/2017	NM	NM	

Table 2-1
AOC 50 2017 ERD Injection Program
AOC 50, Former Fort Devens Army Installation, Massachusetts

Location	Location Type	AOC 50 Area	Injection Product (and water)	Injection Volume (gal)	Injection Depth (ft bgs)*	Injection Date	FID (PPM)	PID (PPM)	Notes
GP-44	DPT Injection	Area 4 - G6M-13-02X	ABC+Ole'+Fe	650	105 - 125	7/19/2017	NM	NM	
GP-45	DPT Injection		ABC+Ole'+Fe	650	105 - 125	7/19/2017	NM	NM	
GP-46	DPT Injection	Area 4/5	ABC+Ole'+Fe	650	110 - 130	7/20/2017	NM	NM	
GP-47	DPT Injection		ABC+Ole'+Fe	650	110 - 130	7/21/2017	NM	NM	
GP-48	DPT Injection		ABC+Ole'+Fe	650	110 - 130	7/20/2017	NM	NM	
GP-49	DPT Injection		ABC+Ole'+Fe	650	110 - 130	7/21/2017	NM	NM	
GP-50	DPT Injection		ABC+Ole'+Fe	650	110 - 130	7/20/2017	NM	NM	
GP-51	DPT Injection	Area 5 G6M-13-01X/ G6M-97-05X	ABC+Ole'+Fe	650	120 - 135	7/24/2017	NM	NM	
GP-52	DPT Injection		ABC+Ole'+Fe	650	120 - 135	7/25/2017	NM	NM	
GP-53	DPT Injection		ABC+Ole'+Fe	650	120 - 135	7/24/2017	NM	NM	
GP-54	DPT Injection		ABC+Ole'+Fe	650	120 - 135	7/25/2017	NM	NM	
GP-55	DPT Injection		ABC+Ole'+Fe	650	120 - 135	7/24/2017	NM	NM	
GP-56	DPT Injection		ABC+Ole'+Fe	650	120 - 135	7/25/2017	NM	NM	
GP-57	DPT Injection		ABC+Ole'+Fe	650	120 - 135	7/24/2017	NM	NM	

* Injection depths for injection wells refer to the screened intervals.

FID = flame ionization detector
ft bgs = feet below ground surface
gal = gallon
NM = not measured
PID = photo ionization detector
PPM = parts per million
gal = gallon
Over = FID reading exceeded meter range of 5,091 PPM

Table 3-1
Sample Preparation and Analysis Methods, Containers, Preservatives and Holding Times
AOC 50, Former Fort Devens Army Installation, Massachusetts

Parameter	Analytical Method	Contaminant of Concern	Sample Container	Preservative	Holding Times
ORGANIC					
VOCs	SW8260B	TCL	3 x 40-ml vials with teflon septa screw caps; no headspace	HCl to pH < 2; 4°+/- 2°C	14 Days
Dissolved Gases	RSK-175	MEE	3 x 40-mL VOA vials	HCl to pH < 2; 4°+/- 2°C	14 Days
METALS					
Dissolved Metals (field filtered)	SW6010C/ 6020A	As, Fe, Mn	1 x 250-mL Polyethylene	HNO_3 to pH < 2; 4°+/- 2°C	180 Days
WET CHEMISTRY					
Alkalinity	SM2320B	None	1 x 250-mL Polyethylene	Store at 4°+/-2°C	14 Days
Nitrate/nitrite	E353.2	Nitrate/Nitrite (as N)	1 x 500-mL Amber Glass	H_2SO_4 to pH < 2; 4°+/- 2°C	28 Days
Sulfate	SW9056A	Sulfate	1 x 500-mL Polyethylene	Store at 4°+/-2°C	28 Days
Sulfide	SW9034	Sulfide	1 x 250-mL Polyethylene	Zinc acetate +NaOH to pH >9, 4 °C	7 Days
Total Organic Carbon	SW9060A	TOC	1 x 250-mL Amber Glass	H_2SO_4 to pH < 2; 4°+/- 2°C	28 Days

Notes:
TCL = Target Compound List
MEE = Methane, ethane, and ethene
As, Fe, Mn = arsenic, iron, manganese
TOC = Total Organic Carbon
HCL = hydrochloric acid
HNO_3 = nitric acid
H_2SO_4 = sulfuric acid
NaOH = sodium hydroxide

Table 3-2
Groundwater Level Data, Spring 2017
AOC 50, Former Fort Devens Army Installation, Massachusetts

Area	Well ID	Date	DTW (ft below TOC)	TOC Elevation (ft amsl)	GW Elevation (ft amsl)	Notes
Area 1	G6M-02-08X	5/15/2017	14.48	225.03	210.55	not used in contour map
Area 1	G6M-03-01X	5/15/2017	13.39	225.89	212.50	--
Area 1	G6M-03-02X	5/15/2017	13.11	225.11	212.00	--
Area 1	G6M-04-09X	5/15/2017	31.61	243.46	211.85	--
Area 1	G6M-04-11X	5/15/2017	19.32	230.27	210.95	--
Area 1	G6M-04-15X	5/15/2017	42.17	254.03	211.86	--
Area 1	G6M-04-22X	5/15/2017	46.00	256.69	210.69	--
Area 1	G6M-04-31X	5/15/2017	45.88	256.71	210.83	--
Area 1	G6M-13-05X	5/15/2017	13.93	225.80	211.87	--
Area 1	G6M-13-06X	5/15/2017	13.61	225.17	211.56	--
Area 1	G6M-93-13X	5/15/2017	12.97	225.63	212.66	--
Area 1	G6M-95-19X	5/15/2017	12.02	224.69	212.67	--
Area 1	G6M-95-20X	5/15/2017	12.34	225.41	213.07	--
Area 1	G6M-96-22A	5/15/2017	3.82	218.39	214.57	--
Area 1	G6M-96-22B	5/15/2017	4.51	218.36	213.85	--
Area 1/FDSA	G6M-04-10A	5/15/2017	12.39	224.82	212.43	--
Area 1/FDSA	G6M-04-10X	5/15/2017	13.03	225.02	211.99	--
Area 1/FDSA	G6M-04-13X	5/15/2017	14.07	226.68	212.61	--
Area 1/FDSA	G6M-07-02X	5/15/2017	13.85	225.83	211.98	--
Area 2	G6M-02-01X	5/15/2017	--	263.24	--	No access
Area 2	G6M-04-01X	5/15/2017	--	261.95	--	No access
Area 2	G6M-04-03X	5/15/2017	56.51	265.09	208.58	--
Area 3	G6M-03-07X	5/15/2017	55.97	263.46	207.49	--
Area 3	G6M-04-02X	5/15/2017	59.65	267.35	207.70	--
Area 3	G6M-04-04X	5/15/2017	57.07	263.46	206.39	--
Area 3	G6M-13-03X	5/15/2017	57.36	265.17	207.81	--
Area 4	G6M-02-03X	5/15/2017	57.43	263.83	206.40	--
Area 4	G6M-02-04X	5/15/2017	59.37	265.72	206.35	--
Area 4	G6M-02-13X	5/15/2017	58.31	264.41	206.10	--
Area 4	G6M-13-02X	5/15/2017	58.59	264.62	206.03	--
Area 4	G6M-97-28X	5/15/2017	60.27	266.49	206.22	--
Area 5	G6M-02-06X	5/15/2017	5.35	210.53	205.18	not used in contour map
Area 5	G6M-02-07X	5/15/2017	6.72	211.52	204.80	--
Area 5	G6M-02-11X	5/15/2017	59.22	264.73	205.51	--
Area 5	G6M-02-12X	5/15/2017	57.73	263.26	205.53	--
Area 5	G6M-03-08X	5/15/2017	54.06	259.40	205.34	--
Area 5	G6M-03-09X	5/15/2017	54.49	259.69	205.20	--
Area 5	G6M-03-10X	5/15/2017	61.22	266.61	205.39	--
Area 5	G6M-04-05X	5/15/2017	53.58	258.93	205.35	--
Area 5	G6M-04-06X	5/15/2017	59.98	264.77	204.79	--
Area 5	G6M-04-07X	5/15/2017	60.13	264.62	204.49	--
Area 5	G6M-13-01X	5/15/2017	62.21	267.65	205.44	--
Area 5	G6M-13-04X	5/15/2017	61.57	267.11	205.54	--
Area 5	G6M-97-05B	5/15/2017	63.89	268.88	204.99	--
Area 5	MW-3	5/15/2017	61.02	266.55	205.53	--
Area 5	MW-7	5/15/2017	59.98	265.77	205.79	--
Area 5	XSA-12-95X	5/15/2017	36.64	270.43	NC	incorrect field measurements likely caused by degrading well conditions
Area 5	XSA-12-96X	5/15/2017	43.95	270.79	NC	
Area 5	XSA-12-97X	5/15/2017	37.27	271.58	NC	
Nashua River	G6M-04-14X	5/15/2017	6.45	211.41	204.96	--

Notes:
FDSA = Former Drum Storage Area
DTW = depth to water
ft = feet
TOC = top of casing
asml = above mean sea level
GW = groundwater
NC = Not calculated

Table 3-3
Groundwater Level Data, Fall 2017
AOC 50, Former Fort Devens Army Installation, Massachusetts

Area	Well ID	Date	DTW (ft below TOC)	TOC Elevation (ft amsl)	GW Elevation (ft amsl)	Notes
Area 1	G6M-02-08X	10/2/2017	14.97	225.03	210.06	not used in contour map
Area 1	G6M-03-01X	10/2/2017	14.63	225.89	211.26	--
Area 1	G6M-03-02X	10/2/2017	13.42	225.11	211.69	--
Area 1	G6M-04-09X	10/2/2017	30.87	243.46	212.59	--
Area 1	G6M-04-11X	10/2/2017	20.14	230.27	210.13	--
Area 1	G6M-04-15X	10/2/2017	43.04	254.03	210.99	--
Area 1	G6M-04-22X	10/2/2017	46.57	256.69	210.12	--
Area 1	G6M-04-31X	10/2/2017	51.29	256.71	205.42	--
Area 1	G6M-13-05X	10/2/2017	14.97	225.80	210.83	--
Area 1	G6M-13-06X	10/2/2017	14.42	225.17	210.75	--
Area 1	G6M-93-13X	10/2/2017	13.83	225.63	211.80	--
Area 1	G6M-95-19X	10/2/2017	13.04	224.69	211.65	--
Area 1	G6M-95-20X	10/2/2017	13.62	225.41	211.79	--
Area 1	G6M-96-22A	10/2/2017	5.93	218.39	212.46	--
Area 1	G6M-96-22B	10/2/2017	6.35	218.36	212.01	--
Area 1/FDSA	G6M-04-10A	10/2/2017	13.30	224.82	211.52	--
Area 1/FDSA	G6M-04-10X	10/2/2017	13.97	225.02	211.05	--
Area 1/FDSA	G6M-04-13X	10/2/2017	15.18	226.68	211.50	--
Area 1/FDSA	G6M-07-02X	10/2/2017	14.58	225.83	211.25	--
Area 2	G6M-02-01X	10/2/2017	55.19	263.24	208.05	--
Area 2	G6M-04-01X	10/2/2017	52.88	261.95	209.07	--
Area 2	G6M-04-03X	10/2/2017	57.46	265.09	207.63	--
Area 3	G6M-03-07X	10/2/2017	57.70	263.46	205.76	--
Area 3	G6M-04-02X	10/2/2017	60.67	267.35	206.68	--
Area 3	G6M-04-04X	10/2/2017	58.80	263.46	204.66	--
Area 3	G6M-13-03X	10/2/2017	58.85	265.17	206.32	--
Area 4	G6M-02-03X	10/2/2017	88.66	263.83	175.17	not used in contour map
Area 4	G6M-02-04X	10/2/2017	61.63	265.72	204.09	--
Area 4	G6M-02-13X	10/2/2017	60.73	264.41	203.68	--
Area 4	G6M-13-02X	10/2/2017	60.96	264.62	203.66	--
Area 4	G6M-97-28X	10/2/2017	62.43	266.49	204.06	--
Area 5	G6M-02-06X	10/2/2017	9.37	210.53	201.16	--
Area 5	G6M-02-07X	10/2/2017	10.23	211.52	201.29	--
Area 5	G6M-02-11X	10/2/2017	61.97	264.73	202.76	--
Area 5	G6M-02-12X	10/2/2017	60.65	263.26	202.61	--
Area 5	G6M-03-08X	10/2/2017	56.88	259.40	202.52	--
Area 5	G6M-03-09X	10/2/2017	57.27	259.69	202.42	--
Area 5	G6M-03-10X	10/2/2017	64.07	266.61	202.54	--
Area 5	G6M-04-05X	10/2/2017	56.48	258.93	202.45	--
Area 5	G6M-04-06X	10/2/2017	63.27	264.77	201.50	--
Area 5	G6M-04-07X	10/2/2017	63.14	264.62	201.48	--
Area 5	G6M-13-01X	10/2/2017	64.93	267.65	202.72	--
Area 5	G6M-13-04X	10/2/2017	64.25	267.11	202.86	--
Area 5	G6M-97-05B	10/2/2017	66.64	268.88	202.24	--
Area 5	MW-3	10/2/2017	64.12	266.55	202.43	--
Area 5	MW-7	10/2/2017	62.64	265.77	203.13	--
Area 5	XSA-12-95X	10/2/2017	74.34	270.43	196.09	not used in contour map
Area 5	XSA-12-96X	10/2/2017	69.57	270.79	201.22	
Area 5	XSA-12-97X	10/2/2017	74.28	271.58	197.30	not used in contour map
Nashua River	G6M-04-14X	10/2/2017	20.42	211.41	190.99	not used in contour map

NOTES:
FDSA - Former Drum Storage Area
DTW = depth to water
ft = feet
TOC = top of casing
asml = above mean sea level
GW = groundwater

Table 4-1
Monitoring Wells Selected for 2017 Sampling Events
AOC 50, Former Fort Devens Army Installation, Massachusetts

Location	Well ID[1]	Sampling Rationale	Well Screen Interval (ft bgs)	Well Screen Elevation (ft amsl)	Sample Parameters	Sample Frequency
North Plume	G6M-96-22A	Monitor groundwater elevations in the North Plume.	40-50	176.3-166.3	Water Level Only	Semi-annual
	G6M-96-22B		65.5-70.5	150.9-145.9	Water Level Only	Semi-annual
Area 1	G6M-04-10A	Monitor COCs downgradient of ERD Injection Wells in the Source Area and provide pre- injection COC and Geochemistry data for ERD injection planning.	30-40	193.02-183.02	Full Suite	Semi-annual
	G6M-04-09X		55-65	188.46-178.46	VOCs, Metals, & TOC	Semi-annual
	G6M-13-06X		60-60	172.67-162.67	Full Suite	Semi-annual
	G6M-02-08X		60-70	163.2-153.2	Full Suite	Semi-annual
	G6M-93-13X		9-19	218.2-208.2	Water Level Only	Semi-annual
	G6M-13-05X		45-55	178.3-168.3	Full Suite	Semi-annual
Area 1	G6M-07-02X	Monitor COC trends within the Source Area.	22.5-27.5	225.83	Full Suite	Semi-annual
	G6M-04-10X		52-62	170.92-160.92	Full Suite	Semi-annual
	G6M-04-13X		30-40	194.71-184.71	Full Suite	Semi-annual
	G6M-04-15X		70-80	182.45-172.45	VOCs and Metals	Annual
	G6M-03-02X		28-43	173.2-158.2	Full Suite	Annual
	G6M-95-19X		48-58	174.8-164.8	VOCs and Metals	Annual
	G6M-95-20X		18-23	205.0-200	VOCs and Metals	Annual
	IW-17D		42-67	181.16-156.16	Full Suite	One time
	IW-18D		38-63	185.76-160.76	Full Suite	One time
Area 1	G6M-04-11X	Monitor COC trends and provide plume delineation downgradient of the Cesspool and Dry Well areas.	35-45	193.42-183.42	VOCs	Biennial
	G6M-04-31X[2]		68-78	186.83-176.83	As only/Fall	Annual
	G6M-04-22X[2]		74-84	180.75-170.75	As only/Fall	Annual
Area 1	G6M-03-01X	Monitor COCs downgradient of ERD Injection Wells in the Source Area.	50-70	173.3-153.3	Full Suite	Semi-annual
Area 2	G6M-02-01X	Monitor TOC and COCs downgradient of ERD Injection Wells in the Southwest Plume Provide pre-injection COC and Geochemistry data for ERD injection planning.	80-95	183.8-168.8	Full Suite	Semi-annual
Area 2	G6M-04-01X	Monitor COCs upgradient of ERD Injection Wells in the Southwest Plume.	82-92	180.49-170.49	VOCs and Metals	Annual
Area 2	G6M-04-03X	Monitor COCs downgradient of ERD Injection Wells in the Southwest Plume.	85-95	180.61-170.61	Full Suite	Annual
Area 3	G6M-03-07X	Monitor TOC and COCs downgradient of ERD Injection Wells in the Southwest Plume Provide pre-injection COC and Geochemistry data for ERD injection.	80-90	183.6-173.6	Full Suite	Semi-Annual
Area 3	G6M-04-02X	Monitor COCs upgradient of ERD Injection Wells in the Southwest Plume.	80-90	184.49-174.98	Full Suite	Semi-annual
	G6M-13-03X		80-90	185-17-175.17	VOCs and Metals	Annual
Area 3	G6M-04-04X	Monitor COCs downgradient of ERD Injection Wells in the Southwest Plume.	94-104	159.67-169.67	Full Suite	Annual

Table 4-1
Monitoring Wells Selected for 2017 Sampling Events
AOC 50, Former Fort Devens Army Installation, Massachusetts

Location	Well ID[1]	Sampling Rationale	Well Screen Interval (ft bgs)	Well Screen Elevation (ft amsl)	Sample Parameters	Sample Frequency
Area 4	G6M-13-02X	Monitor VOCs on perimeter of Southwest Plume. Provide pre-injection COC and Geochemistry data for ERD injection planning.	115-125	149.62-139.62	Full Suite	Semi-Annual
Area 4	G6M-02-13X	Monitor TOC and COCs downgradient of ERD Injection Wells in the Southwest Plume.	110-120	154.8-144.8	Full Suite	Annual
Area 4	G6M-02-04X	Monitor COCs upgradient of ERD Injection	90-105	173.6-158.6	VOCs and Metals	
	G6M-02-03X	Wells in the Southwest Plume.	90-105	174.4-159.4	Water Level Only	Semi-annual
	G6M-97-28X		100-105	163.9-158.9	Water Level Only	
Area 5	MW-3	Monitor TOC and COCs downgradient and adjacent to ERD Injection Wells in the Southwest	126-136	138.7-128.7	Full Suite	Semi-annual
	G6M-13-04X		125-135	139.61-129.61	Full Suite	Semi-annual
Area 5	G6M-02-12X	Monitor COCs downgradient of the ERD Injection Wellswithin the Area 5 IRZ.	125-135	138.4-128.4	Full Suite	Annual
	G6M-02-11X		125-135	140-130	Full Suite	Annual
	G6M-03-10X		120-135	144.2-129.2	Full Suite	Annual
Area 5	MW-7	Monitor COCs upgradient of ERD Injection Wells in the Southwest Plume.	125-135	139.7-129.7	VOCs and Metals	Annual
Area 5	G6M-02-06X	Monitor VOCs along bank of Nashua River	55-65	153.5-143.5	VOCs and Metals	Annual
	G6M-02-07X		30-40	179.5-169.5	VOCs and Metals	Annual
Nashua River	G6M-04-14X	Monitor VOCs and Metals on the south bank of the Nashua River.	80-90	131.56-121.56	VOCs and Metals	Annual
Area 5 (Sentry)	G6M-03-08X	Monitor COCs and metals downgradient of last ERD transect of Injection Wells outside of Area 5	125-140	132.2-117.2	Full Suite	Annual
	G6M-03-09X		125-140	132.4-117.4	Full Suite	Annual
Area 5 (IWS)	G6M-04-05X	Monitor COCs and metals downgradient of the ERD injection transects.	100-110	157.33-147.33	Full Suite	Annual
	G6M-04-07X		120-130	142.68-132.68	Full Suite	Annual
	G6M-04-06X		95-105	168.07-158.07	Full Suite	Annual
Area 5	XSA-12-95X	Monitor Geochemistry and metals crossgradient and downgradient of ERD injection wells at Area 5.	120-130	147.43-137.43	VOCs and Metals	Annual
	XSA-12-96X		120-130	147.82-137.82	VOCs and Metals	Annual
	XSA-12-97X		119.75-129.75	148.96-138.96	VOCs and Metals	Annual
	XSA-12-98X		60-70	147.44-137.44	VOCs and Metals	Annual
Area 5	G6M-97-05B	Monitor COC trends and geochemistry.	130-135	136.4 - 131.4	Full Suite	Semi-annual
	G6M-13-01X		125-135	140.15-130.15	VOCs and Metals	Semi-annual

Notes:
"Metals" analyses includes dissolved arsenic, iron, and manganese.
"Full Suite" analyses includes VOCs, metals, nitrate/nitrite, sulfate, sulfide, alkalinity, methane, ethane, ethene, and total organic carbon.
Field parameters include pH, dissolved oxygen (DO), oxidation/reduction potential (ORP), specific conductivity, turbidty, and temperature.
[1] - Semi-annual water level readings are collected from all wells prior to spring and fall LTM sampling events.
[2] - Annual fall LTM sampling of G6M-04-31X and G6M-04-22X for arsenic will be conducted when biennial laboratory samples are not collected.
ft bgs = feet below ground surface;
ft asml = feet above mean sea level

Table 4-2
Groundwater Analytical Results Spring 2017
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	**Sample ID**	**Date**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(µg/L)**	**(mg/L)**	**(µg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(mg/L)**	**(SU)**	**(mg/L)**	**(mV)**	**(mS/cm)**	**(NTUs)**	**(°C)**
Area 1	G6M-02-08X-SPR17	5/18/2017	20 U	20 U	**51**	20 U	20 U	20 U	1.1 U	1.0 U	**15,000**	**410**	**770**	**4300**	740	930	0.10 U	1.0 U	1.0 U	12.31R	0.01	-111.3	2.650	30.4	13.09
Area 1	G6M-03-01X-SPR17	5/18/2017	**61**	**77**	**210**	**2.3**	**0.70 J**	**73**	1.1 U	**120**	**7,900**	**75**	**120**	**70000**	26	310	0.08 J	8.6	1.0 U	12.52R	0.12	-93.1	2.275	8.51	13.56
Area 1	G6M-04-09X-SPR17	5/18/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	**14,000**	**430**	**180.0**	**3200**	11	190	0.15	5.4	1.0 U	6.58	0.45	-116.7	1.813	17.0	10.40
Area 1	G6M-13-05X-SPR17	5/18/2017	**1300**	20 U	**64 J**	20 U	20 U	20 U	1.1 U	1.0 U	0.58 U	3.0 U	**0.28**	**350**	1.0 U	32 J	1.5	1.0 U	1.0 U	11.40R	3.97	25.1	0.550	7.65	12.67
Area 1	G6M-DUP01 (G6M-13-05X)	5/18/2017	**1200**	20 U	**46 J**	20 U	20 U	20 U	1.1 U	1.0 U	**0.49 J**	3.0 U	**0.30**	**380**	1.0 U	22 J	1.5	1.0 U	1.0 U	--	--	--	--	--	--
Area 1	G6M-13-06X-SPR17	5/19/2017	1.0 U	1.0 U	**2.2**	**0.45 J**	1.0 U	**2.6**	**14**	**16**	**17,000**	**500**	**250**	**7000**	70 J	470	0.14 J	3.0	1.0 U	5.96	1.01	-64.8	1.450	7.43	10.87
Area 1	IW-17D-SPR17	5/19/2017	**4.1**	**6.1**	**16**	5.0 U	5.0 U	5.0 U	1.1 U	1.0 U	**24,000**	**110**	**130**	**14000**	680	110	0.11	1.0 U	1.0 U	11.10R	0.45	40.9	1.781	21.28	11.27
Area 1	IW-18D-SPR17	5/19/2017	**5.1**	5.0 U	**660**	5.0 U	5.0 U	5.0 U	1.1 U	**15**	**21,000**	**150**	**140**	**8900**	680	110	0.21	1.0 U	1.0 UJ	11.00R	0.46	44.3	1.265	85	12.65
Area 1/FDSA	G6M-04-10A-SPR17	5/18/2017	1.0 U	**0.52 J**	**1.4**	1.0 U	1.0 U	**0.85 J**	1.1 U	1.0 U	**5,500**	**170**	**74**	**4800**	5.7	38	0.12	15	1.0 U	6.59	0.33	-98.6	1.780	19.2	10.93
Area 1/FDSA	G6M-04-10X-SPR17	5/18/2017	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	**180**	3.0 U	**0.020 J**	**1,100**	1.0 U	12	0.42	32	1.0 U	5.51	0.63	162.1	1.523	11.3	10.93
Area 1/FDSA	G6M-04-13X-SPR17	5/16/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**12**	**10**	**21**	3.0 U	0.05 U	**3.6 J**	1.0 U	9.5	0.62	4.8	1.0 U	6.47	9.01	210.7	0.034	2.36	9.67
Area 1/FDSA	G6M-07-02X-SPR17	5/16/2017	**1800**	20 U	20 U	20 U	20 U	20 U	1.1 U	1.0 U	**1.8**	3.0 U	0.05 U	**17**	1.0 U	14	0.32	6.2	1.0 U	5.70	3.69	213.3	0.042	2.73	9.73
Area 2	G6M-02-01X-SPR17	5/19/2017	1.0 U	1.0 U	**0.52 J**	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	**24,000**	**500**	**110**	**2600**	4.9	220	0.09 J	0.51 J	1.0 U	6.85	0.42	-132.4	1.590	7.23	14.39
Area 3	G6M-03-07X-SPR17	5/16/2017	1.0 U	1.0 U	**0.51 J**	**0.76 J**	1.0 U	1.0 U	**1.2**	**7.2**	**14,000**	**370**	**84**	**1600**	19	200	0.14	1.0 U	1.0 U	6.59	0.35	-91.3	0.589	11.0	17.46
Area 3	G6M-04-02X-SPR17	5/16/2017	**280**	**120**	**22 J**	**0.39 J**	1.0 U	**2.3 J**	1.1 U	**2.2**	**4,800**	**42**	**15**	**11000**	2.5 J	130	0.065 J	10	1.0 U	6.00	2.09	29.5	0.956	3.90	13.17
Area 3	G6M-DUP-2-SPR17 (G6M-04-02X)	5/16/2017	**290**	**130**	**33 J**	5.0 U	5.0 U	**5.1 J**	1.1 U	**2.2**	**5,000**	**40**	**14**	**11000**	4.5 J	110	0.044 J	10	1.0 U	--	--	--	--	--	--
Area 4	G6M-13-02X-SPR17	5/16/2017	**79**	**25**	**30**	**0.39 J**	1.0 U	**0.90 J**	**0.64 J**	1.0 U	**4,300**	3.0 U	0.05 U	**16**	1.0 U	54	0.34	12	1.0 U	6.07	0.47	89.7	0.841	5.79	12.93
Area 5	G6M-13-01X-SPR17	5/18/2017	**13**	**0.85 J**	**3.4**	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	**830**	3.0 U	**0.039 J**	**19**	1.0 U	36	0.14	14	1.0 U	6.02	0.37	127.6	0.631	5.47	14.52
Area 5	G6M-13-04X-SPR17	5/18/2017	1.0 U	**1.8**	**9.0**	**0.91 J**	1.0 U	**7.1**	**5.7**	**6.2**	**7,600**	**400**	**47.0**	**9000**	2.4	250	0.04 J	5.0 U	1.0 U	6.75	0.43	-100.9	1.279	21.0	13.59
Area 5	G6M-97-05B-SPR17	5/17/2017	**190**	**15**	**8.6**	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	**0.84**	3.0 U	0.05 U	3.0 U	1.0 U	31	0.94	7.0	1.0 U	6.20	2.00	120.8	0.547	9.59	15.17
Area 5	MW-3-SPR17	5/17/2017	1.0 U	1.0 U	**0.75 J**	1.0 U	1.0 U	1.0 U	**1.8**	1.0 U	**10,000**	**500**	**56**	**9400**	5.2	310	0.073 J	2.2	1.0 U	6.78	0.63	-112.4	0.909	6.29	12.70

Notes
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCE = 1,1-Dichloroethene
VC = Vinyl chloride
TOC = Total Organic Carbon

µg/L = microgram per liter
mg/L = milligram per liter
U = Non-detect
UJ = Estimated non-detect
J = Estimated result
MCL = maximum contaminant limit
FDSA = Former Drum Storage Area

Cleanup Goals
PCE = 5 µg/L, MCL
TCE = 5 µg/L, MCL
cis-1,2-DCE = 70 µg/L, MCL
1,1-DCE = 7 µg/L, MCL
VC = 2 µg/L, MCL
Arsenic = 10 µg/L, MCL
Iron = 3,129 µg/L, risk-based cleanup goal determined in the Record of Decision (ARCADIS, 2004).
Manganese = 1,460 µg/L, risk-based cleanup goal determined in the Record of Decision (ARCADIS, 2004).

trans-1,2-DCE does not have a cleanup goal but the MCL is 1000 µg/L.

pH/SU = standard units
DO = Dissolved Oxygen
ORP/mV = Oxidation-Reduction Potential/millivolt
SpC = Specific Conductance
mS/cm = millisiemens per centimeter
NTU = Nephelometric Turbidity Unit
Temp/°C = Temperature/degrees Celsius
R = pH value rejected and not usable due to field instrument error

Analytical Parameters

0.33	= Detection
0.33	= Above cleanup goal

Table 4-3
Groundwater Analytical Results Fall 2017
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis*-1,2-DCE	*trans*-1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Sample ID	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	(°C)
Area 1	G6M-02-08X-Fall17	10/18/2017	20 U	20 U	20 U	20 U	20 U	20 U	1.1 U	1.0 U	16,000	**370**	**640**	**3,300**	250	680	0.26	2.0 U	1.6	6.66	0.44	-144.8	1.97	38.1	12.23
Area 1	G6M-03-01X-Fall17	10/12/2017	2.0 UJ	**9.7 J**	**240 J**	2.0 UJ	2.0 UJ	**160 J**	1.1 U	1.0 U	8,000	**130**	**210**	**65,000**	72	390	0.12	0.50 J	1.0 U	6.42	2.23	-69.7	2.02	7.96	12.49
Area 1	G6M-03-02X-Fall17	10/12/2017	1.0 U	1.0 U	**3.5**	1.0 U	1.0 U	**4.0**	1.1 U	13	16,000	**250**	**150**	**2,000**	21	140	0.15	1.0 U	1.0 U	6.29	1.29	-44.1	1.14	13.9	11.17
Area 1	G6M-04-09X-Fall17	10/23/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.74 J**	--	--	--	**370**	**110**	**2,400**	7.8	--	--	--	--	6.72	0.13	-106.4	1.86	30.7	10.44
Area 1	G6M-04-15X-Fall17	10/9/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	**70**	**15**	**19,000**	--	--	--	--	--	6.13	0.59	0.59	4.28	8.9	14.50
Area 1	G6M-04-22X-Fall17	10/18/2017	--	--	--	--	--	--	--	--	--	**970**	--	--	--	--	--	--	--	6.32	0.48	-66.9	1.27	120	11.74
Area 1	G6M-04-31X-Fall17	10/9/2017	--	--	--	--	--	--	--	--	--	**410**	--	--	--	--	--	--	--	6.52	0.58	-83.5	2.84	8.7	14.26
Area 1	G6M-13-05X-Fall17	10/5/2017	**280**	**69**	**750**	10 U	10 U	10 U	1.1 U	1.0 U	32	**35**	**12**	**1,700**	28	49	0.04 J	1.0 U	1.0 U	5.95	0.51	19.7	0.63	27.4	12.80
Area 1	G6M-13-06X-Fall17	10/5/2017	1.0 U	1.0 U	**2.3 J**	1.0 U	1.0 U	**1.1**	6.0	6.3	6,000	**490**	**220**	**7,500**	72	440	0.17 J	1.0 UJ	1.0 U	6.20	0.31	-88.6	1.46	15.2	10.97
Area 1	Dup-1-Fall17 (G6M-13-06X FD)	10/5/2017	1.0 U	1.0 U	**1.2 J**	1.0 U	1.0 U	**0.98 J**	6.9	6.9	6,500	**480**	**230**	**7,700**	70	500	0.16	1.0 U	1.0 U	--	--	--	--	--	--
Area 1	G6M-95-19X-Fall17	10/5/2017	**1.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.05 U	**1,400**	--	--	--	--	--	5.60	1.22	171.7	3.53	3.41	13.04
Area 1	G6M-95-20X-Fall17	10/5/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	**18**	**6.3**	**410**	--	--	--	--	--	5.80	0.35	27.8	0.60	11.0	14.46
Area 1/FDSA	G6M-04-10A-Fall17	10/12/2017	1.0 U	1.0 U	**1.2**	1.0 U	1.0 U	**0.81 J**	1.1 U	3.6	9,200	**290**	**100**	**4,600**	8.4	78	0.12	8.4	1.2	6.62	0.97	-94.7	1.87	16.0	10.01
Area 1/FDSA	G6M-04-10X-Fall17	10/12/2017	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	760	3.0 U	0.075 U	**1,200**	1.0 U	13	0.46	34	1.0 U	5.56	1.11	195.3	2.02	4.17	10.29
Area 1/FDSA	G6M-04-13X-Fall17	10/6/2017	**1.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.33 J	3.0 U	0.05 U	3.0 U	0.45 J	8.7 U	0.84	4.6	1.0 U	5.86	3.64	223.4	0.06	2.6	10.42
Area 1/FDSA	Dup-02-Fall17 (G6M-04-13X FD)	10/6/2017	**1.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.43 J	3.0 U	0.05 U	**1.0 J**	0.49 J	8.9 U	0.89	4.4	1.0 U	--	--	--	--	--	--
Area 1/FDSA	G6M-07-02X-Fall17	10/10/2017	**910 J**	20 U	20 U	20 U	20 U	20 U	24 J	4.3 J	1,200	**37 J**	**220 J**	**14,000 J**	3,400	520	2.0	20	1.0 U	6.21	0.51	-161.2	2.08	overrange	11.07
Area 1/FDSA	DUP-3-Fall17 (G6M-07-02X FD)	10/10/2017	**440 J**	20 U	20 U	20 U	20 U	20 U	14 J	3.0 J	1,100	**200 J**	**1,200 J**	**75,000 J**	3,000	530	1.9	17	1.0 U	--	--	--	--	--	--
Area 2	G6M-02-01X-Fall17	10/13/2017	1.0 U	1.0 U	**0.77 J**	1.0 U	1.0 U	**0.52 J**	1.1 U	3.8	12,000	**400**	**76**	**1,300**	3.3	64	0.10	0.57 J	1.0 U	6.66	0.46	-107.4	0.96	7.14	12.14
Area 2	DUP-05-Fall17 (G6M-02-01X FD)	10/13/2017	1.0 U	1.0 U	**0.83 J**	1.0 U	1.0 U	1.0 U	1.1 U	4.4	13,000	**400**	**76**	**1,300**	3.3	71	0.11	0.61 J	1.0 U	--	--	--	--	--	--
Area 2	G6M-04-01X-Fall17	10/13/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	**450**	**81**	**18,000**	--	--	--	--	--	6.66	0.87	-99.2	3.54	11.5	13.49
Area 2	G6M-04-03X-Fall17	10/20/2017	1.0 U	1.0 U	**2.2**	1.0 U	1.0 U	**1.6**	1.1 U	1.0 U	9,100	**260**	**85**	**20,000**	5.1	160	0.06 J	19	1.0 U	6.45	0.38	-55.0	2.75	5.87	12.73
Area 3	G6M-03-07X-Fall17	10/23/2017	1.0 U	1.0 U	**0.55 J**	**0.97 J**	1.0 U	**0.72 J**	2.7	14	21,000	**450**	**94**	**1,800**	24	170	0.13	1.0 U	1.0 U	6.32	0.07	-75.1	0.66	5.78	13.52
Area 3	G6M-04-02X-Fall17	10/20/2017	**97**	**26**	**13**	2.0 U	2.0 U	**1.8 J**	1.1 U	1.0 U	16,000	**260**	**66**	**10,000**	3.3	160	0.08 J	6.2	1.0 U	6.36	0.28	-66.9	0.91	4.26	12.51
Area 3	G6M-04-04X-Fall17	10/20/2017	1.0 U	1.0 U	**0.51 J**	**1.4**	1.0 U	1.0 U	3.8	39	19,000	**600**	**170**	**17,000**	11	250	0.11	0.72 J	1.0 U	6.64	0.24	-111.1	1.94	4.39	12.69
Area 3	G6M-13-03X-Fall17	10/18/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.075 U	**550**	--	--	--	--	--	5.61	0.58	170.1	2.25	4.69	11.89
Area 4	G6M-02-04X	10/16/2017	1.0 U	**1.0**	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	**440**	**22**	**1,300**	--	--	--	--	--	7.07	0.42	-119.3	0.63	4.31	12.63
Area 4	G6M-02-13X-Fall17	10/19/2017	**3.3**	**21**	**57**	**0.47 J**	1.0 U	**17**	0.73 J	5.9	1,500	**120**	**6.4**	**8,500**	1.8	180	0.05 U	3.0	1.0 U	6.75	0.22	-58.1	0.50	5.52	12.40
Area 4	G6M-13-02X-Fall17	10/19/2017	**65**	**15**	**13**	**0.50 J**	1.0 U	**0.99 J**	1.1 U	1.0 U	4,100	**1.5 J**	**0.23**	**50**	2.2	75	0.47	12	1.0 U	6.33	0.22	51.1	1.00	8.18	13.41
Area 5	G6M-02-06X-Fall17	10/19/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.075 U	5.0 U	--	--	--	--	--	7.02	5.72	40.2	0.13	4.41	11.94
Area 5	G6M-02-07X-Fall17	10/23/2017	**4.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	**1.9 J**	**0.11**	**12**	--	--	--	--	--	7.57	0.29	-39.4	0.34	9.82	11.93
Area 5	G6M-02-11X-Fall17	10/19/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2	1.0 U	6,500	**530**	**33**	**7,300**	3.9	190	0.03 J	1.0 U	1.0 U	6.91	0.22	-115.9	0.82	12.1	12.07
Area 5	G6M-02-12X-Fall17	10/23/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0	1.0 U	8,000	**670**	**41**	**8,100**	4.3	200	0.055 J	1.0 U	1.0 U	6.90	0.29	-117.9	0.68	7.49	12.24
Area 5	G6M-03-08X-Fall17	10/4/2017	1.0 UJ	1.0 UJ	**0.50 J**	1.0 UJ	1.0 UJ	1.0 UJ	1.1 U	0.90 J	91	**6.6**	**0.23**	**6,900**	0.84 J	110	0.05 U	9.5	1.0 U	6.70	0.65	-29.9	0.37	5.94	13.29
Area 5	G6M-03-09X	10/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.48 J	3.0 U	0.075 U	**180**	1.0 U	24	1.7	11	1.0 U	6.10	2.03	143.1	0.16	3.92	10.69
Area 5	G6M-03-10X-Fall17	10/23/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	6,500	**420**	**62**	**2,100**	1.4	62	0.07 J	5.5	1.0 U	6.88	0.22	-115	1.19	3.99	12.17
Area 5	G6M-04-05X	10/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	260	3.0 U	0.075 U	**15**	1.0 U	31	0.17	16	1.0 U	5.66	0.19	185.7	0.17	3.27	11.24
Area 5	G6M-04-06X	10/17/2017	**1.8**	1.0 U	**0.60 J**	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.6	3.0 U	**0.03 J**	**98**	1.0 U	58	0.07 J	16	1.0 U	6.42	0.28	81.7	0.27	5.72	10.97
Area 5	G6M-04-07X	10/17/2017	**38**	**20**	**56**	**0.39 J**	1.0 U	**3.1**	1.1 U	1.0 U	760	**18**	**1.7**	**5,200**	1.1	170	0.05 U	7.6	1.0 U	6.47	0.38	37.8	0.41	9.59	10.78
Area 5	G6M-13-01X	10/16/2017	**10**	**0.79 J**	**0.65 J**	1.0 U	1.0 U	1.0 U	--	--	--	**3.6**	**0.83**	**34**	--	--	--	--	--	6.09	0.40	49.7	0.81	38.9	12.11
Area 5	G6M-13-04X	10/16/2017	**40**	**40**	**25**	**0.81 J**	**0.71 J**	**33**	1.5	7.6	2,500	**340 J**	**27**	**7,100**	1.8	190	0.05 UJ	4.1	1.0 U	6.76	0.65	-79.1	1.41	4.96	12.07
Area 5	G6M-97-05B-Fall17	10/11/2017	**140**	**16**	**4.4**	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.58 U	3.0 U	0.1 U	**3.3 J**	1.0 U	32	0.89	7.4	1.0 U	6.20	1.65	100.1	0.71	5.27	13.95
Area 5	DUP-4-Fall17 (G6M-97-05B FD)	10/11/2017	**140**	**17**	**4.7**	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.58 U	3.0 U	0.19 U	**8.1 J**	1.0 U	32	0.88	7.4	1.0 U	--	--	--	--	--	--
Area 5	MW-3-Fall17	10/11/2017	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	**0.60 J**	1.9	1.0 U	5,500	**440**	**56**	**9,200**	5.0	280	0.06 J	0.62 J	1.0 U	6.60	0.69	-102.3	1.20	4.33	13.43
Area 5	MW-7-Fall17	10/11/2017	1.0 U	**0.53 J**	**1.4**	1.0 U	1.0 U	**15**	--	--	--	**160**	**20**	**19,000**	--	--	--	--	--	6.37	0.67	-30.1	0.73	2.75	12.73
Area 5	XSA-12-95X-Fall17	10/10/2017	**36**	**11**	**26**	**3.1**	1.0 U	**5.6**	--	--	--	**3.2**	**7.8**	**9,700**	--	--	--	--	--	6.65	0.35	-85.3	1.41	19.5	14.73
Area 5	XSA-12-96X-Fall17	10/10/2017	**26**	**20**	**20**	**5.0**	**0.64 J**	**16**	--	--	--	3.0 U	**8.2**	**6,200**	--	--	--	--	--	6.48	0.69	-38.6	1.12	9.27	14.23
Area 5	XSA-12-97X-Fall17	10/10/2017	**8.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	**1.5**	**78**	--	--	--	--	--	7.88	0.28	-130.3	0.81	9.83	16.81
Area 5	XSA-12-98X-Fall17	10/23/2017	**5.0**	**0.60 J**	**0.70 J**	1.0 U	1.0 U	1.0 U	--	--	--	3 U	**0.088 J**	**2.8 J**	--	--	--	--	--	7.35	0.26	-55.5	0.39	5.42	11.48
Nashua River	G6M-04-14X-Fall17	10/6/2017	**1.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	**7.1**	**0.017 J**	**3.2 J**	--	--	--	--	--	7.50	0.46	69.9	1.00	5.26	12.91

Notes:
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCE = 1,1-Dichloroethene
VC = Vinyl chloride
TOC = Total Organic Carbon

µg/L = microgram per liter
mg/L = milligram per liter
U = Non-detect
UJ = Estimated non-detect
J = Estimated result
MCL = maximum contaminant limit
FDSA = Former Drum Storage Area

Cleanup Goals
PCE = 5 µg/L, MCL
TCE = 5 µg/L, MCL
cis-1,2-DCE = 70 µg/L, MCL
1,1-DCE = 7 µg/L, MCL
VC = 2 µg/L, MCL
Arsenic = 10 µg/L, MCL
Iron = 3,129 µg/L, risk-based cleanup goal determined in the Record of Decision (ARCADIS, 2004).
Manganese = 1,460 µg/L, risk-based cleanup goal determined in the Record of Decision (ARCADIS, 2004).

trans-1,2-DCE does not have a cleanup goal but the MCL is 1,000 µg/L.

pH/SU = standard units
DO = Dissolved Oxygen
ORP/mV = Oxidation-Reduction Potential/millivolt
SpC = Specific Conductance
mS/cm = millisiemens per centimeter
NTU = Nephelometric Turbidity Unit
Temp/°C = Temperature/degrees Celsius

Analytical Parameters

0.33	= Detection
0.330	= Above cleanup goal

APPENDIX A
GROUNDWATER FIELD ANALYSIS FORMS

A.1

Spring 2017 LTM Event

KGS

DP = Dedicated Pump
DT = Dedicated Tubing

Groundwater Water Level Measurement Sheet

Project/Site Name: Fort Devens/AOC50 **Date :** 5/15/17

Field Team Member: KBA **Weather:** Rain

Water Level Meter Model: **Phtoionization Detector Model:**

Area	Well ID	PID Reading	DTW (ft-bgs)	DTB (ft-bgs)	Lock Y/N	Bolts Y/N	Cap Y/N	Well Condition	TOC Elevation (ft, amsl)
Area 1	G6M-02-08X	0.1	14.48	70.54	✓	N/A	✓	Dedicated Pump	225.03
Area 1	G6M-03-01X	0.0	13.39	70.47	✓	N/A	✓	Ded. tub., Bent casing	225.89
Area 1	G6M-03-02X	0.2	13.15	43.95	X	N/A	✓	Ded. Pump,	225.11
Area 1	G6M-04-09X	0.0	31.61	66.24	✓	N/A	✓	T	243.46
Area 1	G6M-04-10A	0.0	12.39	40.86	✓	N/A	✓	DP	224.82
Area 1	G6M-04-10X	0.0	13.03	62.91	✓	N/A	✓	DP	225.02
Area 1	G6M-04-11X	0.0	19.32	46.48	✓	N/A	X	T	230.27
Area 1	G6M-04-13X	0.0	14.07	40.41	X	N/A	X	T	226.68
Area 1	G6M-04-15X	0.0	42.17	80.74	X	N/A	✓		254.03
Area 1	G6M-04-22X	0.0	46.00	85.22	X	N/A	✓	T	256.69
Area 1	G6M-04-31X	0.3	45.88	79.73	X	N/A	✓		256.71
Area 1	G6M-07-02X	0.3	13.85	29.67	✓	N/A	✓	DP	225.83
Area 1	G6M-13-05X	0.1	13.93	55.88	✓	N/A	✓	T	224.60
Area 1	G6M-13-06X	0.0	13.61	61.62	✓	N/A	✓	T	223.80
Area 1	G6M-93-13X	0.0	12.97	20.54	✓	N/A	✓	DP (Pump Broken)	225.63
Area 1	G6M-95-19X	0.0	12.02	58.31	X	N/A	✓	T	224.69
Area 1	G6M-95-20X	0.1	12.34	24.77	X	N/A	✓	T	225.41
Area 2	G6M-02-01X	locked area (no access)							263.24
Area 2	G6M-04-01X	locked area (no access)							261.95
Area 2	G6M-04-03X	0.0	56.51	92.51	✓	N/A	✓	T	265.09
Area 3	G6M-03-07X	0.0	55.97	88.19	✓	2/3 Bolts	✓	DP	263.46

DP = Dedicated pump
T = Dedicated Tubing

Groundwater Water Level Measurement Sheet

Project/Site Name: Fort Devens/AOC50 **Date :** 5/15/17

Field Team Member: VGA **Weather:** Rain

Water Level Meter Model: **Phtoionization Detector Model:**

Area	Well ID	PID Reading	DTW (ft-~~bgs~~)	DTB (ft-~~bgs~~)	Lock Y/N	Bolts Y/N	Cap Y/N	Well Condition	TOC Elevation (ft, amsl)
Area 3	G6M-04-02X	0.1	59.65	92.11	✓	N/A	✓	T	267.35
Area 3	G6M-04-04X	0.0	57.07	103.83	✓	✓	✓	T	263.46
Area 3	G6M-13-03X	0.0	57.36	90.26	✓	X	✓	T roadbox lid destroyed	265.60
Area 4	G6M-02-03X	0.4	57.43	103.46	✓	X	✓	T roadbox lid missing	263.83
Area 4	G6M-02-04X	0.1	59.37	105.77	✓	N/A	✓	T	265.72
Area 4	G6M-02-13X	0.0	58.31	119.34	✓	✓	✓	DP	264.41
Area 4	G6M-13-02X	0.0	58.59	124.78	✓	✓	✓	T	265.00
Area 4	G6M-97-28X	0.0	60.27	107.39	✓	N/A	✓	T	266.49
Area 5	G6M-02-06X	0.0	5.35	66.49	✓	N/A	✓	T	210.53
Area 5	G6M-02-07X	0.0	6.72	39.38	X	N/A	✓	T	211.52
Area 5	G6M-02-11X	0.0	59.22	136.51	✓	N/A	✓	DP	264.73
Area 5	G6M-02-12X	0.0	57.73	134.47	X	N/A	✓	T	263.26
Area 5	G6M-03-08X	0.1	54.06	109.45	X	N/A	✓	Bent screen (micro only)	259.40
Area 5	G6M-03-09X	0.0	54.49	139.14	✓	N/A	✓	DP	259.69
Area 5	G6M-03-10X	0.2	61.22	136.07	✓	N/A	✓	DP	266.61
Area 5	G6M-04-05X	0.0	53.58	112.02	X	N/A	✓	DP	258.93
Area 5	G6M-04-06X	0.0	59.98	105.22	X	N/A	✓	DP	264.77
Area 5	G6M-04-07X	0.0	60.13	130.73	X	N/A	✓	DP	264.62
Area 5	G6M-13-01X	0.0	62.21	136.27	✓	N/A	✓	T	266.00
Area 5	G6M-13-04X	0.0	61.57	137.04	✓	N/A	✓	T	265.10
Area 5	G6M-97-05B	0.0	63.89	137.89	✓	N/A	✓	T	268.88

DP = Dedicated Pump
T = Dedicated Tubing

Groundwater Water Level Measurement Sheet

Project/Site Name: Fort Devens/AOC50 **Date :** 5/15/17

Field Team Member: KGA **Weather:** Rain

Water Level Meter Model: _____ **Phtoionization Detector Model:** _____

Area	Well ID	PID Reading	DTW (ft-bgs)	DTB (ft-bgs)	Lock Y/N	Bolts Y/N	Cap Y/N	Well Condition	TOC Elevation (ft, amsl)
Area 5	MW-3	0.0	61.02	137.51	✓	N/A	✓	DP	266.55
Area 5	MW-7	0.0	59.98	134.32	✓	N/A	✓	T	265.77
Area 5	XSA-12-95X	0.0	36.64	Approximate	X	N/A	✓	DP	270.43
Area 5	XSA-12-96X	0.0	43.95	"	X	N/A	✓	DP	270.79
Area 5	XSA-12-97X	0.0	37.27	"	X	N/A	✓	DP	271.58
Nashua River	G6M-04-14X	0.0	6.45	92.09	X	N/A	✓	High casing cannot lock	211.41
North Plume	G6M-96-22A	0.0	3.82	52.14	X	N/A	✓		218.39
North Plume	G6M-96-22B	0.0	4.51	71.53	X	N/A	✓		218.36
	IW-18D	0.0	13.82	61.87	✓	N/A	X	Injection well / no cap	
	IW-17D	0.1	14.17	62.44	✓	N/A	X	Injection well / no cap	

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-97-05B

Project: Devens AOC 50 Date: 5/17/17

Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	63.89
Depth to bottom (ft bgs)	137.89
Screen Interval (ft-bgs)	130-135
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder Pump Tubing type: poly Dedicated pump (Y/N): Tubing

Purge start/stop time: 1410 Tubing diameter: 1/4" x 1/4" Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556MPS 076100122

LaMotte 2020WE 402735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1410	100	63.68	18.78	6.30	588	2.37	110.7	33.0	clear
1415	↓	↓	16.01	6.27	550	2.30	119.7	27.0	↓
1420			15.42	6.25	546	2.22	120.8	12.4	
1425			15.27	6.23	543	2.14	123.2	9.99	
1430			15.09	6.21	542	2.06	125.3	9.63	
1435			15.01	6.22	543	2.03	122.4	9.89	
1440			15.03	6.21	544	2.01	121.7	9.63	
1445	↓	↓	15.17	6.20	547	2.00	120.8	9.59	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y Duplicate (Y/N): N MS/MSD (Y/N): N

Filter Size: .45 Dup ID/Time: N/A

Comments 66M-97-05B-SPR17 @ 1450

[signature] 5/17/17

Signature Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: GM-02-01X

Project: Devens AOC 50 | Date: 5/19/17

Location: Fort Devens Massachusetts | Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		
Locked (stickup wells)			✓

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	51.74
Depth to bottom (ft bgs)	89.13
Screen Interval (ft-bgs)	80-95
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump | Tubing type: poly | Dedicated pump (Y/N): Pump

Purge start/stop time: 1045 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556 MPS 07 6100 22

LaMotte 2020WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1045	200	54.26	13.04	5.91	1752	3.78	-102.4	8.55	Clear
1050		54.18	13.53	6.89	1698	0.82	-123.5	8.91	
1055		54.14	13.99	6.87	1683	0.67	-125.9	8.67	
1100		54.11	14.23	6.87	1623	0.48	-128.5	7.90	
1105			14.27	6.86	1613	0.46	-129.4	7.31	
1110			14.30	6.86	1604	0.44	-131.3	7.26	
1115			14.39	6.85	1591	0.42	-132.4	7.23	
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: N/A

Comments GM-02-01X-5/19/17 @ 1120

[illegible]

Signature

5/19/17

Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: G6M-02-08X

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact	X		
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-~~bgs~~)	73.95
Depth to bottom (ft ~~bgs~~)	70.54
Screen Interval (ft-~~bgs~~)	60-70
Total volume purged (gal)	4.25

Sampling Type

Purging Method: Low Flow Bladder | Tubing type: LDPE | Dedicated pump (Y/N): Y

Purge start/stop time: 1125/1230 | Tubing diameter: 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): Lamotte 2020WE (3450-2313

YSI 556 MPS (12101301), MiniRAE 3000 (592-90754S), ~~Sample~~ Pro Bladder (1187)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (mS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1155	325	14.72	12.51	12.60	2.641	0.10	-90.1	117.20	Yellow tint clear
1200	325	15.38	12.69	12.31	2.631	0.08	-102.3	52.17	Yellow tint clear
1205	325	16.65	12.88	12.29	2.640	0.06	-107.8	24.53	Yellow tint, clear
1210	325	16.80	12.99	12.29	2.641	0.03	-113.3	26.48	Yellow tint clear
1215	325	16.95	12.95	12.31	2.643	0.02	-116.4	29.78	Yellow tint clear
1220	300	17.00	12.89	12.32	2.649	0.01	-116.5	28.29	yellow tint clear
1225	300	17.01	12.93	12.30	2.648	0.01	-115.1	29.00	yellow tint clear
1230	300	17.01	13.09	12.31	2.651	0.01	-111.3	30.42	yellow tint
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

G6M-02-08X_5pr17@1232

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 µm | Dup ID/Time: NA

Comments PID Headed space Reading: 0.0 ppm @ 1122 | Sample time 1232

Melissa A Miller

Signature

5/18/17

Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: G6M-03-01X

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact	X		
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-bgs)	13.42
Depth to bottom (ft bgs)	70.47
Screen Interval (ft-bgs)	50-70
Total volume purged (gal)	8.0

Sampling Type

Purging Method ~~low flow~~ Peristaltic | Tubing type LDPE | Dedicated ~~pump~~ Tubing (Y/N) Y

Purge start/stop time 9:30 | Tubing diameter 1/4" | Air source N/A

Field Instrument (Model/S/N) YSI 556 MPS (12101301)

Mini RAE 3000 (592-907545), Geotech Peristaltic (1359) | Lamotte 2020WE (5450-2313)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (mS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1000	425	14.85	13.41	12.53	2.228	0.12	-86.1	10.17	clear
1005	425	14.85	13.28	12.54	2.242	0.10	-79.1	19.18	Clear
1010	425	14.87	13.31	12.68	2.246	0.10	-81.4	28.73	Clear
1015	425	14.82	13.43	12.53	2.248	0.09	-70.8	13.72	Clear
1020	425	14.86	13.35	12.64	2.255	0.08	-80.9	9.86	Clear
1025	425	14.85	13.29	12.56	2.261	0.10	-86.4	48.27	Clear
1030	425	14.85	13.43	12.54	2.266	0.11	-88.8	9.45	clear
1035	425	14.82	13.48	12.53	2.275	0.12	-90.0	8.72	clear
1040	425	14.81	13.56	12.52	2.275	0.12	-93.1	8.51	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

G6M-03-01X_SP17 @ 1042

Field Filtered (Y/N): | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45µm | Dup ID/Time:

Comments Initial Head space PID reading 2.4 ppm @ 9:25am Sample 1042

Melissa A Miller

Signature

5/18/17

Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-03-07X

Project: Devens AOC 50
Location: Fort Devens Massachusetts

Date: 5/16/17
Sampler: VGA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present		2/3 X	
Locked (stickup wells)			✓

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	55.97
Depth to bottom (ft bgs)	88.19
Screen Interval (ft-bgs)	80-90
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1515
Tubing type: Poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Y
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 556 MPS 07610012 L+Mottle LOZONE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1515	100	52.76	17.90	6.49	564	1.04	-88.1	11.97	slight yellow
1520	↓	52.76	17.44	6.51	582	0.54	-79.5	11.69	"
1525	↓	↓	17.39	6.52	585	0.39	-86.1	11.39	"
1530	↓	↓	17.41	6.57	586	0.33	-89.0	11.07	"
1535	↓	↓	17.46	6.59	589	0.35	-91.3	11.03	"
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-03-07X-SPR17 @ 1540

[signature]
Signature

5/16/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-04-02X

Project: Devens AOC 50 | Date: 5/16/17

Location: Fort Devens Massachusetts | Sampler: KGA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	59.65
Depth to bottom (ft bgs)	92.11
Screen Interval (ft-bgs)	80-90
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump | Tubing type: poly | Dedicated pump (Y/N): N

Purge start/stop time: 1300 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556 076100122 Lamotte 2020xE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1300	100	59.56	13.15	5.99	964	1.20	43.6	5.04	clear
1305	↓	↓	13.17	6.00	951	1.57	36.7	4.03	↓
1310	↓	↓	13.12	6.02	946	2.03	31.3	3.97	↓
1315	↓	↓	13.15	6.01	952	2.05	29.7	3.93	↓
1320	↓	↓	13.17	6.00	956	2.09	29.5	3.90	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): yes (DUP-2) | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: 1350

Comments 66M-04-02X spec @ 1325 / 66M-DUP-2 @ 1350

[signature] | 5/16/17

Signature | Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-09X

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: MLA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-bgs)	31.61
Depth to bottom (ft bgs)	66.24
Screen Interval (ft-bgs)	55-65
Total volume purged (gal)	3.0 gallons

Sampling Type

Purging Method: Bladder pump | Tubing type: poly | Dedicated pump (Y/N): Tubing

Purge start/stop time: 1240 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556 MPS 07G100 122

LaMotte 2020WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1240	200	31.61	10.69	6.90	1614	0.63	-137.0	23.9	clear
1245		31.77	10.39	6.59	1690	0.52	-122.7	19.7	
1250		31.77	10.42	6.58	1772	0.48	-119.0	14.8	
1255			10.41	6.57	1780	0.48	-118.9	17.2	
1300			10.39	6.56	1793	0.49	-118.7	20.4	
1305			10.40	6.58	1798	0.48	-117.9	16.7	
1310			10.37	6.59	1801	0.46	-117.3	17.2	
1315			10.40	6.58	1813	0.45	-116.7	17.0	
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-04-09X @ 1320

Signature | Date 5/18/17

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-10A

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	12.39
Depth to bottom (ft bgs)	40.86
Screen Interval (ft-bgs)	30-40
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump | Tubing type: Poly | Dedicated pump (Y/N): Y

Purge start/stop time: 1405 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556 MPS 07/100 122 402735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1405	200	12.28	10.42	6.53	1586	0.73	-83.1	25.6	clear
1410	↓	↓	10.22	6.57	1772	0.43	-92.4	21.9	↓
1415	↓	↓	10.11	6.59	1755	0.34	-97.1	17.2	↓
1420	↓	↓	10.10	6.59	1777	0.33	-98.1	19.4	↓
1425	↓	↓	10.93	6.59	1780	0.33	-98.6	19.2	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: 1.45 | Dup ID/Time: N/A

Comments 66M-04-10A-SPR17 @ 1430

[illegible] | 5/18/17

Signature | Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-10X

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: MA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-bgs)	13.03
Depth to bottom (ft bgs)	62.91
Screen Interval (ft-bgs)	52-62
Total volume purged (gal)	3.0

Sampling Type

Purging Method: geotech | Tubing type: poly | Dedicated pump (Y/N): Y (pump failure)

Purge start/stop time: 1530 | Tubing diameter: 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556MPS 07 6100 122

LaMotte 2020we A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1530	200	13.07	11.06	5.56	1482	1.44	137.0	11.0	clear
1535	↓	↓	10.96	5.51	1502	0.84	154.4	11.4	↓
1540	↓	↓	10.90	5.47	1518	0.67	159.6	11.8	↓
1545	↓	↓	10.92	5.50	1521	0.64	161.3	11.5	↓
1550	↓	↓	10.93	5.51	1523	0.63	162.1	11.3	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: 1.45 | Dup ID/Time: N/A

Comments pump failed (removed and sampled w/geotech) 66M-04-10X-SP17 @ 1555

Signature | Date 5/18/17

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-13X

Project: Devens AOC 50 | Date: 5/16/17

Location: Fort Devens Massachusetts | Sampler: WH

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present		✓	
Bolts present		✓	✓
Locked (stickup wells)		✓	

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	14.07
Depth to bottom (ft bgs)	40.41
Screen Interval (ft-bgs)	30-40
Total volume purged (gal)	3.5

Sampling Type

Purging Method: geotech | Tubing type: Air poly | Dedicated pump (Y/N): Tubing

Purge start/stop time: 910 | Tubing diameter: 1/4" | Air source: N/A

Field Instrument (Model/S/N): YSI 556 MPS 07L100172 LaMotte 2020WF A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
910	200	14.17	9.68	7.09	41	9.69	191.0	3.02	clear
915	↓	↓	9.67	6.59	36	9.37	199.7	2.67	↓
920	↓	↓	9.66	6.46	37	9.13	203.6	2.50	↓
925	↓	↓	9.68	6.49	35	9.05	209.0	2.31	↓
930	↓	↓	9.67	6.47	34	9.01	210.7	2.36	↓
~~935~~									
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-04-13X-SPR-17 @ 935

Signature | Date 5/16/17

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-07-02X

Project: Devens AOC 50 Date: 5/16/17

Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)		✓	

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	13.85
Depth to bottom (ft bgs)	29.67
Screen Interval (ft-bgs)	22.5-27.5
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump Tubing type: Poly Dedicated pump (Y/N): Yes

Purge start/stop time: 1020 Tubing diameter: 1/4 x 1/4 Air source: Nitrogen

Field Instrument (Model/S/N): ~~[illegible]~~

YSI 556MPS 07E100122 / LaMotte 2020WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1020	200	14.27	9.71	5.73	42	4.20	212.8	3.52	Clear
1025	↓	↓	9.87	5.73	42	4.06	213.0	3.21	↓
1030	↓	↓	9.77	5.71	42	3.84	213.0	2.99	↓
1035	↓	↓	9.71	5.70	42	3.73	213.4	2.78	↓
1040	↓	↓	9.73	5.70	42	3.69	213.3	2.73	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y Duplicate (Y/N): N MS/MSD (Y/N): N

Filter Size: .45 Dup ID/Time: N/A

Comments 66M-07-02X SPR17 @ 1045

[signature] 5/16/17

Signature Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-13-01X

Project: Devens AOC 50
Location: Fort Devens Massachusetts

Date: 5/18/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	62.21
Depth to bottom (ft bgs)	136.27
Screen Interval (ft-bgs)	125-135
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 845
Tubing type: poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 556 MPS 07L100172
LaMotte 2010WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
845	100	61.93	13.35	5.82	615	1.31	170.1	22.8	Clear
850	↓	↓	14.29	6.03	620	1.27	159.7	19.9	↓
855	↓	↓	14.33	6.07	632	0.72	141.3	18.9	↓
900	↓	↓	14.29	6.05	633	0.69	139.7	17.4	↓
905	↓	↓	14.23	6.05	633	0.55	138.2	16.0	↓
910	↓	↓	14.41	6.04	634	0.44	131.4	11.4	↓
915	↓	↓	14.38	6.03	633	0.38	129.3	5.67	↓
920	↓	↓	14.50	6.03	632	0.37	128.4	5.50	↓
925	↓	↓	14.52	6.02	631	0.37	127.6	5.47	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-13-01X-5PR17 @ 930

[signature]
Signature

5/18/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-13-02X

Project: Devens AOC 50 | Date: 5/17/17

Location: Fort Devens Massachusetts | Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		
Locked (stickup wells)			✓

Well Information

Diameter	2
Material	PVC
Depth to water (ft-~~bgs~~)	58.59
Depth to bottom (ft ~~bgs~~)	124.78
Screen Interval (ft-~~bgs~~)	115-125
Total volume purged (gal)	3.5

Sampling Type

Purging Method: geotech | Tubing type: poly | Dedicated pump (Y/N): Tubing

Purge start/stop time: 910 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556MPS 07610052 Lamotte 2020 WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
910	100	58.52	13.06	6.08	830	0.82	61.2	11.43	clear
915	↓	↓	12.90	6.07	830	0.67	74.7	8.31	↓
920	↓	↓	12.88	6.05	831	0.59	84.5	6.63	↓
925	↓	↓	12.89	6.05	837	0.53	86.7	5.94	↓
930	↓	↓	12.91	6.10	842	0.49	88.7	5.83	↓
935	↓	↓	12.93	6.07	841	0.47	89.7	5.79	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-13-02X-SPR17 @ 940

[signature] | 5/17/17

Signature | Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-13-04X

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: KLA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-bgs)	61.57
Depth to bottom (ft bgs)	137.04
Screen Interval (ft-bgs)	125-135
Total volume purged (gal)	20

Sampling Type

Purging Method: Bladder pump | Tubing type: Poly | Dedicated pump (Y/N): Tubing

Purge start/stop time: 1040 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): [illegible] 076100 [illegible]

[illegible] 2010WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1040	100	61.62	14.53	6.74	1221	2.03	-100.4	20.1	clear
1045	↓	↓	13.79	6.77	1239	1.19	-101.7	20.9	↓
1050	↓	↓	13.68	6.76	1260	0.63	-102.7	27.5	↓
1055	↓	↓	13.67	6.75	1264	0.61	-102.3	22.3	↓
1100	↓	↓	13.43	6.75	1278	0.46	-101.7	21.2	↓
1105	↓	↓	13.59	6.75	1279	0.43	-100.9	21.0	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-13-04X-SPR17 @ 1110

[signature] | 5/18/17

Signature | Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: G6M-13-05X

Project: Devens AOC 50 | Date: 5/18/17

Location: Fort Devens Massachusetts | Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact	X		
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-bgs)	13.83
Depth to bottom (ft bgs)	58.88
Screen Interval (ft-bgs)	45-55
Total volume purged (gal)	4.85

Sampling Type Low Flow

Purging Method peristaltic | Tubing type LDPE | Dedicated pump (Y/N) Y

Purge start/stop time 1418 / 1500 | Tubing diameter 1/4" | Air source Nitrogen Gas

Field Instrument (Model/S/N) YSI 556 MPS (12101301)

Lamotte 2020we (3450-233)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (mS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1430	425	14.95	12.82	11.68	0.539	7.05	-31.0	27.80	Clear
1435	425	15.00	12.64	11.83	0.537	6.93	-21.1	12.21	Clear
1440	425	15.02	12.70	11.77	0.535	6.70	-5.8	15.32	Clear
1445	425	15.03	12.75	11.74	0.539	6.52	3.5	16.22	Clear
1450	425	15.04	12.80	11.60	0.543	4.50	22.2	8.00	Clear
1455	425	15.03	12.78	11.50	0.547	4.12	24.3	7.70	Clear
1500	425	15.04	12.67	11.40	0.550	3.97	25.1	7.65	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

G6M-13-05X-SA17@ 1502

Field Filtered (Y/N): | Duplicate (Y/N): G6M-DUP-1 | MS/MSD (Y/N): N

Filter Size: 45 um | Dup ID/Time: 1507

Comments PID Headspace reading 0.6ppm @ 1412. * Duplicate

Melissa Miller — **Signature**

5/18/17 — Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-13-06X

Project: Devens AOC 50 Date: 5/19/17

Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	13.61
Depth to bottom (ft bgs)	61.62
Screen Interval (ft-bgs)	50-60
Total volume purged (gal)	3.0

Sampling Type

Purging Method: geotech Tubing type: Poly Dedicated pump (Y/N): Tubing

Purge start/stop time: 735 Tubing diameter: 1/4" Air source: N/A

Field Instrument (Model/S/N): YSI 556 MPS 076100122 LaMotte 2020WE A02735

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
735	200	13.82	10.95	5.78	1463	1.77	-50.5	11.28	Clear
740	↓	↓	10.90	5.79	1451	1.32	-53.6	7.35	↓
745	↓	↓	10.87	5.87	1450	1.14	-59.7	7.40	↓
750	↓	↓	10.82	5.92	1443	1.04	-62.9	7.46	↓
755	↓	↓	10.83	5.93	1446	1.02	-63.7	7.43	↓
800	↓	↓	10.87	5.96	1450	1.01	-64.8	7.43	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y Duplicate (Y/N): N MS/MSD (Y/N): Y

Filter Size: .45 Dup ID/Time: N/A

Comments 66M-13-06X-SPR17 @ 805

[signature] 5/19/17

Signature Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: IW-17D

Project: Devens AOC 50 | Date: 5/19/17

Location: Fort Devens Massachusetts | Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact	X		
PVC casing intact	X		
Well gripper present			X
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-~~bgs~~)	13.89
Depth to bottom (ft ~~bgs~~)	62.44
Screen Interval (ft-~~bgs~~)	42-67
Total volume purged (gal)	7.50

Sampling Type Low Flow

Purging Method Bladder Pump | Tubing type 1/4" Double Braided LDPE | Dedicated pump (Y/N) N

Purge start/stop time 905/1000 | Tubing diameter 1/4" | Air source Nitrogen

Field Instrument (Model/S/N) Lamotte 2020WE (3450-2313)

YSI 556MPS (12L101301), Mini RAE3000 (592-907545), SimplePro Bladder (11617),

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
935	425	17.72	11.21	11.15	1.782	0.43	40.5	31.81	Clear
940	425	17.76	11.31	11.14	1.782	0.41	40.4	31.35	Clear
945	425	17.79	11.27	11.13	1.803	0.41	41.2	25.57	Clear
950	425	17.80	11.24	11.12	1.765	0.43	41.0	26.98	Clear
955	425	17.86	11.22	11.11	1.772	0.49	41.0	21.47	Clear
1000	425	17.85	11.27	11.10	1.781	0.45	40.9	21.28	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

IW-17D_Spr17_1002

Field Filtered (Y/N): metals | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 um | Dup ID/Time: NA

Comments PID Head Space Reading 0.1 ppm @ 845.

Melissa Miller — **Signature**

5/19/17 — Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: IW-18D

Project: Devens AOC 50 | Date: 5/19/17
Location: Fort Devens Massachusetts | Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact	✓		
PVC casing intact	X		
Well gripper present			X
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft-~~bgs~~)	14.85
Depth to bottom (ft-~~bgs~~)	61.87
Screen Interval (ft-~~bgs~~)	38-63
Total volume purged (gal)	5.75

Sampling Type Low Flow
Purging Method Peristaltic | Tubing type LDPE | Dedicated pump (Y/N) N
Purge start/stop time 1030/1145 | Tubing diameter 1/4" | Air source NA
Field Instrument (Model/S/N) Lamotte 2020WE (3450-2313)
YSI 556 MPS (12101301), Mini RAE 3000 (592-907545) Geotech Peristaltic (1359)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1100	375	16.70	12.48	11.05	1.353	0.47	46.4	50	Cloudy
1105	375	16.81	12.44	11.04	1.347	0.48	42.6	39	Cloudy
1110	375	17.10	12.43	11.04	1.338	0.48	43.0	59	Cloudy
1115	375	17.21	12.41	11.04	1.329	0.47	42.6	39	Cloudy
1120	375	17.33	12.54	11.02	1.314	0.48	48.6	57	Cloudy
1125	375	17.35	12.48	11.02	1.295	0.43	45.2	64	Cloudy
1130	375	17.39	12.53	11.01	1.281	0.44	45.0	71	Cloudy
1135	375	17.40	12.56	11.00	1.276	0.38	44.8	81	Cloudy
1140	375	17.42	12.60	11.00	1.270	0.42	44.5	82	Cloudy
1145	375	17.47	12.66	11.00	1.265	0.46	44.3	85	Cloud
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

IW-18D-Sp17 1147

Sampling Details

Field Filtered (Y/N): | Duplicate (Y/N): N | MS/MSD (Y/N): N
Filter Size: .45 µm | Dup ID/Time: NA

Comments PID Head Space Reading 0.0 ppm @ 1025

Melissa A Miller
Signature

5/19/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC

Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: MW-3

Project: Devens AOC 50 | Date: 5/17/17

Location: Fort Devens Massachusetts | Sampler: VGA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2
Material	PVC
Depth to water (ft-bgs)	66.02
Depth to bottom (ft bgs)	137.51
Screen Interval (ft-bgs)	126-136
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Bladder pump | Tubing type: poly | Dedicated pump (Y/N): Yes

Purge start/stop time: 1140 | Tubing diameter: 1/4" x 1/4" | Air source: Nitrogen

Field Instrument (Model/S/N): YSI 556 MPS 07610012 2 LaMotte 2020 AO2715

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1140	100	60.9	13.09	6.81	923	3.31	-98.3	9.41	clear
1145	↓	↓	12.89	6.81	918	2.21	-101.7	8.41	↓
1150	↓	↓	12.73	6.82	915	1.00	-106.4	7.67	↓
1155	↓	↓	12.61	6.81	915	0.89	-107.3	6.45	↓
1200	↓	↓	12.95	6.80	913	0.67	-110.0	6.34	↓
1205	↓	↓	12.73	6.79	911	0.65	-111.1	6.33	↓
1210	↓	↓	12.70	6.78	909	0.63	-112.4	6.29	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N

Filter Size: .45 | Dup ID/Time: N/A

Comments MW-3-SPR17 @ 1215

[signature] | 5/17/17

Signature | Date

KGS

Instrument Calibration Log

Project/Site Name: ~~NWIRP Calverton Site 7~~ Deers AOC50

Calibrated By: [illegible]

Instrument/Serial Number	Pre-Cal 1-AM (NTU)	Pre-Cal 1-PM (NTU)	Pre-Cal 10-AM (NTU)	Pre-Cal 10-PM (NTU)	Post-Cal 1-AM (NTU)	Post-Cal 1-PM (NTU)	Post-Cal 10-AM (NTU)	Post-Cal 10-PM (NTU)	Date
LaMotte 2020e / A02735	1.07	0.99	10.02	9.99	1.00	~~1.00~~ 1.00	10.00	10.01	Time: 5/16/17 &
"	1.03	0.99	10.06	10.03	1.00	~~1.03~~ 1.00	10.00	10.03	Time: 5/17/17 &
"	1.09	1.06	10.11	10.00	1.00	1.00	10.00	10.00	Time: 5/18/17 &
"	1.00	N/A	10.07	N/A	1.00	N/A	10.00	N/A	Time: 5/19/17 &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &

Signature: [illegible]

Date: 5/19/17

KGS

Instrument Calibration Log

Project/Site Name: ~~NWIRP Calverton Site 7~~ Peters AOC 50

Date: ~~04/ /17~~ 5/16 + 5/17

Weather: 80's

Calibrated By: NA

Instrument: YSI 556

Serial Number: 07E100122

Parameters	Morning Calibration Time: 5/16	5/17	Cal. Temperature °C 5/16	5/17	Afternoon Cal. Check Time: 5/16	5/17	Comments
Conductivity 1413 (µS/cm°)	1.420	1.418	17.34	16.87	1.410	1.413	
pH (7)	7.00	6.96			7.03	6.97	
pH (4)	4.00	3.97			4.01	3.89	
pH (10)	10.06	10.01			10.10	10.07	
ORP 240 (mv)	240.1	239.7			241.7	241.3	
Dissolved Oxygen (%)	99.7%	106.7%			102.1%	100.9%	
Zero Dissolved Oxygen (mg/L)	—	—			—	—	
Barometric Pressure (mmHg)	—	—			—	—	

pH Check (Every 3 hrs): (NJ only)

	Time:	Standard:	Reading:
Morning		NA	
Cal. Temperature		NA	
Afternoon		NA	

Signature: [signature]

Date: 5/17/17

KGS

Instrument Calibration Log

Project/Site Name: ~~NWIRP Calverton Site 7~~ Devons Acc 50

Date: ~~04/ /17~~ 5/18, 5/19

Weather: 90's

Calibrated By: N/A

Instrument: YSI 556

Serial Number: 07L100122

Parameters	Morning Calibration Time: 5/18	5/19	Cal. Temperature °C 5/18	5/19	Afternoon Cal. Check Time: 5/18	5/19	Comments
Conductivity 1413 (µS/cm°)	1.410	1.413	17.34	16.49	1.413	N/A	
pH (7)	6.99	7.04			7.12		
pH (4)	4.09	4.02			4.01		
pH (10)	9.97	9.99			9.89		
ORP 240 (mv)	240.1	242.7			232.7		
Dissolved Oxygen (%)	100.2%	103.7%			98.6%		
Zero Dissolved Oxygen (mg/L)	—	—			—		
Barometric Pressure (mmHg)	—	—			—		

pH Check (Every 3 hrs): (NJ only)

Time:			Time:		Time:	
Standard:	NA		Standard:	NA	Standard:	NA
Reading:			Reading:		Reading:	

Signature: [illegible]

Date: 5/19/17

KGS

Instrument Calibration Log

Project/Site Name: ~~NWIRP Calverton Site 7~~ AOC50 **Calibrated By:** Melissa Miller

Instrument/Serial Number	Pre-Cal 1-AM (NTU)	Pre-Cal 1-PM (NTU)	Pre-Cal 10-AM (NTU)	Pre-Cal 10-PM (NTU)	Post-Cal 1-AM (NTU)	Post-Cal 1-PM (NTU)	Post-Cal 10-AM (NTU)	Post-Cal 10-PM (NTU)	Date
LaMotte 2020e / 3450-2313	0.91	1.23	9.25	9.68	1.00	0.95	10.07	9.88	5/18/17 Time: 810 & 1655
" "	1.02		9.10		0.99		9.81		5/19/17 Time: 800 &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &
									Time: &

Signature: Melissa Miller

Date: _____

KGS

Instrument Calibration Log

Project/Site Name: ~~NWIRP Calverton Site 7~~ TTD

Date: 05/18/17

Weather: 96°F Sunny, HOT

Calibrated By: Melissa Miller

Instrument: YSI 556 MPS

Serial Number: 12L101301

Parameters	Morning Calibration Time: 825	Cal. Temperature °C	Afternoon Cal. Check Time: 1345	Comments
Conductivity 1413 (µS/cm°)	1.336 to 1.413	24.07	1.444	
pH (7)	7.18 to 7.00	23.48	7.04	
pH (4)	4.25 to 4.00	24.18	3.98	
pH (10)	9.93 to 10.00	24.13	10.05	
ORP 240 (mv)	223.2 to 240.0	24.34	230.8	
Dissolved Oxygen (%)	104.8 to 100.0	22.46	100.0	
Zero Dissolved Oxygen (mg/L)	—			
Barometric Pressure (mmHg)	—			

pH Check (Every 3 hrs): (NJ only)

Time:
Standard: NA
Reading:

Time:
Standard: NA
Reading:

Time:
Standard: NA
Reading:

Signature: [signature]

Date: 5/18/17

KGS

Instrument Calibration Log

Project/Site Name: ~~NWIRP Calverton Site 7~~ Ft Devens AOC50

Date: 05/19/17

Weather: 85°F Sunny

Calibrated By: Melissa Miller

Instrument: YSI 556 MPS

Serial Number: 12L101301

Parameters	Morning Calibration Time: 820	Cal. Temperature °C	Afternoon Cal. Check Time:	Comments
Conductivity 1413 (µS/cm°)	1.423 → 1.413	23.43		
pH (7)	7.23 → 7.00	24.02		
pH (4)	4.08 → 4.00	23.90		
pH (10)	9.81 → 10.00	23.73		
ORP 240 (mv)	235.0 → 240.0	24.03		
Dissolved Oxygen (%)	109.9 → 100	22.48		
Zero Dissolved Oxygen (mg/L)	—			
Barometric Pressure (mmHg)	—			

pH Check (Every 3 hrs): (NJ only)

Time:	Time:	Time:
Standard: NA	Standard: NA	Standard: NA
Reading:	Reading:	Reading:

Signature: Melissa Miller

Date: 5/19/17

AOC 50 Synoptic Photolog Spring 2017

EVENT DATE: 05/15/2017

KOMAN GOVERNMENT SOLUTIONS, LLC

G6M-13-06X

G6M-93-13X

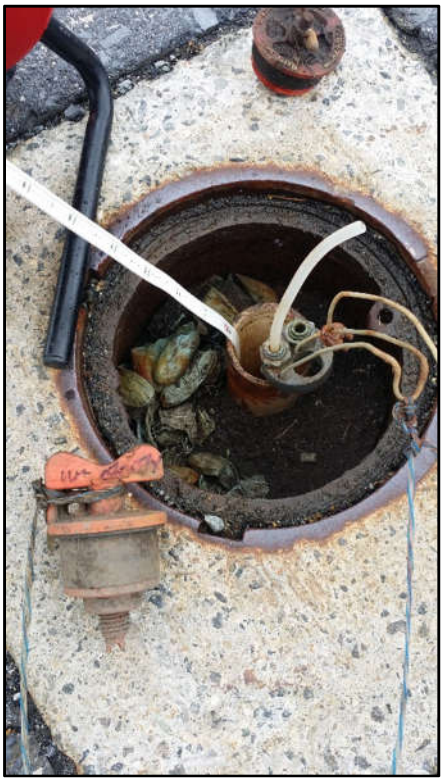
G6M-04-11X

G6M-13-05X

IW-18D

G6M-02-03X

IW-17D



G6M-03-07X

G6M-95-20X

G6M-02-08X

G6M-03-02X

G6M-97-28X

G6M-04-14X

G6M-95-19X

G6M-03-01X

G6M-02-11X

G6M-07-02X

G6M-04-13X

G6M-04-09X

XGM-04-10A

G6M-04-10X

G6M-04-15X

G6M-03-09X

G6M-04-31X

G6M-04-22X

G6M-96-22B

G6M-96-22A

G6M-13-03X

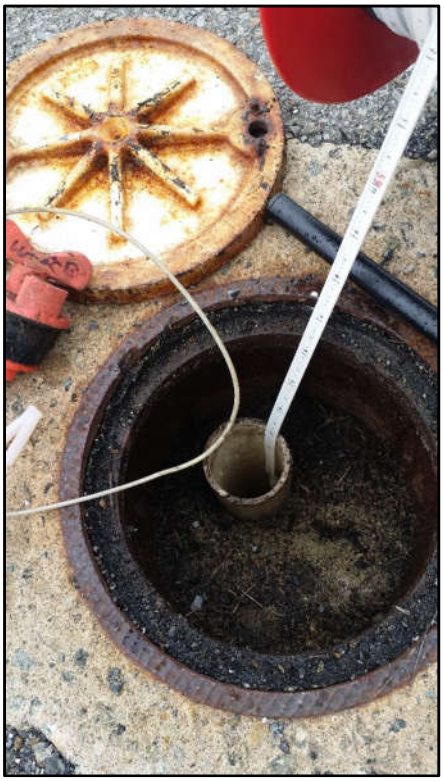
G6M-04-02X

MW-7

G6M-04-03X

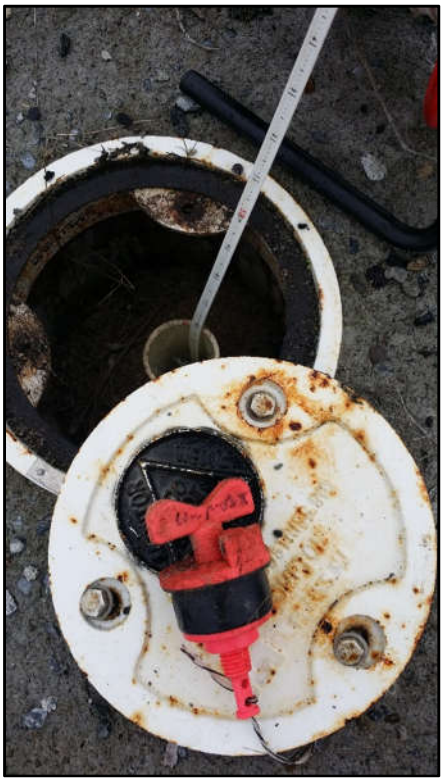
G6M-04-04

G6M-02-07X



G6M-02-13X

G6M-02-04X

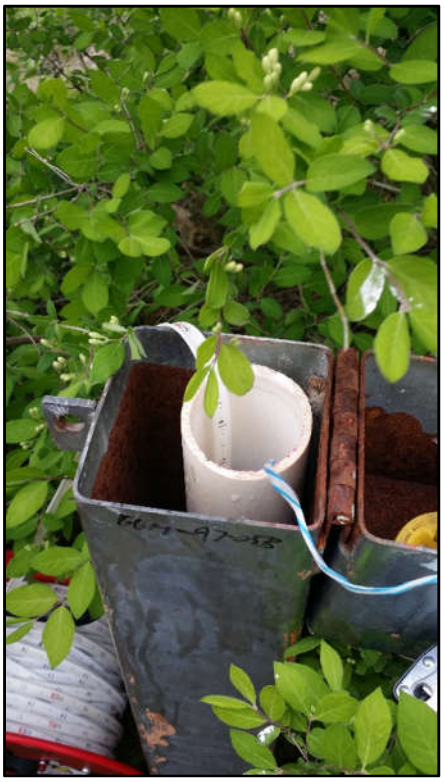


G6M-13-02X

G6M-13-04X

G6M-13-01X

MW-3



G6M-97-05B

G6M-02-12X

G6M-04-05X

G6M-03-08X

G6M-03-10X

G6M-04-07X

G6M-02-06X

G6M-04-06X

A.2

Fall 2017 LTM Event

P = dedicated pump
T = dedicated Tubing

KGS

Groundwater Water Level Measurement Sheet

Project/Site Name: Fort Devens/AOC50 • Skinny dipper (300') **Date :** 10/2/17
Field Team Member: [illegible] + **Weather:** 70's
Water Level Meter Model: _____ • Interface probe (200') • add .36' DTB readings

Area	Well ID	Time	DTW (ft bTOR)	DTB (ft bTOR)	Lock Y/N	Bolts Y/N	Cap Y/N	Well Condition
North Plume	G6M-96-22A	• + .36'	5.93	52.13	X	NA	✓	Tubing down well
North Plume	G6M-96-22B	• +	6.35	71.92	X	NA	✓	T
Area 1	G6M-02-08X	[redacted]	14.97	70.48	✓	NA	✓	P
Area 1	G6M-03-01X	• +	14.63	71.69	✓	NA	✓	T
Area 1	G6M-03-02X	• +	13.42	44.27	X	NA	✓	P (Lock added)
Area 1	G6M-04-09X	• +	30.87	66.57	✓	NA	✓	T
Area 1	G6M-04-10A	• +	13.30	40.78	✓	NA	✓	P
Area 1	G6M-04-10X	• +	13.97	63.53	✓	NA	✓	T
Area 1	G6M-04-11X	• +	20.14	46.66	X	NA	✓	T
Area 1	G6M-04-13X	• +	15.18	40.58	X	NA	X	T
Area 1	G6M-04-15X	• +	43.04	67.04	✓	NA	✓	Micro needed / Tubing — Fell added Lock
Area 1	G6M-04-22X	• +	46.57	85.60	✓	NA	✓	T added lock
Area 1	G6M-04-31X	• +	51.29	63.18	✓	NA	✓	Micro needed / tubing — fell added lock
Area 1	G6M-07-02X	• +	14.58	28.68	✓	NA	✓	P
Area 1	G6M-13-05X	• +	14.97	55.18	✓	NA	✓	T
Area 1	G6M-13-06X	• +	14.42	61.87	✓	NA	✓	T
Area 1	G6M-93-13X	• +	13.83	20.88	✓	NA	✓	P (pump broken)
Area 1	G6M-95-19X	• +	13.04	58.44	X	NA	✓	T
Area 1	G6M-95-20X	• +	13.62	24.78	X	NA	✓	T
Area 2	G6M-02-01X		55.19	89.37	✓	✓	✓	P
Area 2	G6M-04-01X		52.88	91.32	✓	✓	✓	T
Area 2	G6M-04-03X		57.46	93.33	✓	✓	✓	T
Area 3	G6M-03-07X		57.70	88.32	✓	Y2	✓	P
Area 3	G6M-04-02X		60.67	92.84	✓	NA	✓	T
Area 3	G6M-04-04X		58.80	104.83	✓	✓	✓	T
Area 3	G6M-13-03X		58.85	90.31	✓	✓	✓	T
rea 4	G6M-02-03X		88.66	104.04	✓	✓	✓	T

does not seem correct

Groundwater Water Level Measurement Sheet

Project/Site Name: Fort Devens/AOC50 **Date :** _____

Field Team Member: _____ **Weather:** _____

Water Level Meter Model: _____

Area	Well ID	Time	DTW (ft bTOR)	DTB (ft bTOR)	Lock Y/N	Bolts Y/N	Cap Y/N	Well Condition
Area 4	G6M-02-04X		61.63	102.63	✓	NA	✓	T
Area 4	G6M-02-13X		60.73	121.18	✓	X	✓	P
Area 4	G6M-13-02X		60.96	126.04	✓	✓	✓	T
Area 4	G6M-97-28X		62.43	107.86	✓	NA	✓	T
Area 5	G6M-02-06X		9.37	66.80	✓	NA	✓	T
Area 5	G6M-02-07X	● +	10.23	49.51	X	NA	✓	T
Area 5	G6M-02-11X	● +	61.97	138.19	✓	NA	✓	P
Area 5	G6M-02-12X		60.65	136.32	X	NA	✓	T collar broken
Area 5	G6M-03-08X		56.88	110.38	X	NA	✓	P rust Micro
Area 5	G6M-03-09X		57.27	141.52	✓	NA	✓	P added lock
Area 5	G6M-03-10X		64.07	137.90	✓	NA	✓	P
Area 5	G6M-04-05X		56.48	113.50	X	NA	✓	P added lock
Area 5	G6M-04-06X		63.27	106.83	X	NA	✓	P added lock
Area 5	G6M-04-07X		63.14	131.33	X	NA	✓	P added lock
Area 5	G6M-13-01X		64.93	138.18	✓	NA	✓	T
Area 5	G6M-13-04X		64.25	138.98	✓	NA	✓	T
Area 5	G6M-97-05B	● +	66.64	138.61	✓	NA	✓	T
Area 5	MW-3		64.12	138.67	✓	NA	✓	P
Area 5	MW-7		62.64	135.17	✓	NA	✓	T
Area 5	XSA-12-95X	● +	74.34	131.82	X	NA	✓	P
Area 5	XSA-12-96X	● +	69.57	131.98	X	NA	✓	P Pump damaged Micro
Area 5	XSA-12-97X	● +	74.28	133.01	X	NA	✓	P
Nashua River	G6M-04-14X	● +	20.42	92.78	X	NA	✓	P retaining to old lock T
~~Area 5~~	~~XSA-12-98X~~							

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: G6M-03-08X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/4/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure		X	
Concrete Pad intact			—
PVC casing intact	X		
Well gripper present	X		
Bolts present			—
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	57.00
Depth to bottom (ft BTOC)	110.38
Screen Interval (ft BTOC)	127.20-142.20
Total volume purged (gal)	2.75

Sampling Type
Purging Method: Micro Bladder
Purge start/stop time: 1245/1350
Tubing type: Double Banded
Tubing diameter: 1/4"
Dedicated pump (Y/N): N
Air source: Nitrogen
Field Instrument (Model/S/N):
YSI 600 XL (02E0534AM) Hach 2100Q (11060C010282) Geotech Micro Bladder (097)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1355	125	57.36	13.12	6.31	356	1.02	119.1	14.5	clear
1400	125	57.40	12.97	6.47	366	0.90	22.1	10.0	Clear
* 1405	125	57.43	13.41	6.62	372	0.67	-14.1	7.27	Clear
1410	125	57.51	13.57	6.66	374	0.80	-25.9	6.19	Clear
1415	125	57.49	13.34	6.75	376	0.65	-33.9	6.04	Clear
1420	125	57.48	13.31	6.69	374	0.62	-29.9	5.98	clear
1425	125	57.46	13.29	6.70	374	0.65	-29.9	5.94	clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

* Changed Nitrogen tank

Sampling Details
Field Filtered (Y/N): Y
Filter Size: 45
Duplicate (Y/N): N
Dup ID/Time:
MS/MSD (Y/N): N
G6M-03-08X_FAL17@ 1430

Comments Old Dedicated Tubing previously fell into Bottom, Hence the DTB Dicrepency. Did not leave Dedicated tubing

[signature]
Signature

10/4/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-13-05X

Project: Devens AOC 50 Fall 2017 | Date: 10/5/17
Location: Fort Devens Massachusetts | Sampler: MA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	14.97
Depth to bottom (ft BTOC)	55.18
Screen Interval (ft ~~BTOC~~ BGS)	45-55
Total volume purged (gal)	3.0

Sampling Type

Purging Method: geotech | Tubing type: Poly | Dedicated pump (Y/N): Tubing
Purge start/stop time: 10/2 / 1050 | Tubing diameter: 1/4" | Air source: N/A
Field Instrument (Model/S/N): YSI 650 MDS 02E0534 AM / Hach 21008 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1012	200	15.88	12.61	5.95	481	0.88	31.5	38.8	Slightly cloudy
1017	↓	15.88	12.47	5.87	628	0.61	31.7	35.5	↓
1022	↓	↓	12.50	5.88	~~627~~ 628	0.61	28.3	30.4	↓
1027	↓	↓	12.63	5.89	~~629~~ 627	0.67	25.3	28.7	↓
1032	↓	↓	12.73	5.94	~~630~~ 629	0.47	20.0	27.8	↓
1037	↓	↓	12.76	5.93	630	0.49	19.7	27.9	↓
1042	↓	↓	12.80	5.95	631	0.51	19.7	27.4	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N
Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-13-05X-Fall17 @ 1050 (Fall 1st)

Signature | Date 10/5/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-13-06X

Project: Devens AOC 50 Fall 2017 | Date: 10/5/17
Location: Fort Devens Massachusetts | Sampler: MLR

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	14.47
Depth to bottom (ft BTOC)	61.87
Screen Interval (ft ~~BTOC~~)	50-60 bgs
Total volume purged (gal)	3.0

Sampling Type

Purging Method: geotech | Tubing type: ~~Poly~~ teflon lined poly | Dedicated pump (Y/N): Tubing
Purge start/stop time: 740/810 | Tubing diameter: 1/4" | Air source: N/A
Field Instrument (Model/S/N): YSI 650 MDS 02E0534AM / Mod 2003 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
740	200	14.94	11.15	6.20	1462	0.49	-79.7	23.5	slight yellow
745	↓	↓	10.99	6.21	1459	0.39	-82.7	18.7	↓
750	↓	↓	10.96	6.23	1455	0.34	-84.7	14.6	↓
755	↓	↓	10.96	6.26	1456	0.33	-86.7	15.8	↓
800	↓	↓	10.99	6.21	1457	0.32	-87.4	15.3	↓
805	↓	↓	10.97	6.20	1458	0.31	-88.6	15.2	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): Y | MS/MSD (Y/N): Y
Filter Size: .45 | Dup ID/Time: DUP-1 @ 815

Comments 66M-13-06X- Fall 17 @ 810 (Full list)

Signature | Date 10/5/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: GGM-95-19X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/5/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	~~✓~~	✓	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	13.04
Depth to bottom (ft BTOC)	58.44
Screen Interval (ft ~~BTOC~~ bgs)	48-58
Total volume purged (gal)	3.0

Sampling Type

Purging Method: geotech
Purge start/stop time: 1205/1235
Tubing type: teflon lined poly
Tubing diameter: 1/4"
Dedicated pump (Y/N): Tubing
Air source: N/A
Field Instrument (Model/S/N): —
YSI 650MDS 02E0534 AM / Mach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1205	200	14.28	12.83	5.65	3468	2.08	135.0	3.98	Clear
1210	↓	↓	12.72	5.63	3486	1.51	147.6	3.71	↓
1215	↓	↓	13.01	5.61	3509	1.42	153.1	3.49	↓
1220	↓	↓	13.00	5.58	3513	1.30	166.3	3.47	↓
1225	↓	↓	13.02	5.59	3521	1.24	169.7	3.42	↓
1230	↓	↓	13.04	5.60	3530	1.22	171.7	3.41	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments GGM-95-19X - Fall17 @ 1235 (VOC + Metals only)

[signature]
Signature

10/5/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-95-20X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/5/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)		✓	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	13.62
Depth to bottom (ft BTOC)	24.78
Screen Interval (ft ~~BTOC~~ BGS)	18-23
Total volume purged (gal)	3.0

Sampling Type

Purging Method: peristaltic
Purge start/stop time: 1305/1335
Tubing type: teflon lined poly
Tubing diameter: 1/4"
Dedicated pump (Y/N): Tubing
Air source: N/A
Field Instrument (Model/S/N): YSI 650MDS 02E0534/AM / Mach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1305	200	13.97	15.08	5.77	575	0.59	45.3	11.0	clear
1310	↓	↓	14.87	5.76	586	0.48	38.5	11.8	↓
1315	↓	↓	14.60	5.79	597	0.42	32.7	11.3	↓
1320	↓	↓	14.51	5.81	600	0.37	31.1	11.2	↓
1325	↓	↓	14.49	5.81	601	0.34	28.9	11.1	↓
1330	↓	↓	14.46	5.80	603	0.35	27.8	11.0	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-95-20X-Fall 17 @ 1375 (VOC + Diss. Metals only)

Signature

Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-04-13X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/6/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)		✓	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	15.18
Depth to bottom (ft BTOC)	40.58
Screen Interval (ft ~~BTOC~~ bgs)	30-40
Total volume purged (gal)	3.5

Sampling Type

Purging Method: geotech
Purge start/stop time: 1112/1205
Tubing type: teflon lined poly
Tubing diameter: 1/4"
Dedicated pump (Y/N): Tubing
Air source: N/A
Field Instrument (Model/S/N): YSI 650MDS 02EQ534AM / Mach 2100 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1122	200	16.37	12.12	6.64	68	4.79	182.6	3.15	Clear
1127	↓	↓	10.47	6.30	59	3.89	184.9	3.09	↓
1132	↓	↓	10.32	6.21	55	3.78	203.6	3.01	↓
1137	↓	↓	10.41	6.17	56	3.72	209.7	3.00	↓
1142	↓	↓	10.40	5.92	55	3.71	214.6	2.72	↓
1147	↓	↓	10.38	5.88	55	3.69	221.9	2.67	↓
1152	↓	↓	10.41	5.87	55	3.68	222.7	2.64	↓
1157	↓	↓	10.42	5.86	56	3.64	223.4	2.60	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): Y
Dup ID/Time: DUP-2-Fall17 @ 1210
MS/MSD (Y/N): N

Comments 66M-04-13X-Fall17 @ 1205

[signature]
Signature

10/6/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-04-14X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/6/17
Sampler: KGA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)		unsolpto	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	20.42
Depth to bottom (ft BTOC)	92.78
Screen Interval (ft ~~BTOC~~ bgs)	80-90
Total volume purged (gal)	3.0

Sampling Type

Purging Method: geotech
Purge start/stop time: 835/910
Tubing type: teflon lined poly
Tubing diameter: 1/4"
Dedicated pump (Y/N): Tubing
Air source: N/A
Field Instrument (Model/S/N): YSI 650MDS 02E0534AM / Mach 2100 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
835	150	20.51	12.91	7.17	1004	1.68	98.8	6.31	clear
840	↓	↓	12.87	7.32	1003	0.72	80.4	6.12	↓
845	↓	↓	12.86	7.37	1001	0.68	79.6	6.07	↓
850	↓	↓	12.89	7.40	1001	0.63	71.7	5.43	↓
855	↓	↓	12.88	7.54	999	0.57	75.0	5.31	↓
900	↓	↓	12.89	7.51	998	0.50	68.1	5.21	↓
905	↓	↓	12.91	7.50	997	0.46	69.9	5.26	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-14X-Fall17 @ 910

[signature]
Signature

10/6/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: G6M-04-15x

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/9/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact			X
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOR)	42.99
Depth to bottom (ft BTOR)	67.40
Screen Interval (ft BTOR)	71.58-81.58
Total volume purged (gal)	2.75

Sampling Type
Purging Method: Micro Bladder
Purge start/stop time: 945/1045
Tubing type: teflon lined Double Bounded
Tubing diameter: 1/4"
Dedicated pump (Y/N): N
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600 XL (02E0534 AM)
Micro Geotech Bladder (097)
HACH 2100A (11060C010282), Solinst 122 (286714

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1050	150	43.50	13.52	6.15	4243	0.64	0.64	33.3	Cloudy
1055	150	43.59	13.46	6.14	4298	0.57	0.57	24.6	Clear
1100	125	43.51	13.59	6.13	4288	0.56	0.56	18.9	Clear
1105	125	43.55	14.10	6.13	4282	0.59	0.59	10.2	Clear
1110	125	43.54	14.40	6.14	4280	0.59	0.59	9.9	Clear
1115	125	43.51	14.47	6.13	4281	0.60	0.61	9.8	Clear
1120	125	43.50	14.50	6.13	4283	0.59	0.59	8.9	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details
G6M-04-15X_FAL17
Field Filtered (Y/N): Y
Duplicate (Y/N): N
MS/MSD (Y/N): N
Filter Size: .45µM
Dup ID/Time:
@ 1125

Comments Removed Dedicated Tubing ~~of~~ Fell in. Had to use Micro bladder Pump. Did not Leave Dedicated tubing

Signature

10/9/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: G6M-04-31X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/9/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure		X	
Concrete Pad intact			X
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOR)	46.48
Depth to bottom (ft BTOR)	63.54
Screen Interval (ft BTOR)	69.88-79.88
Total volume purged (gal)	2.75

Sampling Type

Purging Method: Micro Bladder
Tubing type: Double Bonded Teflon line
Dedicated pump (Y/N): N
Purge start/stop time: 1155 / 1235
Tubing diameter: 1/4"
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600XL (02E0534AM)
Geotech micro Bladder (097)
HACH 2100Q (11060C010282), solonist 122 (286714)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1240	150	46.98	15.65	6.61	2888	0.76	-83.1	47.5	cloudy
1245	150	46.97	15.36	6.54	2887	0.86	-81.0	35.6	cloudy
1250	125	46.85	15.16	6.49	2886	0.81	-79.6	25.3	Cloudy
1255	125	46.79	14.69	6.49	2884	0.68	-80.1	20.6	Cloudy
1300	125	46.73	14.59	6.50	2873	0.63	-80.6	10.5	Clear
1305	125	46.70	14.26	6.51	2845	0.61	-83.0	9.3	Clear
1310	125	46.71	14.23	6.51	2840	0.59	-83.2	9.0	Clear
1315	125	46.69	14.26	6.52	2839	0.58	-83.5	8.7	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

G6M-04-31X_FAL17
Field Filtered (Y/N): Y
Duplicate (Y/N): N
MS/MSD (Y/N): N
Filter Size: .45um
Dup ID/Time:
@ 1320

Comments Previously fallen tubing. Did not leave dedicated tubing.

Signature

10/9/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: G6M-07-02X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/10/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact			X
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOR)	14.35
Depth to bottom (ft BTOR)	29.04
Screen Interval (ft BTOR)	24.70-29.70
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Micro Bladder
Purge start/stop time: 1435/1540
Tubing type: Teflon lined
Tubing diameter: 1/4"
Dedicated pump (Y/N): Y
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600XL (02E0534AM)
HACH 2100Q, Solinst 122 (286714)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1545	150	16.40	12.75	6.25	2180	0.60	-157.6	Over range	White
1550	150	16.39	12.67	6.18	2177	0.54	-154.2	Over range	White
1555	125	16.31	12.54	6.21	2190	0.81	-152.1	Over range	White
1600	125	16.28	11.16	6.14	2133	0.46	-157.6	Over range	White
1605	125	16.27	11.10	6.19	2083	0.48	-162.2	Overange	White
1610	125	16.28	11.08	6.20	2080	0.50	-162.2	Overange	White
1615	125	16.27	11.07	6.21	2079	0.51	-161.2	Overange	White
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

G6M-07-02X_FAL17
Field Filtered (Y/N): Y
Filter Size: .45 µm
1620
Duplicate (Y/N): Y
Dup ID/Time: DUP-3_FAL17
1625
MS/MSD (Y/N): N

Comments located Right next to Injection # 20, Dedicated tubing & Pump in well

Signature

10/10/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: XSA-12-95X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/10/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure		X	
Concrete Pad intact			X
(Metal) ~~PVC~~ casing intact	X		
(cap) Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	1"
Material	Metal
Depth to water (ft BTOR)	68.60
Depth to bottom (ft BTOR)	132.18
Screen Interval (ft BTOR)	123.00-133.00
Total volume purged (gal)	3.0

Sampling Type

Purging Method: Micro Bladder
Purge start/stop time: 1140 / 1210
Tubing type: Teflon lined
Tubing diameter: 1/4"
Dedicated pump (Y/N): Y
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600 XL (02E0534AM)
HACH 2100Q (11060010282), Solinist 122 (286714)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1215	150	69.43	13.80	6.78	1403	0.23	-107.7	57.0	Cloudy
1220	150	69.44	14.78	6.74	1413	0.34	-98.6	50.6	Cloudy
1225	150	69.46	14.48	6.73	1410	0.33	-91.0	47.8	Cloudy
1230	125	69.42	14.32	6.68	1407	0.34	-90.4	35.2	Cloudy
1235	125	69.39	14.78	6.65	1405	0.42	-85.9	20.3	Clear
1240	125	69.36	14.77	6.68	1414	0.36	-86.1	19.8	Clear
1245	125	69.35	14.75	6.68	1416	0.38	-86.0	19.6	Clear
1250	125	69.34	14.73	6.65	1414	0.35	-85.3	19.5	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

XSA-12-95X_FAL17
Field Filtered (Y/N): Y
Filter Size: .45µm
1255
Duplicate (Y/N): N
Dup ID/Time:
MS/MSD (Y/N): N

Comments Dedicated tubing and Pump in well

Signature

10/10/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: XSA-12-96X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/10/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure		X	
Concrete Pad intact			X
Metal ~~PVC~~ casing intact	X		
Cap ~~Well~~ gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	1"
Material	Metal
Depth to water (ft BTOR)	69.25
Depth to bottom (ft BTOR)	132.34
Screen Interval (ft BTOR)	122.97-132.97
Total volume purged (gal)	2.5

Sampling Type

Purging Method: Micro Bladder
Purge start/stop time: 820 / 910
Tubing type: Feflon lined
Tubing diameter: 1/4"
Dedicated pump (Y/N): N
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600 XL (02E0534 AM)

Geotech Micro Bladder (097), Solinist 122 (286714), HACH 2100Q (11060C010282)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
915	125	69.29	15.31	6.62	1213	0.87	-56.1	46.7	Cloudy
920	125	69.31	15.13	6.58	1198	0.85	-49.3	31.2	Cloudy
925	125	69.34	14.78	6.43	1152	0.83	-35.7	23.6	Clear
930	125	69.36	14.32	6.45	1137	0.76	34.5	12.5	Clear
935	125	69.35	14.23	6.44	1126	0.72	-35.6	9.87	Clear
940	125	69.34	14.26	6.46	1123	0.68	-38.1	9.53	Clear
945	125	69.35	14.23	6.48	1121	0.69	-38.6	9.27	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

XSA-12-96X_FAL17

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45µm
Duplicate (Y/N): N
Dup ID/Time:
MS/MSD (Y/N): N

950

Comments Left dedicated tubing in well

[signature]
Signature

10/10/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: XSA-12-97X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/10/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure		X	
Concrete Pad intact			X
Metal ~~PVC~~ casing intact	X		
Cap Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	1"
Material	Metal
Depth to water (ft BTOC)	70.90
Depth to bottom (ft BTOC)	133.37
Screen Interval (ft BTOC)	122.62-132.62
Total volume purged (gal)	2.5

Sampling Type
Purging Method: MicroBladder
Purge start/stop time: 1015/1045
Tubing type: teflon lined
Tubing diameter: 1/4"
Dedicated pump (Y/N): Y
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600XL (02E0534AM)
HACH 2100Q (1160C010282), Solinist 122 (286714)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1050	150	71.10	17.83	7.63	810	0.38	-98.1	83.8	Cloudy
1055	150	72.71	17.21	7.74	811	0.37	-111.3	85.3	Cloudy
1100	150	73.91	17.01	7.80	812	0.34	-115.4	82.1	Clear
1105	150	73.93	16.95	7.89	814	0.29	-130.0	86.1	Clear
1110	150	73.91	16.80	7.90	813	0.29	-130.5	9.76	Clear
1115	150	73.90	16.83	7.87	811	0.28	-128.6	9.79	Clear
1120	150	73.92	16.81	7.88	813	0.28	-130.3	9.83	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details
XSA-12-97X_Fall17
Field Filtered (Y/N): Y
Filter Size: .45um
1125
Duplicate (Y/N): N
Dup ID/Time:
MS/MSD (Y/N): N

Comments Dedicated tubing & pump in well

Melissa A. Miller
Signature

10/10/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: G6M-97-05B

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/11/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact			X
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOR)	66.55
Depth to bottom (ft BTOR)	138.97
Screen Interval (ft BTOR)	132.48-137.48
Total volume purged (gal)	2.50

Sampling Type

Purging Method: Bladder Pump
Purge start/stop time: 1155/1225
Tubing type: teflon Double Bonded
Tubing diameter: 1/4"
Dedicated pump (Y/N): N
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600XL (02E0534 Am)
Geotech Bladder Pump: (16251), Solinist Model 121 (286714 Hach 21002 (11060C010282)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1230	150	66.65	13.63	6.23	704	2.05	90.1	14.31	Clear
1235	150	66.66	13.89	6.23	707	1.83	93.7	7.87	Clear
1240	150	66.65	13.97	6.22	709	1.70	95.0	5.35	Clear
1245	150	66.67	13.96	6.19	709	1.67	97.8	5.29	Clear
1250	150	66.66	13.95	6.20	710	1.65	100.1	5.27	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45µm
Duplicate (Y/N): Y
Dup ID/Time: 1300
MS/MSD (Y/N): N

1255 DUP-4_FAL17

Comments Previously dedicated tubing Left in well

[signature]
Signature

10/11/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: MW-3

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/11/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact			X
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOR)	63.56
Depth to bottom (ft BTOR)	138.67
Screen Interval (ft BTOR)	127.85-137.85
Total volume purged (gal)	2.50

Sampling Type

Purging Method: Bladder Pump
Purge start/stop time: 1045/1105
Tubing type: Teflon Double Bonded
Tubing diameter: _____
Dedicated pump (Y/N): Y
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600XL (02EC534) ~~Hach 2100Q~~ Hach (11060C010282) 2100Q

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1110	150	63.58	13.13	6.55	1242	0.88	-86.1	7.95	Clear
1115	150	63.58	13.29	6.56	1222	0.81	-91.3	6.17	Clear
1120	150	63.57	13.39	6.56	1203	0.70	-95.1	4.99	Clear
1125	150	63.58	13.40	6.59	1198	0.70	-102.6	4.47	Clear
1130	150	63.59	13.41	6.61	1199	0.68	-102.1	4.37	Clear
1135	150	63.58	13.43	6.60	1200	0.69	-102.3	4.33	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

MW-3-Fall 17
Field Filtered (Y/N): Y
Filter Size: .45um
Duplicate (Y/N): N
Dup ID/Time: _____
MS/MSD (Y/N): N
1140

Comments Previously Dedicated pump and tubing left in well

Signature

10/11/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: MW-7

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/11/17
Sampler: Melissa Miller

Well Integrity

	Yes	No	N/A
Casing Secure	X		
Concrete Pad intact			X
PVC casing intact	X		
Well gripper present	X		
Bolts present			X
Locked (stickup wells)	X		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	62.92
Depth to bottom (ft BTOC)	135.19
Screen Interval (ft BTOC)	126.07-136.07
Total volume purged (gal)	2.50

Sampling Type

Purging Method: Bladder Pump
Purge start/stop time: 845/930
Tubing type: Teflon Lined Double Bonded
Tubing diameter: 1/4"
Dedicated pump (Y/N): N
Air source: Nitrogen
Field Instrument (Model/S/N): YSI 600XL C02E0534AM
HACH 2100Q (11060C010282), Geotech Bladder (1625), Solinist 122 (286714)

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
935	150	62.78	12.92	6.39	741	1.19	-13.7	8.62	Clear
940	150	62.76	12.87	6.37	739	1.03	-15.0	5.37	Clear
945	150	62.77	12.72	6.38	729	0.73	-20.3	3.99	Clear
950	150	62.76	12.73	6.37	729	0.72	-22.1	2.69	Clear
955	150	62.82	12.71	6.35	729	0.66	-28.5	2.86	Clear
1000	150	62.79	12.73	6.37	730	0.67	-30.1	2.75	Clear
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

MW-7_FAL17
Field Filtered (Y/N): Y
Filter Size: .45um
Duplicate (Y/N): N
Dup ID/Time:
MS/MSD (Y/N): N
1005

Comments Previously Dedicated Tubing Left in well.

Signature

10/11/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-03-01X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/12/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	14.63
Depth to bottom (ft BTOC)	71.69
Screen Interval (ft BTOC)	5259-7259
Total volume purged (gal)	4.0

Sampling Type

Purging Method: geotech
Purge start/stop time: 1305 / 1330
Tubing type: Teflon lined poly
Tubing diameter: 1/4"
Dedicated pump (Y/N): Tubing
Air source: N/A
Field Instrument (Model/S/N): —
YSI 650MDS 02E0534AM / Mach 400Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1305	200	16.22	12.23	6.42	2014	2.21	-63.8	8.55	clear
1310	↓	↓	12.20	6.43	2014	2.21	-65.6	8.01	↓
1315	↓	↓	12.49	6.43	2015	2.21	-66.6	8.03	↓
1320	↓	↓	12.47	6.42	2016	2.22	-68.4	7.97	↓
1325	↓	↓	12.49	6.42	2017	2.23	-69.7	7.96	↓
	↓	↓							
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-03-01X-Fall17 @ 1330 Full list

[signature]
Signature

10/12/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-03-02X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/12/17
Sampler: VGA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present			
Bolts present			✓
Locked (stickup wells)	✓		

↑ lock added ✱

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	13.42
Depth to bottom (ft BTOC)	44.27
Screen Interval (ft BTOC)	30.50-45.50
Total volume purged (gal)	4.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1155 / 1230
Tubing type: Double barrel teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): YSI 650 MDS 02E0534 AM / Mach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1155	300	10.78	11.34	6.34	1137	1.93	-33.0	13.2	Slight yellow
1200	↓	↓	11.32	6.32	1142	1.20	-38.1	13.9	"
1205	↓	↓	11.19	6.31	1140	1.36	-39.8	14.7	↓
1210	↓	↓	11.21	6.31	1140	1.33	-40.1	13.7	↓
1215	↓	↓	11.19	6.30	1137	1.33	-43.4	13.9	↓
1220	↓	↓	11.21	6.29	1136	1.30	-43.6	13.8	↓
1225	↓	↓	11.17	6.29	1135	1.29	-44.1	13.9	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-03-02X- Fall17 @ 1230 Fulllist

[signature]
Signature

10/12/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-10A

Project: Devens AOC 50 Fall 2017 Date: 10/12/17
Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	13.30
Depth to bottom (ft BTOC)	40.78
Screen Interval (ft BTOC)	31.80-41.80
Total volume purged (gal)	4.0

Sampling Type Bladder pump
Purging Method [redacted]
Purge start/stop time 935/1010
Tubing type Bonded teflon lined poly tubing
Tubing diameter 1/4"x1/4"
Dedicated pump (Y/N) ~~N~~ Y
Air source N
Field Instrument (Model/S/N) YSI 650MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
935	250	13.73	9.99	6.52	1697	1.26	-77.8	16.4	Clear
940	↓	↓	9.99	6.66	1756	1.14	-85.0	16.7	↓
945	↓	↓	9.98	6.67	1781	1.14	-88.8	16.5	↓
950	↓	↓	9.99	6.69	1799	1.03	-89.8	16.3	↓
955	↓	↓	9.98	6.62	1831	0.99	-91.6	15.6	↓
1000	↓	↓	10.00	6.63	1840	0.99	-92.8	15.9	↓
1005	↓	↓	10.01	6.62	1868	0.97	-94.7	16.0	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-10A - Fall17 @1010

[illegible]
Signature

10/12/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: GM-04-10X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/12/17
Sampler: WAF

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	13.97
Depth to bottom (ft BTOC)	63.53
Screen Interval (ft BTOC)	54.10-64.10
Total volume purged (gal)	4.0

Sampling Type

Purging Method: geotech
Purge start/stop time: 830/900
Tubing type: Teflon lined Poly tubing
Tubing diameter: 1/4"
Dedicated pump (Y/N): Tubing
Air source: N/A
Field Instrument (Model/S/N): YSI 650MDS 02E0534 AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
830	200	14.27	10.34	6.03	1885	214	174.8	12.9	clear
835	↓	↓	10.22	5.67	1926	1.40	186.9	4.61	↓
840	↓	↓	10.27	5.62	1977	1.31	191.6	4.30	↓
845	↓	↓	10.32	5.56	1998	1.16	194.3	4.21	↓
850	↓	↓	10.31	5.55	2015	1.12	194.6	4.18	↓
855	↓	↓	10.29	5.56	2017	1.1	195.3	4.17	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments GM-04-10X-Fall17 @ 900 Full list

Signature

10/12/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-02-01X

Project: Devens AOC 50 Fall 2017 | Date: 10/13/17
Location: Fort Devens Massachusetts | Sampler: MH

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		
Locked (stickup wells)			✓

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	35.19
Depth to bottom (ft BTOC)	89.37
Screen Interval (ft BTOC)	79.44 – 94.44
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Bladder pump | Tubing type: Bonded teflon lined poly | Dedicated pump (Y/N): Y
Purge start/stop time: 830/905 | Tubing diameter: 1/4" X 1/4" | Air source: N
Field Instrument (Model/S/N): YSI 650MDS 02E0534 AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
830	250	55.31	12.18	6.60	997	0.80	-87.4	26.0	Clear
835	↓	↓	12.14	6.62	989	0.65	-97.2	22.1	↓
840	↓	↓	12.13	6.64	990	0.49	-99.7	16.9	↓
845	↓	↓	12.12	6.66	960	0.47	-104.3	7.56	↓
850	↓	↓	12.14	6.66	963	0.46	-106.9	7.21	↓
855	↓	↓	12.13	6.67	962	0.45	-107.2	7.17	↓
900	↓	↓	12.14	6.66	958	0.46	-107.4	7.14	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): Y | MS/MSD (Y/N): N
Filter Size: 1.45 | Dup ID/Time: ~~DUP-01-Fall17~~ 05 @ 910 Full list

Comments 66M-02-01X-Fall17 @ 905 Full list

Signature | Date: 10/13/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-01X

Project: Devens AOC 50 Fall 2017 Date: 10/13/17
Location: Fort Devens Massachusetts Sampler: WA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		
Locked (stickup wells)			✓

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	52.88
Depth to bottom (ft BTOC)	91.32
Screen Interval (ft BTOC)	81.46 - 91.46
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1050/1130
Tubing type: Double Bonded Teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): YSI 650MDS 0E0534AM / HACH 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1050	200	53.40	12.70	6.64	3413	1.04	-89.4	16.6	clear
1055	↓	↓	13.79	6.66	3480	0.90	-95.5	15.1	↓
1100	↓	↓	13.54	6.65	3541	0.89	-96.7	14.3	↓
1105	↓	↓	13.57	6.65	3540	0.88	-97.1	13.7	↓
1110	↓	↓	13.44	6.65	3539	0.87	-97.9	13.8	↓
1115	↓	↓	13.47	6.66	3538	0.86	-98.7	11.2	↓
1120	↓	↓	13.48	6.66	3542	0.85	-98.9	11.4	↓
1125	↓	↓	13.49	6.66	3543	0.87	-99.2	11.5	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-01X-Fall17 @ 1130 8260VOC + Diss. Metals

Signature

10/13/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-02-046

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/16/17
Sampler: KGA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	61.63
Depth to bottom (ft BTOC)	102.63
Screen Interval (ft BTOC)	92.12 - 107.12
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 815/840
Tubing type: Double bonded teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): —

YSI 650 MDS 02E0534 AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
815	300	62.07	12.63	7.03	595	0.47	-110.1	4.34	Clear
820	↓	62.07	12.62	7.05	610	0.45	-114.0	4.32	↓
825	↓	↓	12.61	7.07	621	0.42	-117.8	4.30	↓
830	↓	↓	12.64	7.08	624	0.41	-118.7	4.29	↓
835	↓	↓	12.63	7.07	626	0.42	-119.3	4.31	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-02-04X - Fall17 @ 840 VOC + Diss. Metals

[signature]
Signature

10/16/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-13-01X

Project: Devens AOC 50 Fall 2017 — Date: 10/16/17
Location: Fort Devens Massachusetts — Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	64.93
Depth to bottom (ft BTOC)	138.18
Screen Interval (ft BTOC)	127.50-137.50
Total volume purged (gal)	7.0

Sampling Type

Purging Method: Bladder pump — Tubing type: Double bonded teflon coated poly — Dedicated pump (Y/N): Tubing
Purge start/stop time: 1025/1055 — Tubing diameter: 1/4" x 1/4" — Air source: N
Field Instrument (Model/S/N): YSI 650 MDS 03-02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1025	300	65.07	12.13	6.13	812	0.52	53.8	48.0	Pretty Cloudy
1030	↓	↓	12.14	6.11	812	0.46	52.7	39.3	↓
1035	↓	↓	12.15	6.09	810	0.41	51.9	39.1	↓
1040	↓	↓	12.08	6.10	811	0.37	50.5	38.6	↓
1045	↓	↓	12.09	6.09	810	0.38	50.2	38.8	↓
1050	↓	↓	12.11	6.09	809	0.40	49.7	38.9	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y — Duplicate (Y/N): N — MS/MSD (Y/N): N
Filter Size: .45 — Dup ID/Time: N/A

Comments 66M-13-01X - Fall17 @ 1055 VOC + Diss. Metals
water white / cloudy during purging

[illegible] — **Signature**
10/16/17 — Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M- 13-04X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/16/17
Sampler: VGK

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	64.25
Depth to bottom (ft BTOC)	138.98
Screen Interval (ft BTOC)	127.50-137.50
Total volume purged (gal)	7.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1225 / 1300
Tubing type: Double barrier teflon lined poly
Tubing diameter: 1/4" X 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): –

YSI 650MDS 02E0534 AM / Mach 2100 Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1225	200	64.52	12.07	6.66	1404	0.95	-66.9	6.13	Clear
1230	↓	↓	12.08	6.69	1409	0.93	-69.1	6.01	↓
1235	↓	↓	12.05	6.70	1411	0.89	-73.8	5.87	↓
1240	↓	↓	12.11	6.72	1412	0.72	-76.1	5.21	↓
1245	↓	↓	12.07	6.73	1413	0.70	-77.7	5.01	↓
1250	↓	↓	12.05	6.75	1412	0.66	-78.4	4.97	↓
1255	↓	↓	12.07	6.76	1413	0.65	-79.1	4.96	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): Y

Comments 66M-13-04X-Fall17 @ 1300

[signature]
Signature

10/16/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-03-09X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/17/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	57.27
Depth to bottom (ft BTOC)	141.52
Screen Interval (ft BTOC)	127.29 → 142.29
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1220/1255
Tubing type: Double bonded teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Pump
Air source: N
Field Instrument (Model/S/N): –

YSI 650MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1220	200	57.17	10.55	6.10	161	2.40	142.6	4.06	clear
1225	↓	↓	10.56	6.10	162	2.39	149.6	4.02	↓
1230	↓	↓	10.57	6.10	160	2.27	147.2	4.00	↓
1235	↓	↓	10.60	6.10	159	2.19	146.7	3.97	↓
1240	↓	↓	10.63	6.09	159	2.12	145.1	3.96	↓
1245	↓	↓	10.67	6.10	157	2.09	144.2	3.92	↓
1250	↓	↓	10.69	6.10	158	2.03	143.1	3.92	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-03-09X - Fall 17 @ 1255 Full list

[signature]
Signature

10/17/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-05X

Project: Devens AOC 50 Fall 2017 Date: 10/17/17
Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓	added	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	56.48
Depth to bottom (ft BTOC)	113.50
Screen Interval (ft BTOC)	101.60 → 111.60
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1420/1445
Tubing type: Double bonded teflon lined poly
Tubing diameter: 1/4" X 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): —

YSI 650MDS 02 F0534AM / March 2/09 @ 18:38

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1420	300	56.58	11.15	5.70	175	0.34	180.1	3.27	Clear
1425	↓	↓	11.17	5.70	174	0.24	181.3	3.22	↓
1430	↓	↓	11.19	5.68	173	0.21	182.6	3.20	↓
1435	↓	↓	11.23	5.67	172	0.20	184.1	3.21	↓
1440	↓	↓	11.24	5.66	171	0.19	185.7	3.27	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-05X - Fall 17 @ 1445 Full list

[illegible]
Signature

10/17/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-07X

Project: Devens AOC 50 Fall 2017 Date: 10/17/17
Location: Fort Devens Massachusetts Sampler: MR

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓	Added	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	63.14
Depth to bottom (ft BTOC)	131.33
Screen Interval (ft BTOC)	121.94 → 131.94
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 855/930
Tubing type: Double barrel teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): —
YSI 650MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
855	~~200~~ 250	62.83	10.69	6.58	414	0.53	47.0	49.7	Clear
900	↓	62.83	10.53	6.52	411	0.57	43.2	37.1	↓
905	↓	62.83	10.72	6.49	410	0.42	39.6	21.6	↓
910	↓	↓	10.68	6.45	406	0.39	38.6	10.1	↓
915	↓	↓	10.71	6.45	405	0.37	38.2	9.76	↓
920	↓	↓	10.73	6.46	403	0.38	37.9	9.64	↓
925	↓	↓	10.78	6.47	409	0.38	37.8	9.59	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: 1.45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): —

Comments 66M-04-07X - Fall17 @ 930 Fall 1st

Signature: [signature]
Date: 10/17/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-06X

Project: Shepley's Hill Landfill- Fall 2017
Location: Fort Devens Massachusetts
Date: 10/17/17
Sampler: WF

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	pvc
Depth to water (ft BTOR)	63.27
Depth to bottom (ft BTOR)	106.83
Screen Interval (ft BTOR)	96.70 – 106.70
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1030/1100
Tubing type: poly
Tubing diameter: 1/4 x 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): YSI 650MDS 02E0534AM / Hach 21002 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1030	200	62.78	10.92	6.52	269	0.47	65.4	6.72	clear
1035	↓	↓	10.93	6.44	269	0.37	69.4	6.37	↓
1040			10.94	6.43	270	0.31	75.0	5.97	
1045			10.97	6.42	273	0.30	79.3	5.77	
1050			10.96	6.42	271	0.29	81.2	5.73	
1055	↓	↓	10.97	6.42	271	0.28	81.7	5.72	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Dedicated Tubing: (Y/N) Y

Comments 66M-04-06X-Fall17 @1100 Full list

Signature

10/17/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-02-08X

Project: Devens AOC 50 Fall 2017 | Date: 10/18/17
Location: Fort Devens Massachusetts | Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	14.97
Depth to bottom (ft BTOC)	70.48
Screen Interval (ft BTOC)	61.83→71.83
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump | Tubing type: Double bonded teflon lined poly | Dedicated pump (Y/N): Y
Purge start/stop time: 1259/1320 | Tubing diameter: 1/4" x 1/4" | Air source: N
Field Instrument (Model/S/N): —
YSI 650MDS 02E0534AM / Hach 21009 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1259	200	14.98	12.21	6.60	1951	0.48	-135.4	45.3	Clear
1255	↓	↓	12.14	6.63	1957	0.48	-139.6	38.7	↓
1300			12.13	6.66	1966	0.48	-142.3	35.4	
1305			12.18	6.66	1970	0.47	-141.9	36.8	
1310			12.21	6.66	1971	0.45	-143.5	32.9	
1315			12.23	6.66	1974	0.44	-144.8	38.1	

Acceptance Criteria:	<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N
Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-02-08X- Fall17 @ 1320 Full list
a lot of bubbles present, slight odor

Signature | Date 10/18/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-04-22X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/18/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓	Added	

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	46.57
Depth to bottom (ft BTOC)	85.60
Screen Interval (ft BTOC)	75.94 – 85.94
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1055 / 1135
Tubing type: Double banded foam lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): —

YSI 650MDS 02E0534AM / Hach2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1055	200	46.98	11.57	6.23	1215	0.55	-58.5	114	Semi cloudy
1100	↓	47.34	11.80	6.27	1227	0.48	-59.7	119	↓
1105	↓	47.68	11.61	6.28	1235	0.42	-61.6	124	↓
1110	↓	↓	11.71	6.30	1249	0.41	-62.1	124	↓
1115	↓	↓	11.66	6.31	1261	0.43	-63.2	127	↓
1120	↓	↓	11.69	6.31	1267	0.44	-64.7	125	↓
1125	↓	↓	11.73	6.32	1269	0.47	-66.6	123	↓
1130	↓	↓	11.74	6.32	1273	0.48	-66.9	120	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-22X - Fall17 @ 1135 (As only FF)

[signature]
Signature

10/18/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-13-03X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/18/17
Sampler: MA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		✓
Locked (stickup wells)	~~✓ [illegible]~~		✓

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	58.85
Depth to bottom (ft BTOC)	90.31
Screen Interval (ft BTOC)	79.98-89.98
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 845/915
Tubing type: Double bonded teflon lined PAY
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): YSI 650MDS 02E0534AA / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
845	300	59.13	11.74	5.77	2242	0.56	150.3	5.07	Clear
850	↓	↓	11.80	5.67	2260	0.66	157.9	4.87	↓
855	↓	↓	11.81	5.62	2254	0.74	163.1	4.79	↓
900	↓	↓	11.90	5.61	2253	0.60	164.7	4.72	↓
905	↓	↓	11.88	5.60	2251	0.57	169.1	4.70	↓
910	↓	↓	11.89	5.61	2252	0.58	170.1	4.69	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-13-03X - Fall 17 VOC + Diss. Metals

Signature

Date 10/18/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-02-06X

Project: Devens AOC 50 Fall 2017 Date: 10/19/17
Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	9.37
Depth to bottom (ft BTOC)	66.80
Screen Interval (ft BTOC)	57.03 -> 67.03
Total volume purged (gal)	3.0

Sampling Type

Purging Method geotech Tubing type Teflon lined poly Dedicated pump (Y/N) Tubing
Purge start/stop time 1250/1325 Tubing diameter 1/4" Air source N
Field Instrument (Model/S/N) —
YSI 650 MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1250	200	9.48	11.99	7.17	137	5.79	11.4	5.49	clear
1255	↓	↓	11.92	7.08	131	5.79	22.6	4.78	↓
1300			11.92	7.05	129	5.73	26.4	4.51	
1305			11.94	7.03	128	5.75	31.8	4.47	
1310			11.93	7.02	128	5.74	36.7	4.45	
1315			11.92	7.02	127	5.73	39.4	4.42	
1320	↓	↓	11.94	7.02	126	5.72	40.2	4.41	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y Duplicate (Y/N): N MS/MSD (Y/N): N
Filter Size: .45 Dup ID/Time: N/A

Comments 66M-02-06X-Fall 17 @ 1325 VOC + Diss Metals

[illegible]
Signature

10/19/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: GGM-02-11X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/19/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	61.97
Depth to bottom (ft BTOC)	138.19
Screen Interval (ft BTOC)	124.73 → 134.73
Total volume purged (gal)	7.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1105/1130
Tubing type: Double bonded teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): –

YSI 650MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1105	300	62.03	12.01	6.76	810	0.33	-89.4	13.7	Clear
1110	↓	↓	12.03	6.90	813	0.27	-111.4	12.9	↓
1115	↓	↓	12.00	6.93	811	0.24	-112.4	12.4	↓
1120	↓	↓	12.06	6.92	815	0.23	-114.3	12.3	↓
1125	↓	↓	12.07	6.91	816	0.22	-115.9	12.1	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments GGM-02-11X - Fall 17 @ 1130 Fall 1,37

[signature]
Signature

10/19/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-02-13X

Project: Devens AOC 50 Fall 2017 | Date: 10/19/17
Location: Fort Devens Massachusetts | Sampler: KGS

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		✓
Bolts present	✓		✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	60.73
Depth to bottom (ft BTOC)	121.18
Screen Interval (ft BTOC)	109.61-119.61
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump | Tubing type: Double bonded teflon lined poly | Dedicated pump (Y/N): Y
Purge start/stop time: 655/725 | Tubing diameter: 1/4" X 1/4" | Air source: N
Field Instrument (Model/S/N): YSI 650MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
655	300	60.86	12.38	6.71	487	0.34	-42.5	9.05	Clear
700	↓	↓	12.32	6.72	491	0.30	-50.1	5.99	↓
705	↓	↓	12.34	6.74	498	0.27	-55.7	5.68	↓
710	↓	↓	12.40	6.73	499	0.24	-56.7	5.55	↓
715	↓	↓	12.37	6.74	500	0.23	-57.9	5.53	↓
720	↓	↓	12.40	6.75	501	0.22	-58.1	5.52	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N
Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-02-13X-Fall17 @ 725 Full list

Signature

10/19/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-13-02X

Project: Devens AOC 50 Fall 2017 | Date: 10/19/17
Location: Fort Devens Massachusetts | Sampler: VGF

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	60.76
Depth to bottom (ft BTOC)	126.04
Screen Interval (ft BTOC)	115.0→125.0
Total volume purged (gal)	7.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 855/925
Tubing type: Dedicated bonded teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): YSI 650 MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
855	300	61.16	13.67	6.45	998	0.28	41.2	19.2	clear
900	↓	↓	13.40	6.31	997	0.27	44.7	9.15	↓
905	↓	↓	13.39	6.32	995	0.25	47.7	8.23	↓
910	↓	↓	13.40	6.32	996	0.24	49.2	8.19	↓
915	↓	↓	13.37	6.33	997	0.23	50.7	8.17	↓
920	↓	↓	13.41	6.33	996	0.22	51.1	8.18	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-13-02X - Fall 17 @ 925 Fall list

Signature

10/19/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-02X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/20/17
Sampler: VMA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	60.67
Depth to bottom (ft BTOC)	92.84
Screen Interval (ft BTOC)	82.86 → 92.37
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1025/1050
Tubing type: Double bonded teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): –

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1025	300	61.37	12.49	6.40	901	0.35	-64.7	5.09	clear
1030	↓	↓	12.51	6.38	904	0.34	-65.1	4.49	↓
1035			12.52	6.37	903	0.31	-66.3	4.30	
1040			12.50	6.36	906	0.26	-66.8	4.27	
1045	✓	✓	12.51	6.36	910	0.28	-66.9	4.26	✓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: 1.45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-02X- Fall 17 @ 1050 Full list

Signature

10/20/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: 66M-04-03X

Project: Devens AOC 50 Fall 2017 | Date: 10/20/17
Location: Fort Devens Massachusetts | Sampler: VMA

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		
Locked (stickup wells)			✓

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	57.46
Depth to bottom (ft BTOC)	93.33
Screen Interval (ft BTOC)	84.48 → 94.48
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Bladder pump | Tubing type: Double barrel teflon lined poly | Dedicated pump (Y/N): Tubing
Purge start/stop time: 800 / 830 | Tubing diameter: 1/4" x 1/4" | Air source: N
Field Instrument (Model/S/N): YSI 650 MDS 02E0534AM / Hach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
800	300	58.14	12.74	6.49	2660	0.49	-49.7	7.96	clear
805	↓	↓	12.75	6.48	2692	0.42	-53.1	7.01	↓
810	↓	↓	12.73	6.46	2731	0.41	-53.9	6.07	↓
815	↓	↓	12.74	6.45	2747	0.40	-54.6	5.93	↓
820	↓	↓	12.74	6.45	2746	0.39	-54.7	5.90	↓
825	↓	↓	12.73	6.45	2747	0.38	-55.0	5.87	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N
Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-04-03X-Fall17 @ 830 Full list

Signature: [illegible] | Date: 10/20/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-04-04X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/20/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	✓		
Locked (stickup wells)			✓

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	58.80
Depth to bottom (ft BTOC)	104.83
Screen Interval (ft BTOC)	93.79 → 103.79
Total volume purged (gal)	4.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 635/705
Tubing type: Double banded teflon lined Poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): —
YSI 650 MDS 02E0534AM / Mach 2100 Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
635	300	59.19	12.89	6.56	1715	0.31	-76.1	5.17	Clear
640	↓	↓	12.80	6.60	1900	0.28	-97.6	4.90	↓
645	↓	↓	12.76	6.61	1907	0.26	-102.3	4.86	↓
650	↓	↓	12.66	6.64	1931	0.24	-107.1	4.39	↓
655	↓	↓	12.67	6.64	1930	0.25	-109.7	4.37	↓
700	↓	↓	12.69	6.64	1936	0.24	-111.1	4.39	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-04X-Fall17 @ 705 Fall list

[signature]
Signature

10/20/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-02-07X

Project: Devens AOC 50 Fall 2017 Date: 10/23/17
Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present		✓	✓
Locked (stickup wells)	-	✓	-

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	10.23
Depth to bottom (ft BTOC)	40.51
Screen Interval (ft BTOC)	32.02 → 42.02
Total volume purged (gal)	5.0

Sampling Type

Purging Method geotech Tubing type teflon lined Poly Dedicated pump (Y/N) Tubing
Purge start/stop time 1105/1135 Tubing diameter 1/4" Air source N/A
Field Instrument (Model/S/N) —
YSI 650 MDS 02E0534AM / [illegible] Hach 21002 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1105	200	9.73	11.88	7.55	336	0.50	-35.2	17.6	Clear
1110	↓	9.73	11.86	7.52	335	0.42	-36.0	14.7	↓
1115	↓	↓	11.86	7.53	335	0.31	-36.1	12.7	↓
1120	↓	↓	11.86	7.55	335	0.30	-38.1	9.84	↓
1125	↓	↓	11.90	7.56	336	0.29	-39.1	9.82	↓
1130	↓	↓	11.93	7.57	335	0.29	-39.4	9.82	↓

Acceptance Criteria:	<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y Duplicate (Y/N): ~~Y~~ N MS/MSD (Y/N): N
Filter Size: .45 Dup ID/Time: N/A

Comments 66M-02-07X-Fall17 VOC + Dissolved Metals

[signature]
Signature

10/23/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-02-12X

Project: Devens AOC 50 Fall 2017 | Date: 10/23/17
Location: Fort Devens Massachusetts | Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present		✓	✓
Locked (stickup wells)		✓	

Broken hinge/latch

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	60.65
Depth to bottom (ft BTOC)	136.22
Screen Interval (ft BTOC)	124.86 → 134.86
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump | Tubing type: Double braided Teflon lined poly | Dedicated pump (Y/N): Tubing
Purge start/stop time: 1450/1525 | Tubing diameter: ¼" X ¼" | Air source: N
Field Instrument (Model/S/N): YSI 650 MDS 02E0534AM / Mach 2 1008 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1450	300	60.57	12.17	6.81	493	0.45	-97.5	10.0	clear
1455	↓	↓	12.18	6.86	587	0.43	-101.2	9.27	↓
1500	↓	↓	12.18	6.88	664	0.40	-112.1	8.75	↓
1505	↓	↓	12.20	6.90	672	0.36	-114.3	7.99	↓
1510	↓	↓	12.22	6.91	676	0.30	-116.1	7.67	↓
1515	↓	↓	12.24	6.90	677	0.29	-117.6	7.47	↓
1520	↓	↓	12.24	6.90	678	0.29	-117.9	7.49	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): N
Filter Size: .45 | Dup ID/Time: N/A

Comments 66M-02-12X-Fall17 @ 1525

[illegible]
Signature

10/23/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-03-07X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/23/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present	1/3		
Locked (stickup wells)			✓

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	57.70
Depth to bottom (ft BTOC)	88.32
Screen Interval (ft BTOC)	79.86 → 89.86
Total volume purged (gal)	5.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 745/815
YSI 650MDS
Tubing type: Double bonded tetha lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): –

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
745	300	58.67	13.57	6.31	633	0.05	-63.3	6.31	Clear
750	↓	↓	13.60	6.30	640	0.08	-68.1	65.99	↓
755	↓	↓	13.56	6.29	646	0.08	-70.5	5.97	↓
800	↓	↓	13.52	6.31	653	0.05	-72.9	5.80	↓
805	↓	↓	13.50	6.32	656	0.07	-74.1	5.77	↓
810	↓	↓	13.52	6.32	657	0.07	-75.1	5.78	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-03-07X-Fall17 @ 815 Full list

[signature]
Signature

10/23/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-03-10X

Project: Devens AOC 50 Fall 2017 Date: 10/23/17
Location: Fort Devens Massachusetts Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	64.07
Depth to bottom (ft BTOC)	137.90
Screen Interval (ft BTOC)	122.41 → 137.41
Total volume purged (gal)	6.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1300/1325
Tubing type: Double braid teflon lined poly
Tubing diameter: 1/4" x 1/4"
Dedicated pump (Y/N): Y
Air source: N
Field Instrument (Model/S/N): YSI 650 MDS 02 EO 534 AM / March 2008 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1300	300	63.93	12.15	6.88	1183	0.33	-107.7	4.29	clear
1305	↓	↓	12.40	6.89	1186	0.27	-112.6	3.99	↓
1310	↓	↓	12.13	6.89	1187	0.24	-113.3	3.96	↓
1315	↓	↓	12.20	6.88	1188	0.23	-114.1	3.97	↓
1320	↓	↓	12.17	6.88	1189	0.22	-115.0	3.99	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-03-10X - Fall 17 @ 1325 Fall 17

Signature [illegible]

Date 10/23/17

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

KGS

Well Identification: 66M-04-09X

Project: Devens AOC 50 Fall 2017
Location: Fort Devens Massachusetts
Date: 10/23/17
Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present	✓		
Bolts present			✓
Locked (stickup wells)	✓		

Well Information

Diameter	2"
Material	PVC
Depth to water (ft BTOC)	30.87
Depth to bottom (ft BTOC)	66.57
Screen Interval (ft BTOC)	57.5 → 67.50
Total volume purged (gal)	4.0

Sampling Type

Purging Method: Bladder pump
Purge start/stop time: 1655/1725
Tubing type: Double bonded friction lined poly
Tubing diameter: 1/4" X 1/4"
Dedicated pump (Y/N): Tubing
Air source: N
Field Instrument (Model/S/N): —

YSI 650MDS 02E0534AM / Mach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm^c)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
1655	300	30.97	10.47	6.73	1786	0.11	-102.3	32.5	Partly cloudy
1700	↓	↓	10.46	6.73	1840	0.12	-103.7	31.4	↓
1705	↓	↓	10.44	6.73	1852	0.14	-105.8	31.0	↓
1710	↓	↓	10.47	6.72	1857	0.14	-105.9	31.3	↓
1715	↓	↓	10.46	6.72	1859	0.13	-106.2	30.9	↓
1720	↓	↓	10.44	6.72	1863	0.13	-106.4	30.7	↓
Acceptance Criteria:		<0.3ft	±3%	±0.1	±3%	±10%	± 10mv	10%	

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y
Filter Size: .45
Duplicate (Y/N): N
Dup ID/Time: N/A
MS/MSD (Y/N): N

Comments 66M-04-09X-Fall17 @ 1725 VOC, diss. Metals, TOC

[signature]
Signature

10/23/17
Date

KOMAN GOVERNMENT SOLUTIONS LLC
Low Flow/ Low Stress Groundwater Sampling Log

Well Identification: XSA-12-98X

Project: Devens AOC 50 Fall 2017 | Date: 10/23/17
Location: Fort Devens Massachusetts | Sampler: [illegible]

Well Integrity

	Yes	No	N/A
Casing Secure	✓		
Concrete Pad intact	✓		
PVC casing intact	✓		
Well gripper present			✓
Bolts present			✓
Locked (stickup wells)	✓		✓

Well Information

Diameter	.5"
Material	Steel
Depth to water (ft BTOC)	N/A Micronerted
Depth to bottom (ft BTOC)	73.22
Screen Interval (ft BTOC)	62.97 → 72.97
Total volume purged (gal)	5.0

Sampling Type

Purging Method geotech | Tubing type teflon lined poly | Dedicated pump (Y/N) Tubing
Purge start/stop time 935/1005 | Tubing diameter 1/4" | Air source N/A
Field Instrument (Model/S/N) YSI 650MDS 02E0534AM ✓ / Mach 2100Q 18138

Stabilization Parameters

Time (hhmm)	Flow Rate (ml/min)	Depth to Water (ft)	Temp (°C)	pH (STD)	SPC (µS/cm°)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Color/Clarity
935	200	N/A	11.50	7.18	384	0.85	-32.3	16.9	clear
940	↓	↓	11.47	7.29	384	0.43	-47.9	5.69	↓
945			11.44	7.34	385	0.31	-51.7	5.57	
950			11.47	7.34	385	0.29	-53.1	5.43	
955			11.46	7.32	387	0.28	-54.7	5.44	
1000	↓	↓	11.48	7.33	387	0.26	-55.5	5.42	↓

Acceptance Criteria: <0.3ft | ±3% | ±0.1 | ±3% | ±10% | ± 10mv | 10%

2" Screen Volume = 0.163 gal/ft or 616 ml per foot

Sampling Details

Field Filtered (Y/N): Y | Duplicate (Y/N): N | MS/MSD (Y/N): Y
Filter Size: .45 | Dup ID/Time: N/A

Comments XSA-12-98X Fall17 @ 1005 MS/MSD ☆ (VOC + PFAS Metals)
Cannot gauge while pumping (0.5" well)

[illegible]
Signature

10/23/17
Date

KGS

Turbidity Instrument Calibration Log

Project/Site Name: AOC 50 Fall 2017 Sampling
Calibrated By: Melissa Miller / [illegible]

Instrument: Hach 2100Q
Serial Number: 11060C010282

Date	AM Pre/Post - Cal 10 NTU	AM Pre/Post - Cal 20 NTU	AM Pre/Post - Cal 100 NTU	AM Pre/Post - Cal 800 NTU	PM Pre/Post - Cal 10 NTU	PM Pre/Post - Cal 20 NTU	PM Pre/Post - Cal 100 NTU	PM Pre/Post - Cal 800 NTU
10/4/17 0830 1205	10.6	18.4	103	746	10.2	19.6	101	778
MGA 10/5/17	9.8	19.7	100	786	10.1	20.2	100	793
MGA 10/6/17	9.9	20.9	101	799	10.0	20.3	101	799
MAM 10/9/17	10.1	18.6	102	809	10.0	20.2	100	800
MAM 10/10/17	10.4	20.5	101	812	9.6	22.2	108	800
MAM 10/11/17	9.65	20.8	106	805	NO PM			
MGA 10/12/17	9.31	19.2	96.5	797	10.0	20.0	103	797
10/13/17	9.69	21.2	93.7	796	10.1	19.7	101	802

Signature: [illegible] / [illegible]

Date: 10/13/17

KGS

Turbidity Instrument Calibration Log

Project/Site Name: AOC 50 Fall 2017 Sampling
Calibrated By: [illegible]

Instrument: Hach 2100Q
Serial Number: 11060C010282

	AM				PM			
Date	Pre/Post - Cal 10 NTU	Pre/Post - Cal 20 NTU	Pre/Post - Cal 100 NTU	Pre/Post - Cal 800 NTU	Pre/Post - Cal 10 NTU	Pre/Post - Cal 20 NTU	Pre/Post - Cal 100 NTU	Pre/Post - Cal 800 NTU
10/16/17	10.3	21.0	97	806	10.1	22.6	97	803
10/17/17	10.9	22.7	99	789	10.9	19.6	103	789
10/18/17	9.9	21.6	101	797	10.1	21.0	96	793
10/19/17	10.9	23.1	107	792	9.2	18.9	101	792
10/20/17	10.2	21.9	109	791	10.7	20.6	107	804
10/23/17	9.7	18.9	101	797	10.1	20.0	102	806

Signature: [illegible]

Date: 10/23/17

KGS

Field Instrument Calibration Log

Date: 10/4/17 **Weather:** 60°F Clear skies

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: Melissa Miller **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 815		Cal. Temperature °C	Afternoon Calibration Time 1205		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm^{c})	03/18	1.410	1.412	16.37	1.407	1.413	18.40
pH (7)	06/17	6.97	7.00	16.41	7.01	7.00	18.95
pH (4)	02/19	3.98	4.00	16.43	3.97	4.00	18.61
pH (10)	10/18	9.99	10.00	16.48	10.04	10.00	18.44
ORP (240 mv)	01/22	239	240.0	16.58	229.7	240.0	18.69
Dissolved Oxygen (%)	-	99.5	100	18.61	101.3	100.0	–
Dissolved Oxygen (mg/L)	-	9.32	9.37	18.61	8.59	8.48	23.61
Barometric Pressure (mmHg)	-	761		—	760	—	–

Notes:

Signature: Melissa A. Miller **Date:** 10/4/17

KGS

Field Instrument Calibration Log

Date: 10/5/17 **Weather:** 70's

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: [illegible] **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 630		Cal. Temperature °C	Afternoon Calibration Time 1400		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm°)	03/18	1.420	1.413	16.97°	1.417	1.413	17.29
pH (7)	06/17	6.97	7.09		7.01	7.00	
pH (4)	02/19	3.97	4.00		3.92	4.00	
pH (10)	10/18	10.01	10.00		10.03	10.00	
ORP (240 mv)	01/22	239.6	240.0		238.6	240.0	
Dissolved Oxygen (%)	-	96.2%	100.0%		99.7%	100.0%	
Dissolved Oxygen (mg/L)	-						
Barometric Pressure (mmHg)	-						

Notes:

Signature: [illegible] **Date:** 10/5/17

KGS

Field Instrument Calibration Log

Date: 10/6/17 **Weather:** 70's / Rain

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: KGA **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 650		Cal. Temperature °C	Afternoon Calibration Time ~~[illegible]~~ 1330		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm[c])	03/18	1.397	1.413	17.21	1.412	1.413	16.94
pH (7)	06/17	6.87	7.00		6.99	7.00	
pH (4)	02/19	3.98	4.00		3.97	4.00	
pH (10)	10/18	9.90	10.00		10.02	10.00	
ORP (240 mv)	01/22	238.7	240.0		239.8	240.0	
Dissolved Oxygen (%)	-	103.6%	100.1%		99.6%	100.0%	
Dissolved Oxygen (mg/L)	-						
Barometric Pressure (mmHg)	-						

Notes:

Signature: [signature] **Date:** 10/6/17

KGS

Field Instrument Calibration Log

Date: 10/9/17 **Weather:** Rainy/Humid

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: Melissa Miller **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 900		Cal. Temperature °C	Afternoon Calibration Time 1340		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm°)	03/18	1429	1413	23.26	1419	1413	24.17
pH (7)	06/17	6.98	7.00	23.37	6.99	7.00	24.20
pH (4)	02/19	3.97	4.00	23.28	4.01	4.00	24.13
pH (10)	10/18	9.96	10.00	23.28	9.97	10.00	24.13
ORP (240 mv)	01/22	242.4	240	23.28	239.8	240.0	24.13
Dissolved Oxygen (%)	-	105.5	10.00	22.18	104.1	100.0	23.27
Dissolved Oxygen (mg/L)	-	9.19	8.71	22.18	9.20	8.72	23.27
Barometric Pressure (mmHg)	-	760	—	—	760	—	—

Notes:

Signature: Melissa A. Miller **Date:** 10/9/17

KGS

Field Instrument Calibration Log

Date: 10/10/17 **Weather:** Humid 60-70°F

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: Melissa Miller **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 0700		Cal. Temperature °C	Afternoon Calibration Time 1310		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm^c)	03/18	1393	1413	22.36	1426	1413	21.17
pH (7)	06/17	7.09	7.00	22.59	7.01	7.00	21.52
pH (4)	02/19	4.00	4.00	21.87	3.99	4.00	21.23
pH (10)	10/18	9.96	10.00	22.15	9.97	10.00	21.18
ORP (240 mv)	01/22	242.7	240	21.23	244.7	240.0	21.09
Dissolved Oxygen (%)	-	99.2	100.0	22.18	103.2	100.0	21.88
Dissolved Oxygen (mg/L)	-	8.64	8.71	—	9.04	8.75	—
Barometric Pressure (mmHg)	-	760	—	—	760	—	—

Notes:

Signature: [signature] **Date:** 10/10/17

KGS

Field Instrument Calibration Log

Date: 10/11/17 **Weather:** Cloudy cool 68°F

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: Melissa Miller **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 755		Cal. Temperature °C	Afternoon Calibration Time NO PM		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm°)	03/18	1426	1413	17.68			
pH (7)	06/17	6.95	7.00	16.95			
pH (4)	02/19	4.02	4.00	17.10			
pH (10)	10/18	10.18	10.03	17.57			
ORP (240 mv)	01/22	245.1	240.0	17.39			
Dissolved Oxygen (%)	-	108.3	100.0	15.88			
Dissolved Oxygen (mg/L)	-	10.73	9.90	15.88			
Barometric Pressure (mmHg)	-	760	—	15.88			

Notes:

Signature: Melissa Miller **Date:** 10/11/17

KGS

Field Instrument Calibration Log

Date: 10/12/17 **Weather:** 50's

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: MA **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 735		Cal. Temperature °C	Afternoon Calibration Time 1425		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm^c)	03/18	1.501	1.413	17.01	1.416	1.413	16.98
pH (7)	06/17	6.84	7.00	~~17.0~~	6.98	7.00	
pH (4)	02/19	4.07	4.00		3.97	4.00	
pH (10)	10/18	10.13	10.00		9.89	10.00	
ORP (240 mv)	01/22	239.7	240.0		234.2	240.0	
Dissolved Oxygen (%)	-	102.6%	100.0%		99.6%	100.0%	
Dissolved Oxygen (mg/L)	-						
Barometric Pressure (mmHg)	-						

Notes:

Signature: [signature] **Date:** 10/12/17

Field Instrument Calibration Log

Date: 10/13/17 **Weather:** 50's

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: VGA **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 700		Cal. Temperature °C	Afternoon Calibration Time 1210		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm[c])	03/18	1.397	1.413	16.29°	1.400	1.413	16.49°
pH (7)	06/17	6.87	7.00		6.89	7.00	
pH (4)	02/19	3.81	4.00		4.02	4.00	
pH (10)	10/18	9.87	10.00		9.97	10.00	
ORP (240 mv)	01/22	234.1	240.0		237.6	240.0	
Dissolved Oxygen (%)	-	92.7%	100.0%		96.9%	100.0%	
Dissolved Oxygen (mg/L)	-						
Barometric Pressure (mmHg)	-						

Notes:

Signature: [illegible] **Date:** 10/13/17

KGS

Field Instrument Calibration Log

Date: 10/16/17 **Weather:** ~~Rain~~ 50's

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: MA **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 710		Cal. Temperature °C	Afternoon Calibration Time 1435		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm°)	03/18	1.379	1.413	17.09	1.410	1.413	16.73°
pH (7)	06/17	6.79	7.00		6.94	7.00	
pH (4)	02/19	3.77	4.00		3.97	4.00	
pH (10)	10/18	9.81	10.00		9.86	10.00	
ORP (240 mv)	01/22	230.2	240.0		237.6	240.0	
Dissolved Oxygen (%)	-	92.8%	100.0%		102.7%	100.0%	
Dissolved Oxygen (mg/L)	-						
Barometric Pressure (mmHg)	-						

Notes:

Signature: [signature] **Date:** 10/16/17

Field Instrument Calibration Log

Date: 10/17/17 **Weather:** 40's

Project/Site Name: AOC 50 Fall 2017 Sampling **Instrument:** YSI 600XL

Calibrated By: [illegible] **Serial Number:** 02E0534 AM

Parameters	Solution Expiration Date	Morning Calibration Time 715		Cal. Temperature °C	Afternoon Calibration Time 1530		Cal. Temperature °C
Specific Conductivity (1.413 µS/cm^c)	03/18	1.376	1.413	15.97°	1.427	1.413	16.31°
pH (7)	06/17	6.84	7.00		7.09	7.00	
pH (4)	02/19	3.87	4.00		4.03	4.00	
pH (10)	10/18	9.90	10.00		10.11	10.00	
ORP (240 mv)	01/22	236.4	240.0		236.2	240.0	
Dissolved Oxygen (%)	-	101.7%	100.0%		99.2%	100.0%	
Dissolved Oxygen (mg/L)	-						
Barometric Pressure (mmHg)	-						

Notes:

Signature: [illegible] **Date:** 10/17/17

KGS

Instrument Calibration Log

Project/Site Name: ~~10/18/17~~ **Date:** 10/18/17 **Weather:** 40's

Calibrated By: KGL **Instrument:** YSI 650 MDS **Serial Number:** ~~02534AM~~ 02~~1~~0534AM

Parameters		Morning Calibration		Cal. Temperature °C	Afternoon Cal. Check		Comments
3/18	Conductivity (µS/cm°)	1.372	1.413	15.32°	1.410	1.413	~~1.405~~
6/17	pH (7)	7.27	7.00		7.03	7.00	
2/19	pH (4)	4.13	4.00		4.09	4.00	
10/18	pH (10)	10.09	10.00		9.92	10.00	
1/22	ORP (mv)	236.1	240.0		237.6	240.0	
	Dissolved Oxygen (%)	98.2%	100.0%		97.1%	100.0%	
	Zero Dissolved Oxygen (mg/L)						
	Barometric Pressure (mmHg)						

Signature: [signature] Date: 10/18/17

KGS

Instrument Calibration Log

Project/Site Name: A0050 **Date:** 10/19/17 **Weather:** 45°

Calibrated By: MA **Instrument:** YSI 650MDS **Serial Number:** 02E0534AM

Parameters		Morning Calibration		Cal. Temperature °C	Afternoon Cal. Check		Comments
3/18	Conductivity (µS/cm°)	1.397	1.413	15.29°	1.420	1.413	
6/17	pH (7)	6.87	7.00		7.09	7.00	
2/19	pH (4)	3.92	4.00		3.89	4.00	
10/18	pH (10)	10.03	10.00		10.02	10.00	
1/22	ORP (mv)	229.7	240.0		238.6	240.0	
	Dissolved Oxygen (%)	106.9%	100.0%		97.9%	100.0%	
	Zero Dissolved Oxygen (mg/L)						
	Barometric Pressure (mmHg)						

Signature: [signature] Date: 10/19/17

Instrument Calibration Log

Project/Site Name: Ac50 **Date:** 10/20/17 **Weather:** 50's

Calibrated By: VGA **Instrument:** YSI 650MDS **Serial Number:** 02E0534AM

Parameters	Morning Calibration		Cal. Temperature °C	Afternoon Cal. Check		Comments
3/18 Conductivity (µS/cm°)	1.421	1.413	16.02°	1.423	1.413	
6/17 pH (7)	7.03	7.00		7.09	7.00	
4/9 pH (4)	4.09	4.00		4.04	4.00	
10/18 pH (10)	9.97	10.00		10.04	10.00	
1/22 ORP (mv)	247.1	240.0		241.6	240.0	
Dissolved Oxygen (%)	92.6%	100.0%		97.2%	100.0%	
Zero Dissolved Oxygen (mg/L)						
Barometric Pressure (mmHg)						

Signature: M Date: 10/20/17

KGS

Instrument Calibration Log

Project/Site Name: AOC50 **Date:** 10/23/17 **Weather:** 50s

Calibrated By: KA **Instrument:** YSI 650 MDS **Serial Number:** 02E0334AM

Parameters	Morning Calibration		Cal. Temperature °C	Afternoon Cal. Check		Comments
Conductivity (µS/cm°)	1.400	1.413	15.96°	1.410	1.413	
pH (7)	6.87	7.00		7.10	7.00	
pH (4)	3.89	4.00		4.03	4.00	
pH (10)	9.91	10.00		9.92	10.00	
ORP (mv)	236.1	240.0		237.6	240.0	
Dissolved Oxygen (%)	102.9%	100.1%		101.0%	100.0%	
Zero Dissolved Oxygen (mg/L)	—					
Barometric Pressure (mmHg)						

Signature: [signature] Date: 10/23/17

APPENDIX B
LABORATORY ANALYTICAL REPORTS
(on CD)

B.1

Spring 2017 LTM Event

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-138853-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
160 East Main St
Suite 2F
Westborough, Massachusetts 01581

Attn: Laurie Ekes

Authorized for release by:
6/5/2017 9:51:19 AM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 6
Method Summary 7
Definitions/Glossary 8
Detection Summary 9
Client Sample Results 12
Surrogate Summary 28
QC Sample Results 29
QC Association Summary 45
Lab Chronicle 49
Chain of Custody 54
Receipt Checklists 57
Certification Summary 58

Job ID: 680-138853-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-138853-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 05/18/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.3 C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6), MW-3-SPR17 (680-138853-7) and Trip Blank (680-138853-8) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/25/2017 and 05/27/2017.

Samples G6M-07-02X-SPR17 (680-138853-2)[20X], G6M-04-02X-SPR17 (680-138853-3)[2X] and G6M-DUP-2-SPR17 (680-138853-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED GASES
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 05/30/2017.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 680-481882.

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

METALS (ICP) - DISSOLVED
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for Metals (ICP) - Dissolved in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/19/2017 and analyzed on 05/20/2017.

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

METALS (ICPMS) - DISSOLVED
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were

Job ID: 680-138853-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

prepared on 05/19/2017 and analyzed on 05/24/2017.

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

ALKALINITY
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 05/22/2017 and 05/24/2017.

The method blank associated with analytical batch 280-375005 contained alkalinity greater than one-half the reporting limit (RL). The samples were not re-analyzed because the sample result was >10x the MB. The sample results have been qualified and reported.

Alkalinity was detected in method blank MB 280-374638/33 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

NITRATE-NITRITE AS NITROGEN
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/23/2017.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for method 353.2_Pres analytical batch 280-374765 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Refer to the QC report for details.

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

SULFIDE
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 05/23/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 05/31/2017.

The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 680-482246 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Chloride in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 680-482246 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Refer to the QC report for details.

Job ID: 680-138853-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

TOTAL ORGANIC CARBON

Samples G6M-04-13X-SPR17 (680-138853-1), G6M-07-02X-SPR17 (680-138853-2), G6M-04-02X-SPR17 (680-138853-3), G6M-DUP-2-SPR17 (680-138853-4), G6M-03-07X-SPR17 (680-138853-5), G6M-13-02X-SPR17 (680-138853-6) and MW-3-SPR17 (680-138853-7) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 05/26/2017.

Total Organic Carbon - Duplicates was detected in method blank MB 280-375169/35 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-138853-1	G6M-04-13X-SPR17	Water	05/16/17 09:35	05/18/17 09:05
680-138853-2	G6M-07-02X-SPR17	Water	05/16/17 10:45	05/18/17 09:05
680-138853-3	G6M-04-02X-SPR17	Water	05/16/17 13:25	05/18/17 09:05
680-138853-4	G6M-DUP-2-SPR17	Water	05/16/17 13:50	05/18/17 09:05
680-138853-5	G6M-03-07X-SPR17	Water	05/16/17 15:40	05/18/17 09:05
680-138853-6	G6M-13-02X-SPR17	Water	05/16/17 09:40	05/18/17 09:05
680-138853-7	MW-3-SPR17	Water	05/17/17 12:15	05/18/17 09:05
680-138853-8	Trip Blank	Water	05/17/17 00:00	05/18/17 09:05

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

HPLC/IC

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.

Glossary

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

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-04-13X-SPR17 — Lab Sample ID: 680-138853-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ethane	12		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	10		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	21		0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	4.8		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Manganese	3.6	J	10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate Nitrite as N	0.62		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.80	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	9.5		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-07-02X-SPR17 — Lab Sample ID: 680-138853-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1800	D	20	20	15	ug/L	20		8260B	Total/NA
Methane	1.8		0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	6.2		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Manganese	17		10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate Nitrite as N	0.32		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.96	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	14		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-04-02X-SPR17 — Lab Sample ID: 680-138853-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	22		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	22		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.39	J	1.0	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	120		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Vinyl chloride	2.3		1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Tetrachloroethene - DL	280	D	2.0	2.0	1.5	ug/L	2		8260B	Total/NA
Ethylene	2.2		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	4800		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	10		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	15000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	11000		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	42		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate Nitrite as N	0.065	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	2.5		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	130		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-DUP-2-SPR17 — Lab Sample ID: 680-138853-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	33	D	5.0	5.0	2.1	ug/L	5		8260B	Total/NA
1,2-Dichloroethene, Total	33	D	10	5.0	3.7	ug/L	5		8260B	Total/NA
Tetrachloroethene	290	D	5.0	5.0	3.7	ug/L	5		8260B	Total/NA
Trichloroethene	130	D	5.0	5.0	2.4	ug/L	5		8260B	Total/NA
Vinyl chloride	5.1	D	5.0	5.0	2.5	ug/L	5		8260B	Total/NA
Ethylene	2.2		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G6M-DUP-2-SPR17 (Continued) — Lab Sample ID: 680-138853-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane (TCD)	5000		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	10		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	14000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	11000		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	40		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate Nitrite as N	0.044	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	4.5		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	110		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-03-07X-SPR17 — Lab Sample ID: 680-138853-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16		10	10	7.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.51	J	1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	1.3	J	2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Toluene	0.52	J	1.0	1.0	0.48	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.76	J	1.0	1.0	0.37	ug/L	1		8260B	Total/NA
Ethane	1.2		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	7.2		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	14000		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	84000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	1600		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	370		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate Nitrite as N	0.14		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	19		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	200		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-13-02X-SPR17 — Lab Sample ID: 680-138853-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	30		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	30		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene	79		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.39	J	1.0	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	25		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Vinyl chloride	0.90	J	1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Ethane	0.64	J	1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Methane (TCD)	4300		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	12		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Manganese	16		10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate Nitrite as N	0.34	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.88	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	54		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-3-SPR17 — Lab Sample ID: 680-138853-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.75	J	1.0	1.0	0.41	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-3-SPR17 (Continued) — Lab Sample ID: 680-138853-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.98	J	2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Ethane	1.8		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Methane (TCD)	10000		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	2.2		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	56000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	9400		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	500		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate Nitrite as N	0.073	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	5.2		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	310	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-138853-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-04-13X-SPR17

Lab Sample ID: 680-138853-1

Date Collected: 05/16/17 09:35

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/25/17 12:27	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 12:27	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:27	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 12:27	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/25/17 12:27	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/25/17 12:27	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 12:27	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/25/17 12:27	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 12:27	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/25/17 12:27	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:27	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 12:27	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 12:27	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 12:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/25/17 12:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 12:27	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/25/17 12:27	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 12:27	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:27	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 12:27	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/25/17 12:27	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 12:27	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/25/17 12:27	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 12:27	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:27	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/25/17 12:27	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/25/17 12:27	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/25/17 12:27	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 12:27	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:27	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 12:27	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 12:27	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 12:27	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/25/17 12:27	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 12:27	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 12:27	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/25/17 12:27	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/25/17 12:27	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 12:27	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 12:27	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 12:27	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/25/17 12:27	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 12:27	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 12:27	1

Client Sample ID: G6M-04-13X-SPR17

Lab Sample ID: 680-138853-1

Date Collected: 05/16/17 09:35

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 12:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/25/17 12:27	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/25/17 12:27	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 12:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 12:27	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:27	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:27	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 12:27	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 12:27	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 12:27	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/25/17 12:27	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 12:27	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/25/17 12:27	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/25/17 12:27	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:27	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/25/17 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*		*05/25/17 12:27*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*05/25/17 12:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*81 - 118*		*05/25/17 12:27*	*1*
Toluene-d8 (Surr)	*98*		*89 - 112*		*05/25/17 12:27*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**12**		1.1	1.1	0.55	ug/L		05/30/17 20:39	1
Ethylene	**10**		1.0	1.0	0.50	ug/L		05/30/17 20:39	1
Methane	**21**		0.58	0.58	0.29	ug/L		05/30/17 20:39	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**4.8**		1.0	1.0	0.40	mg/L		05/31/17 16:57	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/20/17 02:05	1
Manganese	**3.6**	**J**	10	3.0	1.0	ug/L		05/20/17 02:05	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/24/17 21:31	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.62**		0.10	0.050	0.019	mg/L		05/23/17 19:08	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1
Total Organic Carbon - Duplicates	**0.80**	**J**	1.0	0.50	0.16	mg/L		05/26/17 01:20	1
Alkalinity	**9.5**		5.0	3.2	1.1	mg/L		05/22/17 15:10	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-07-02X-SPR17

Lab Sample ID: 680-138853-2

Date Collected: 05/16/17 10:45
Matrix: Water
Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	U	200	200	140	ug/L		05/25/17 13:54	20
Benzene	20	U	20	20	8.6	ug/L		05/25/17 13:54	20
Bromobenzene	20	U	20	20	10	ug/L		05/25/17 13:54	20
Bromoform	20	U	20	20	8.6	ug/L		05/25/17 13:54	20
Bromomethane	100	U	100	100	50	ug/L		05/25/17 13:54	20
2-Butanone (MEK)	200	U	200	200	68	ug/L		05/25/17 13:54	20
Carbon disulfide	40	U	40	40	8.6	ug/L		05/25/17 13:54	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		05/25/17 13:54	20
Chlorobenzene	10	U	20	10	5.2	ug/L		05/25/17 13:54	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		05/25/17 13:54	20
Chlorodibromomethane	10	U	20	10	6.4	ug/L		05/25/17 13:54	20
Chloroethane	100	U	100	100	50	ug/L		05/25/17 13:54	20
Chloroform	20	U	20	20	10	ug/L		05/25/17 13:54	20
Chloromethane	20	U	20	20	8.0	ug/L		05/25/17 13:54	20
2-Chlorotoluene	10	U	20	10	5.4	ug/L		05/25/17 13:54	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		05/25/17 13:54	20
cis-1,2-Dichloroethene	20	U	20	20	8.2	ug/L		05/25/17 13:54	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		05/25/17 13:54	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		05/25/17 13:54	20
Dibromomethane	20	U	20	20	7.0	ug/L		05/25/17 13:54	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		05/25/17 13:54	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		05/25/17 13:54	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		05/25/17 13:54	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		05/25/17 13:54	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		05/25/17 13:54	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		05/25/17 13:54	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		05/25/17 13:54	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		05/25/17 13:54	20
1,2-Dichloroethene, Total	20	U	40	20	15	ug/L		05/25/17 13:54	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		05/25/17 13:54	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		05/25/17 13:54	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		05/25/17 13:54	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		05/25/17 13:54	20
Ethylbenzene	10	U	20	10	6.6	ug/L		05/25/17 13:54	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		05/25/17 13:54	20
Hexachlorobutadiene	100	U	100	100	50	ug/L		05/25/17 13:54	20
2-Hexanone	100	U	200	100	40	ug/L		05/25/17 13:54	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		05/25/17 13:54	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		05/25/17 13:54	20
Methylene Chloride	100	U	100	100	50	ug/L		05/25/17 13:54	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		05/25/17 13:54	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		05/25/17 13:54	20
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		05/25/17 13:54	20
Naphthalene	100	U	100	100	50	ug/L		05/25/17 13:54	20
n-Butylbenzene	20	U	20	20	9.4	ug/L		05/25/17 13:54	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		05/25/17 13:54	20
o-Xylene	10	U	20	10	4.6	ug/L		05/25/17 13:54	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		05/25/17 13:54	20
Styrene	10	U	20	10	5.4	ug/L		05/25/17 13:54	20

Client Sample ID: G6M-07-02X-SPR17

Lab Sample ID: 680-138853-2

Date Collected: 05/16/17 10:45

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	20	U	20	20	9.0	ug/L		05/25/17 13:54	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		05/25/17 13:54	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		05/25/17 13:54	20
Tetrachloroethene	**1800**	**D**	20	20	15	ug/L		05/25/17 13:54	20
Toluene	20	U	20	20	9.6	ug/L		05/25/17 13:54	20
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		05/25/17 13:54	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		05/25/17 13:54	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		05/25/17 13:54	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		05/25/17 13:54	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		05/25/17 13:54	20
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		05/25/17 13:54	20
Trichloroethene	20	U	20	20	9.6	ug/L		05/25/17 13:54	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		05/25/17 13:54	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		05/25/17 13:54	20
1,2,4-Trimethylbenzene	20	U	20	20	9.4	ug/L		05/25/17 13:54	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		05/25/17 13:54	20
Vinyl acetate	40	U	40	40	16	ug/L		05/25/17 13:54	20
Vinyl chloride	20	U	20	20	10	ug/L		05/25/17 13:54	20
Xylenes, Total	10	U	40	10	4.6	ug/L		05/25/17 13:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*05/25/17 13:54*	*20*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/25/17 13:54*	*20*
1,2-Dichloroethane-d4 (Surr)	*109*		*81 - 118*		*05/25/17 13:54*	*20*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/25/17 13:54*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/30/17 20:51	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/30/17 20:51	1
Methane	**1.8**		0.58	0.58	0.29	ug/L		05/30/17 20:51	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**6.2**		1.0	1.0	0.40	mg/L		05/31/17 17:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/20/17 01:10	1
Manganese	**17**		10	3.0	1.0	ug/L		05/20/17 01:10	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/24/17 19:55	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.32**		0.10	0.050	0.019	mg/L		05/23/17 19:10	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 11:40	1
Total Organic Carbon - Duplicates	**0.96**	**J**	1.0	0.50	0.16	mg/L		05/26/17 01:35	1
Alkalinity	**14**		5.0	3.2	1.1	mg/L		05/22/17 15:15	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-04-02X-SPR17

Lab Sample ID: 680-138853-3

Date Collected: 05/16/17 13:25
Date Received: 05/18/17 09:05

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/25/17 12:49	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 12:49	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:49	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 12:49	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/25/17 12:49	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/25/17 12:49	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 12:49	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/25/17 12:49	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 12:49	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/25/17 12:49	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:49	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 12:49	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 12:49	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 12:49	1
cis-1,2-Dichloroethene	**22**		1.0	1.0	0.41	ug/L		05/25/17 12:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 12:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/25/17 12:49	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 12:49	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:49	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 12:49	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/25/17 12:49	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 12:49	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/25/17 12:49	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 12:49	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 12:49	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/25/17 12:49	1
1,2-Dichloroethene, Total	**22**		2.0	1.0	0.74	ug/L		05/25/17 12:49	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/25/17 12:49	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 12:49	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:49	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 12:49	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 12:49	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 12:49	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/25/17 12:49	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 12:49	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 12:49	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/25/17 12:49	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/25/17 12:49	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 12:49	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 12:49	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 12:49	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/25/17 12:49	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 12:49	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 12:49	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-04-02X-SPR17

Lab Sample ID: 680-138853-3

Date Collected: 05/16/17 13:25
Matrix: Water
Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 12:49	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/25/17 12:49	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 12:49	1
trans-1,2-Dichloroethene	**0.39**	**J**	1.0	1.0	0.37	ug/L		05/25/17 12:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 12:49	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 12:49	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 12:49	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 12:49	1
Trichloroethene	**120**		1.0	1.0	0.48	ug/L		05/25/17 12:49	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 12:49	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/25/17 12:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 12:49	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/25/17 12:49	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/25/17 12:49	1
Vinyl chloride	**2.3**		1.0	1.0	0.50	ug/L		05/25/17 12:49	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/25/17 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*05/25/17 12:49*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 119*		*05/25/17 12:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*81 - 118*		*05/25/17 12:49*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*05/25/17 12:49*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Tetrachloroethene	**280**	**D**	2.0	2.0	1.5	ug/L		05/25/17 14:38	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*		*05/25/17 14:38*	*2*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/25/17 14:38*	*2*
1,2-Dichloroethane-d4 (Surr)	*109*		*81 - 118*		*05/25/17 14:38*	*2*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/25/17 14:38*	*2*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/30/17 21:04	1
Ethylene	**2.2**		1.0	1.0	0.50	ug/L		05/30/17 21:04	1
Methane (TCD)	**4800**		390	77	39	ug/L		05/30/17 21:04	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**10**		1.0	1.0	0.40	mg/L		05/31/17 17:32	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**15000**		50	50	17	ug/L		05/20/17 01:55	1
Manganese	**11000**		10	3.0	1.0	ug/L		05/20/17 01:55	1

Client Sample ID: G6M-04-02X-SPR17

Lab Sample ID: 680-138853-3

Date Collected: 05/16/17 13:25

Matrix: Water

Date Received: 05/18/17 09:05

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	42		3.0	3.0	1.5	ug/L		05/24/17 21:11	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.065	J	0.10	0.050	0.019	mg/L		05/23/17 19:12	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1
Total Organic Carbon - Duplicates	2.5		1.0	0.50	0.16	mg/L		05/26/17 01:50	1
Alkalinity	130		5.0	3.2	1.1	mg/L		05/22/17 15:21	1

Client Sample ID: G6M-DUP-2-SPR17

Lab Sample ID: 680-138853-4

Date Collected: 05/16/17 13:50

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	50	U	50	50	35	ug/L		05/25/17 14:16	5
Benzene	5.0	U	5.0	5.0	2.2	ug/L		05/25/17 14:16	5
Bromobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 14:16	5
Bromoform	5.0	U	5.0	5.0	2.2	ug/L		05/25/17 14:16	5
Bromomethane	25	U	25	25	13	ug/L		05/25/17 14:16	5
2-Butanone (MEK)	50	U	50	50	17	ug/L		05/25/17 14:16	5
Carbon disulfide	10	U	10	10	2.2	ug/L		05/25/17 14:16	5
Carbon tetrachloride	2.5	U	5.0	2.5	1.7	ug/L		05/25/17 14:16	5
Chlorobenzene	2.5	U	5.0	2.5	1.3	ug/L		05/25/17 14:16	5
Chlorobromomethane	5.0	U	5.0	5.0	2.3	ug/L		05/25/17 14:16	5
Chlorodibromomethane	2.5	U	5.0	2.5	1.6	ug/L		05/25/17 14:16	5
Chloroethane	25	U	25	25	13	ug/L		05/25/17 14:16	5
Chloroform	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 14:16	5
Chloromethane	5.0	U	5.0	5.0	2.0	ug/L		05/25/17 14:16	5
2-Chlorotoluene	2.5	U	5.0	2.5	1.4	ug/L		05/25/17 14:16	5
4-Chlorotoluene	5.0	U	5.0	5.0	2.3	ug/L		05/25/17 14:16	5
cis-1,2-Dichloroethene	33	D	5.0	5.0	2.1	ug/L		05/25/17 14:16	5
cis-1,3-Dichloropropene	5.0	U	5.0	5.0	2.0	ug/L		05/25/17 14:16	5
1,2-Dibromo-3-Chloropropane	10	U	25	10	5.5	ug/L		05/25/17 14:16	5
Dibromomethane	5.0	U	5.0	5.0	1.8	ug/L		05/25/17 14:16	5
1,2-Dichlorobenzene	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
1,3-Dichlorobenzene	5.0	U	5.0	5.0	2.2	ug/L		05/25/17 14:16	5
1,4-Dichlorobenzene	5.0	U	5.0	5.0	2.3	ug/L		05/25/17 14:16	5
Dichlorobromomethane	5.0	U	5.0	5.0	2.2	ug/L		05/25/17 14:16	5
Dichlorodifluoromethane	5.0	U	5.0	5.0	3.0	ug/L		05/25/17 14:16	5
1,1-Dichloroethane	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
1,2-Dichloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 14:16	5
1,1-Dichloroethene	5.0	U	5.0	5.0	1.8	ug/L		05/25/17 14:16	5
1,2-Dichloroethene, Total	33	D	10	5.0	3.7	ug/L		05/25/17 14:16	5
1,2-Dichloropropane	5.0	U	5.0	5.0	3.4	ug/L		05/25/17 14:16	5
1,3-Dichloropropane	5.0	U	5.0	5.0	1.7	ug/L		05/25/17 14:16	5
2,2-Dichloropropane	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
1,1-Dichloropropene	5.0	U	5.0	5.0	1.7	ug/L		05/25/17 14:16	5
Ethylbenzene	2.5	U	5.0	2.5	1.7	ug/L		05/25/17 14:16	5
Ethylene Dibromide	5.0	U	5.0	5.0	2.2	ug/L		05/25/17 14:16	5

Client Sample ID: G6M-DUP-2-SPR17

Lab Sample ID: 680-138853-4

Date Collected: 05/16/17 13:50

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Hexachlorobutadiene	25	U	25	25	13	ug/L		05/25/17 14:16	5
2-Hexanone	25	U	50	25	10	ug/L		05/25/17 14:16	5
Isopropylbenzene	5.0	U	5.0	5.0	1.8	ug/L		05/25/17 14:16	5
4-Isopropyltoluene	5.0	U	5.0	5.0	2.4	ug/L		05/25/17 14:16	5
Methylene Chloride	25	U	25	25	13	ug/L		05/25/17 14:16	5
4-Methyl-2-pentanone (MIBK)	25	U	50	25	11	ug/L		05/25/17 14:16	5
Methyl tert-butyl ether	2.5	U	50	2.5	1.5	ug/L		05/25/17 14:16	5
m-Xylene & p-Xylene	5.0	U	5.0	5.0	1.8	ug/L		05/25/17 14:16	5
Naphthalene	25	U	25	25	13	ug/L		05/25/17 14:16	5
n-Butylbenzene	5.0	U	5.0	5.0	2.4	ug/L		05/25/17 14:16	5
N-Propylbenzene	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
o-Xylene	2.5	U	5.0	2.5	1.2	ug/L		05/25/17 14:16	5
sec-Butylbenzene	5.0	U	5.0	5.0	2.1	ug/L		05/25/17 14:16	5
Styrene	2.5	U	5.0	2.5	1.4	ug/L		05/25/17 14:16	5
tert-Butylbenzene	5.0	U	5.0	5.0	2.3	ug/L		05/25/17 14:16	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	5.0	3.1	ug/L		05/25/17 14:16	5
Tetrachloroethene	**290**	**D**	5.0	5.0	3.7	ug/L		05/25/17 14:16	5
Toluene	5.0	U	5.0	5.0	2.4	ug/L		05/25/17 14:16	5
trans-1,2-Dichloroethene	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
trans-1,3-Dichloropropene	5.0	U	5.0	5.0	2.1	ug/L		05/25/17 14:16	5
1,2,3-Trichlorobenzene	25	U	25	25	13	ug/L		05/25/17 14:16	5
1,2,4-Trichlorobenzene	25	U	25	25	13	ug/L		05/25/17 14:16	5
1,1,1-Trichloroethane	5.0	U	5.0	5.0	1.9	ug/L		05/25/17 14:16	5
1,1,2-Trichloroethane	2.5	U	5.0	2.5	1.7	ug/L		05/25/17 14:16	5
Trichloroethene	**130**	**D**	5.0	5.0	2.4	ug/L		05/25/17 14:16	5
Trichlorofluoromethane	5.0	U	5.0	5.0	2.1	ug/L		05/25/17 14:16	5
1,2,3-Trichloropropane	5.0	U	5.0	5.0	2.0	ug/L		05/25/17 14:16	5
1,2,4-Trimethylbenzene	5.0	U	5.0	5.0	2.4	ug/L		05/25/17 14:16	5
1,3,5-Trimethylbenzene	2.5	U	5.0	2.5	1.6	ug/L		05/25/17 14:16	5
Vinyl acetate	10	U	10	10	4.1	ug/L		05/25/17 14:16	5
Vinyl chloride	**5.1**	**D**	5.0	5.0	2.5	ug/L		05/25/17 14:16	5
Xylenes, Total	2.5	U	10	2.5	1.2	ug/L		05/25/17 14:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*05/25/17 14:16*	*5*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*05/25/17 14:16*	*5*
1,2-Dichloroethane-d4 (Surr)	*109*		*81 - 118*		*05/25/17 14:16*	*5*
Toluene-d8 (Surr)	*101*		*89 - 112*		*05/25/17 14:16*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/30/17 21:17	1
Ethylene	**2.2**		1.0	1.0	0.50	ug/L		05/30/17 21:17	1
Methane (TCD)	**5000**		390	77	39	ug/L		05/30/17 21:17	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**10**		1.0	1.0	0.40	mg/L		05/31/17 17:50	1

Client Sample ID: G6M-DUP-2-SPR17

Lab Sample ID: 680-138853-4

Date Collected: 05/16/17 13:50

Matrix: Water

Date Received: 05/18/17 09:05

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	14000		50	50	17	ug/L		05/20/17 01:35	1
Manganese	11000		10	3.0	1.0	ug/L		05/20/17 01:35	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	40		3.0	3.0	1.5	ug/L		05/24/17 21:03	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.044	J	0.10	0.050	0.019	mg/L		05/23/17 19:14	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1
Total Organic Carbon - Duplicates	4.5		1.0	0.50	0.16	mg/L		05/26/17 02:04	1
Alkalinity	110		5.0	3.2	1.1	mg/L		05/22/17 15:26	1

Client Sample ID: G6M-03-07X-SPR17

Lab Sample ID: 680-138853-5

Date Collected: 05/16/17 15:40

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	16		10	10	7.0	ug/L		05/25/17 13:11	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 13:11	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:11	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 13:11	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/25/17 13:11	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/25/17 13:11	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 13:11	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/25/17 13:11	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 13:11	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/25/17 13:11	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:11	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 13:11	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 13:11	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 13:11	1
cis-1,2-Dichloroethene	0.51	J	1.0	1.0	0.41	ug/L		05/25/17 13:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 13:11	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/25/17 13:11	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 13:11	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:11	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 13:11	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/25/17 13:11	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 13:11	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/25/17 13:11	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 13:11	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:11	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/25/17 13:11	1
1,2-Dichloroethene, Total	1.3	J	2.0	1.0	0.74	ug/L		05/25/17 13:11	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/25/17 13:11	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-03-07X-SPR17

Lab Sample ID: 680-138853-5

Date Collected: 05/16/17 15:40
Matrix: Water
Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 13:11	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:11	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 13:11	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 13:11	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 13:11	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/25/17 13:11	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 13:11	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 13:11	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/25/17 13:11	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/25/17 13:11	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 13:11	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 13:11	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 13:11	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/25/17 13:11	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 13:11	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 13:11	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 13:11	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/25/17 13:11	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/25/17 13:11	1
Toluene	**0.52**	**J**	1.0	1.0	0.48	ug/L		05/25/17 13:11	1
trans-1,2-Dichloroethene	**0.76**	**J**	1.0	1.0	0.37	ug/L		05/25/17 13:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 13:11	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:11	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:11	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 13:11	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 13:11	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 13:11	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/25/17 13:11	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 13:11	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/25/17 13:11	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/25/17 13:11	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:11	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/25/17 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*05/25/17 13:11*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/25/17 13:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*81 - 118*		*05/25/17 13:11*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*05/25/17 13:11*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**1.2**		1.1	1.1	0.55	ug/L		05/30/17 21:30	1
Ethylene	**7.2**		1.0	1.0	0.50	ug/L		05/30/17 21:30	1
Methane (TCD)	**14000**		390	77	39	ug/L		05/30/17 21:30	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		05/31/17 19:17	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**84000**		50	50	17	ug/L		05/20/17 01:40	1
Manganese	**1600**		10	3.0	1.0	ug/L		05/20/17 01:40	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**370**		3.0	3.0	1.5	ug/L		05/24/17 21:07	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.14**		0.10	0.050	0.019	mg/L		05/23/17 19:16	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1
Total Organic Carbon - Duplicates	**19**		1.0	0.50	0.16	mg/L		05/26/17 02:19	1
Alkalinity	**200**		5.0	3.2	1.1	mg/L		05/22/17 15:43	1

Client Sample ID: G6M-13-02X-SPR17

Lab Sample ID: 680-138853-6

Date Collected: 05/16/17 09:40

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/25/17 13:33	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 13:33	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:33	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 13:33	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/25/17 13:33	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/25/17 13:33	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 13:33	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/25/17 13:33	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 13:33	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/25/17 13:33	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:33	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 13:33	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 13:33	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 13:33	1
cis-1,2-Dichloroethene	**30**		1.0	1.0	0.41	ug/L		05/25/17 13:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 13:33	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/25/17 13:33	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 13:33	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:33	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 13:33	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/25/17 13:33	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 13:33	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/25/17 13:33	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 13:33	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 13:33	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/25/17 13:33	1
1,2-Dichloroethene, Total	**30**		2.0	1.0	0.74	ug/L		05/25/17 13:33	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/25/17 13:33	1

Client Sample ID: G6M-13-02X-SPR17

Lab Sample ID: 680-138853-6

Date Collected: 05/16/17 09:40

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 13:33	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:33	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 13:33	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 13:33	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 13:33	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/25/17 13:33	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 13:33	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 13:33	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/25/17 13:33	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/25/17 13:33	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 13:33	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 13:33	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 13:33	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/25/17 13:33	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 13:33	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 13:33	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 13:33	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/25/17 13:33	1
Tetrachloroethene	**79**		1.0	1.0	0.74	ug/L		05/25/17 13:33	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 13:33	1
trans-1,2-Dichloroethene	**0.39**	**J**	1.0	1.0	0.37	ug/L		05/25/17 13:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 13:33	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 13:33	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 13:33	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 13:33	1
Trichloroethene	**25**		1.0	1.0	0.48	ug/L		05/25/17 13:33	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 13:33	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/25/17 13:33	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 13:33	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/25/17 13:33	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/25/17 13:33	1
Vinyl chloride	**0.90**	**J**	1.0	1.0	0.50	ug/L		05/25/17 13:33	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/25/17 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*05/25/17 13:33*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/25/17 13:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*81 - 118*		*05/25/17 13:33*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/25/17 13:33*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**0.64**	**J**	1.1	1.1	0.55	ug/L		05/30/17 21:43	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/30/17 21:43	1
Methane (TCD)	**4300**		390	77	39	ug/L		05/30/17 21:43	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**12**		1.0	1.0	0.40	mg/L		05/31/17 19:34	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/20/17 02:10	1
Manganese	**16**		10	3.0	1.0	ug/L		05/20/17 02:10	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/24/17 21:35	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.34**	**J**	0.10	0.050	0.019	mg/L		05/23/17 19:34	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1
Total Organic Carbon - Duplicates	**0.88**	**J**	1.0	0.50	0.16	mg/L		05/26/17 02:34	1
Alkalinity	**54**		5.0	3.2	1.1	mg/L		05/22/17 15:48	1

Client Sample ID: MW-3-SPR17

Lab Sample ID: 680-138853-7

Date Collected: 05/17/17 12:15

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/27/17 16:44	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 16:44	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 16:44	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 16:44	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/27/17 16:44	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/27/17 16:44	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 16:44	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/27/17 16:44	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 16:44	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/27/17 16:44	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 16:44	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/27/17 16:44	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/27/17 16:44	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 16:44	1
cis-1,2-Dichloroethene	**0.75**	**J**	1.0	1.0	0.41	ug/L		05/27/17 16:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/27/17 16:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/27/17 16:44	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 16:44	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 16:44	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 16:44	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/27/17 16:44	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/27/17 16:44	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/27/17 16:44	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/27/17 16:44	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 16:44	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/27/17 16:44	1
1,2-Dichloroethene, Total	**0.98**	**J**	2.0	1.0	0.74	ug/L		05/27/17 16:44	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/27/17 16:44	1

Client Sample ID: MW-3-SPR17

Lab Sample ID: 680-138853-7

Date Collected: 05/17/17 12:15

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/27/17 16:44	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 16:44	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/27/17 16:44	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 16:44	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/27/17 16:44	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/27/17 16:44	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 16:44	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 16:44	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/27/17 16:44	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/27/17 16:44	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 16:44	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/27/17 16:44	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/27/17 16:44	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/27/17 16:44	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 16:44	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/27/17 16:44	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 16:44	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 16:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/27/17 16:44	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/27/17 16:44	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 16:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 16:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 16:44	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 16:44	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 16:44	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 16:44	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 16:44	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 16:44	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/27/17 16:44	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/27/17 16:44	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/27/17 16:44	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/27/17 16:44	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 16:44	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/27/17 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*05/27/17 16:44*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/27/17 16:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*		*05/27/17 16:44*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/27/17 16:44*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**1.8**		1.1	1.1	0.55	ug/L		05/30/17 21:56	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/30/17 21:56	1
Methane (TCD)	**10000**		390	77	39	ug/L		05/30/17 21:56	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.2		1.0	1.0	0.40	mg/L		05/31/17 19:51	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	56000		50	50	17	ug/L		05/20/17 02:00	1
Manganese	9400		10	3.0	1.0	ug/L		05/20/17 02:00	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	500		3.0	3.0	1.5	ug/L		05/24/17 21:27	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.073	J	0.10	0.050	0.019	mg/L		05/23/17 19:40	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1
Total Organic Carbon - Duplicates	5.2		1.0	0.50	0.16	mg/L		05/26/17 02:49	1
Alkalinity	310	B	5.0	3.2	1.1	mg/L		05/24/17 16:26	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-138853-8

Date Collected: 05/17/17 00:00

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/27/17 12:23	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 12:23	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:23	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 12:23	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/27/17 12:23	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/27/17 12:23	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 12:23	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/27/17 12:23	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 12:23	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/27/17 12:23	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:23	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/27/17 12:23	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/27/17 12:23	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 12:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/27/17 12:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/27/17 12:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/27/17 12:23	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 12:23	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:23	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 12:23	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/27/17 12:23	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/27/17 12:23	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/27/17 12:23	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/27/17 12:23	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:23	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/27/17 12:23	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/27/17 12:23	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/27/17 12:23	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-138853-8

Date Collected: 05/17/17 00:00

Matrix: Water

Date Received: 05/18/17 09:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/27/17 12:23	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:23	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/27/17 12:23	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 12:23	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/27/17 12:23	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/27/17 12:23	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 12:23	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 12:23	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/27/17 12:23	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/27/17 12:23	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 12:23	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/27/17 12:23	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/27/17 12:23	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/27/17 12:23	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 12:23	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/27/17 12:23	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 12:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/27/17 12:23	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/27/17 12:23	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 12:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 12:23	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:23	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:23	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 12:23	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 12:23	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 12:23	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/27/17 12:23	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/27/17 12:23	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/27/17 12:23	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/27/17 12:23	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:23	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/27/17 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*05/27/17 12:23*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*05/27/17 12:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*05/27/17 12:23*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*05/27/17 12:23*	*1*

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-138853-1	G6M-04-13X-SPR17	101	103	105	98
680-138853-2	G6M-07-02X-SPR17	98	101	109	100
680-138853-3	G6M-04-02X-SPR17	98	105	108	99
680-138853-3 - DL	G6M-04-02X-SPR17	101	102	109	100
680-138853-4	G6M-DUP-2-SPR17	100	100	109	101
680-138853-5	G6M-03-07X-SPR17	100	101	107	101
680-138853-6	G6M-13-02X-SPR17	98	102	106	100
680-138853-7	MW-3-SPR17	93	102	100	100
680-138853-8	Trip Blank	94	100	97	99
LCS 680-481343/3	Lab Control Sample	100	101	109	104
LCS 680-481703/4	Lab Control Sample	100	103	98	105
LCSD 680-481343/4	Lab Control Sample Dup	99	107	116	105
LCSD 680-481703/5	Lab Control Sample Dup	96	106	99	105
MB 680-481343/8	Method Blank	102	104	106	100
MB 680-481703/9	Method Blank	93	103	97	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-481343/8
Matrix: Water
Analysis Batch: 481343

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/25/17 08:33	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 08:33	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 08:33	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 08:33	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/25/17 08:33	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/25/17 08:33	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 08:33	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/25/17 08:33	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 08:33	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/25/17 08:33	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 08:33	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 08:33	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 08:33	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 08:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/25/17 08:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/25/17 08:33	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/25/17 08:33	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 08:33	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 08:33	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/25/17 08:33	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/25/17 08:33	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 08:33	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/25/17 08:33	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 08:33	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 08:33	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/25/17 08:33	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/25/17 08:33	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/25/17 08:33	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 08:33	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 08:33	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/25/17 08:33	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 08:33	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/25/17 08:33	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/25/17 08:33	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 08:33	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 08:33	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/25/17 08:33	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/25/17 08:33	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/25/17 08:33	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 08:33	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/25/17 08:33	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/25/17 08:33	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 08:33	1

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

Lab Sample ID: MB 680-481343/8
Matrix: Water
Analysis Batch: 481343

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/25/17 08:33	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/25/17 08:33	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 08:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/25/17 08:33	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/25/17 08:33	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 08:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 08:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 08:33	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/25/17 08:33	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/25/17 08:33	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/25/17 08:33	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/25/17 08:33	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/25/17 08:33	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/25/17 08:33	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/25/17 08:33	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/25/17 08:33	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/25/17 08:33	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/25/17 08:33	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/25/17 08:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*		*05/25/17 08:33*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*05/25/17 08:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*81 - 118*		*05/25/17 08:33*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/25/17 08:33*	*1*

Lab Sample ID: LCS 680-481343/3
Matrix: Water
Analysis Batch: 481343

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	275		ug/L		110	39 - 160
Benzene	50.0	48.6		ug/L		97	79 - 120
Bromobenzene	50.0	49.0		ug/L		98	80 - 120
Bromoform	50.0	48.2		ug/L		96	66 - 130
Bromomethane	50.0	50.4		ug/L		101	53 - 141
2-Butanone (MEK)	250	240		ug/L		96	56 - 143
Carbon disulfide	50.0	46.1		ug/L		92	64 - 133
Carbon tetrachloride	50.0	52.8		ug/L		106	72 - 136
Chlorobenzene	50.0	49.0		ug/L		98	82 - 118
Chlorobromomethane	50.0	47.3		ug/L		95	78 - 123
Chlorodibromomethane	50.0	50.0		ug/L		100	74 - 126
Chloroethane	50.0	41.5		ug/L		83	60 - 138
Chloroform	50.0	51.9		ug/L		104	79 - 124
Chloromethane	50.0	50.5		ug/L		101	50 - 139
2-Chlorotoluene	50.0	47.5		ug/L		95	79 - 122
4-Chlorotoluene	50.0	48.9		ug/L		98	78 - 122

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

Lab Sample ID: LCS 680-481343/3
Matrix: Water
Analysis Batch: 481343

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	50.0	50.8		ug/L		102	78 - 123
cis-1,3-Dichloropropene	50.0	50.0		ug/L		100	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	45.9		ug/L		92	62 - 128
Dibromomethane	50.0	51.4		ug/L		103	79 - 123
1,2-Dichlorobenzene	50.0	49.7		ug/L		99	80 - 119
1,3-Dichlorobenzene	50.0	50.2		ug/L		100	80 - 119
1,4-Dichlorobenzene	50.0	49.2		ug/L		98	79 - 118
Dichlorobromomethane	50.0	52.3		ug/L		105	79 - 125
Dichlorodifluoromethane	50.0	50.6		ug/L		101	32 - 152
1,1-Dichloroethane	50.0	48.2		ug/L		96	77 - 125
1,2-Dichloroethane	50.0	56.8		ug/L		114	73 - 128
1,1-Dichloroethene	50.0	49.1		ug/L		98	71 - 131
1,2-Dichloroethene, Total	100	99.8		ug/L		100	79 - 121
1,2-Dichloropropane	50.0	49.6		ug/L		99	78 - 122
1,3-Dichloropropane	50.0	50.5		ug/L		101	80 - 119
2,2-Dichloropropane	50.0	56.6		ug/L		113	60 - 139
1,1-Dichloropropene	50.0	51.5		ug/L		103	79 - 125
Ethylbenzene	50.0	48.8		ug/L		98	79 - 121
Ethylene Dibromide	50.0	51.8		ug/L		104	75 - 127
Hexachlorobutadiene	50.0	52.8		ug/L		106	66 - 134
2-Hexanone	250	248		ug/L		99	57 - 139
Isopropylbenzene	50.0	49.2		ug/L		98	72 - 131
4-Isopropyltoluene	50.0	50.4		ug/L		101	77 - 127
Methylene Chloride	50.0	48.1		ug/L		96	74 - 124
4-Methyl-2-pentanone (MIBK)	250	243		ug/L		97	67 - 130
Methyl tert-butyl ether	50.0	51.7		ug/L		103	71 - 124
m-Xylene & p-Xylene	50.0	48.3		ug/L		97	80 - 121
Naphthalene	50.0	47.6		ug/L		95	61 - 128
n-Butylbenzene	50.0	52.5		ug/L		105	75 - 128
N-Propylbenzene	50.0	48.9		ug/L		98	76 - 126
o-Xylene	50.0	47.7		ug/L		95	78 - 122
sec-Butylbenzene	50.0	50.1		ug/L		100	77 - 126
Styrene	50.0	48.3		ug/L		97	78 - 123
tert-Butylbenzene	50.0	48.5		ug/L		97	78 - 124
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	78 - 124
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/L		94	71 - 121
Tetrachloroethene	50.0	52.4		ug/L		105	74 - 129
Toluene	50.0	48.7		ug/L		97	80 - 121
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	75 - 124
trans-1,3-Dichloropropene	50.0	52.9		ug/L		106	73 - 127
1,2,3-Trichlorobenzene	50.0	48.8		ug/L		98	69 - 129
1,2,4-Trichlorobenzene	50.0	49.7		ug/L		99	69 - 130
1,1,1-Trichloroethane	50.0	53.8		ug/L		108	74 - 131
1,1,2-Trichloroethane	50.0	50.8		ug/L		102	80 - 119
Trichloroethene	50.0	51.5		ug/L		103	79 - 123
Trichlorofluoromethane	50.0	47.6		ug/L		95	65 - 141
1,2,3-Trichloropropane	50.0	47.2		ug/L		94	73 - 122
1,2,4-Trimethylbenzene	50.0	49.8		ug/L		100	76 - 124

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

Lab Sample ID: LCS 680-481343/3
Matrix: Water
Analysis Batch: 481343

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	50.2		ug/L		100	75 - 124
Vinyl acetate	100	108		ug/L		108	54 - 146
Vinyl chloride	50.0	51.5		ug/L		103	58 - 137
Xylenes, Total	100	96.0		ug/L		96	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*109*		*81 - 118*
Toluene-d8 (Surr)	*104*		*89 - 112*

Lab Sample ID: LCSD 680-481343/4
Matrix: Water
Analysis Batch: 481343

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	250	264		ug/L		106	39 - 160	4	20
Benzene	50.0	50.1		ug/L		100	79 - 120	3	20
Bromobenzene	50.0	48.9		ug/L		98	80 - 120	0	20
Bromoform	50.0	50.1		ug/L		100	66 - 130	4	20
Bromomethane	50.0	49.8		ug/L		100	53 - 141	1	20
2-Butanone (MEK)	250	251		ug/L		100	56 - 143	4	20
Carbon disulfide	50.0	46.7		ug/L		93	64 - 133	1	20
Carbon tetrachloride	50.0	55.0		ug/L		110	72 - 136	4	20
Chlorobenzene	50.0	49.0		ug/L		98	82 - 118	0	20
Chlorobromomethane	50.0	50.6		ug/L		101	78 - 123	7	20
Chlorodibromomethane	50.0	53.5		ug/L		107	74 - 126	7	20
Chloroethane	50.0	41.4		ug/L		83	60 - 138	0	20
Chloroform	50.0	55.3		ug/L		111	79 - 124	6	20
Chloromethane	50.0	50.6		ug/L		101	50 - 139	0	20
2-Chlorotoluene	50.0	47.6		ug/L		95	79 - 122	0	20
4-Chlorotoluene	50.0	48.5		ug/L		97	78 - 122	1	20
cis-1,2-Dichloroethene	50.0	53.5		ug/L		107	78 - 123	5	20
cis-1,3-Dichloropropene	50.0	53.0		ug/L		106	75 - 124	6	20
1,2-Dibromo-3-Chloropropane	50.0	46.9		ug/L		94	62 - 128	2	20
Dibromomethane	50.0	53.6		ug/L		107	79 - 123	4	20
1,2-Dichlorobenzene	50.0	50.8		ug/L		102	80 - 119	2	20
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	80 - 119	0	20
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	79 - 118	1	20
Dichlorobromomethane	50.0	53.4		ug/L		107	79 - 125	2	20
Dichlorodifluoromethane	50.0	49.0		ug/L		98	32 - 152	3	20
1,1-Dichloroethane	50.0	50.5		ug/L		101	77 - 125	5	20
1,2-Dichloroethane	50.0	60.0		ug/L		120	73 - 128	6	20
1,1-Dichloroethene	50.0	49.9		ug/L		100	71 - 131	2	20
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121	4	20
1,2-Dichloropropane	50.0	51.9		ug/L		104	78 - 122	4	20
1,3-Dichloropropane	50.0	54.9		ug/L		110	80 - 119	8	20
2,2-Dichloropropane	50.0	56.9		ug/L		114	60 - 139	0	20

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

Lab Sample ID: LCSD 680-481343/4
Matrix: Water
Analysis Batch: 481343

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-Dichloropropene	50.0	53.8		ug/L		108	79 - 125	4	20
Ethylbenzene	50.0	48.7		ug/L		97	79 - 121	0	20
Ethylene Dibromide	50.0	53.9		ug/L		108	75 - 127	4	20
Hexachlorobutadiene	50.0	49.8		ug/L		100	66 - 134	6	20
2-Hexanone	250	260		ug/L		104	57 - 139	5	20
Isopropylbenzene	50.0	47.9		ug/L		96	72 - 131	3	20
4-Isopropyltoluene	50.0	50.3		ug/L		101	77 - 127	0	20
Methylene Chloride	50.0	50.1		ug/L		100	74 - 124	4	20
4-Methyl-2-pentanone (MIBK)	250	257		ug/L		103	67 - 130	6	20
Methyl tert-butyl ether	50.0	54.3		ug/L		109	71 - 124	5	20
m-Xylene & p-Xylene	50.0	48.6		ug/L		97	80 - 121	1	20
Naphthalene	50.0	48.5		ug/L		97	61 - 128	2	20
n-Butylbenzene	50.0	51.4		ug/L		103	75 - 128	2	20
N-Propylbenzene	50.0	48.3		ug/L		97	76 - 126	1	20
o-Xylene	50.0	48.6		ug/L		97	78 - 122	2	20
sec-Butylbenzene	50.0	49.5		ug/L		99	77 - 126	1	20
Styrene	50.0	48.2		ug/L		96	78 - 123	0	20
tert-Butylbenzene	50.0	46.9		ug/L		94	78 - 124	3	20
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	78 - 124	0	20
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/L		96	71 - 121	2	20
Tetrachloroethene	50.0	52.4		ug/L		105	74 - 129	0	20
Toluene	50.0	50.4		ug/L		101	80 - 121	3	20
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	56.2		ug/L		112	73 - 127	6	20
1,2,3-Trichlorobenzene	50.0	49.7		ug/L		99	69 - 129	2	20
1,2,4-Trichlorobenzene	50.0	50.6		ug/L		101	69 - 130	2	20
1,1,1-Trichloroethane	50.0	55.6		ug/L		111	74 - 131	3	20
1,1,2-Trichloroethane	50.0	52.8		ug/L		106	80 - 119	4	20
Trichloroethene	50.0	52.2		ug/L		104	79 - 123	1	20
Trichlorofluoromethane	50.0	46.9		ug/L		94	65 - 141	1	20
1,2,3-Trichloropropane	50.0	47.9		ug/L		96	73 - 122	2	20
1,2,4-Trimethylbenzene	50.0	49.5		ug/L		99	76 - 124	1	20
1,3,5-Trimethylbenzene	50.0	49.8		ug/L		100	75 - 124	1	20
Vinyl acetate	100	114		ug/L		114	54 - 146	5	20
Vinyl chloride	50.0	49.9		ug/L		100	58 - 137	3	20
Xylenes, Total	100	97.2		ug/L		97	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*107*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*116*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

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

Lab Sample ID: MB 680-481703/9
Matrix: Water
Analysis Batch: 481703

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/27/17 12:02	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 12:02	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:02	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 12:02	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/27/17 12:02	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/27/17 12:02	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 12:02	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/27/17 12:02	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 12:02	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/27/17 12:02	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:02	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/27/17 12:02	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/27/17 12:02	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 12:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/27/17 12:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/27/17 12:02	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/27/17 12:02	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 12:02	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:02	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/27/17 12:02	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/27/17 12:02	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/27/17 12:02	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/27/17 12:02	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/27/17 12:02	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:02	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/27/17 12:02	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/27/17 12:02	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/27/17 12:02	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/27/17 12:02	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:02	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/27/17 12:02	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 12:02	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/27/17 12:02	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/27/17 12:02	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 12:02	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 12:02	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/27/17 12:02	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/27/17 12:02	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/27/17 12:02	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/27/17 12:02	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/27/17 12:02	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/27/17 12:02	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 12:02	1

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

Lab Sample ID: MB 680-481703/9
Matrix: Water
Analysis Batch: 481703

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/27/17 12:02	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/27/17 12:02	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/27/17 12:02	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/27/17 12:02	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 12:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 12:02	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/27/17 12:02	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/27/17 12:02	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/27/17 12:02	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/27/17 12:02	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/27/17 12:02	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/27/17 12:02	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/27/17 12:02	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/27/17 12:02	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/27/17 12:02	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/27/17 12:02	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/27/17 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*05/27/17 12:02*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*05/27/17 12:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*05/27/17 12:02*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/27/17 12:02*	*1*

Lab Sample ID: LCS 680-481703/4
Matrix: Water
Analysis Batch: 481703

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	238		ug/L		95	39 - 160
Benzene	50.0	47.9		ug/L		96	79 - 120
Bromobenzene	50.0	52.9		ug/L		106	80 - 120
Bromoform	50.0	51.1		ug/L		102	66 - 130
Bromomethane	50.0	45.2		ug/L		90	53 - 141
2-Butanone (MEK)	250	211		ug/L		84	56 - 143
Carbon disulfide	50.0	46.0		ug/L		92	64 - 133
Carbon tetrachloride	50.0	53.9		ug/L		108	72 - 136
Chlorobenzene	50.0	51.9		ug/L		104	82 - 118
Chlorobromomethane	50.0	42.6		ug/L		85	78 - 123
Chlorodibromomethane	50.0	52.4		ug/L		105	74 - 126
Chloroethane	50.0	36.9		ug/L		74	60 - 138
Chloroform	50.0	51.0		ug/L		102	79 - 124
Chloromethane	50.0	41.0		ug/L		82	50 - 139
2-Chlorotoluene	50.0	51.6		ug/L		103	79 - 122
4-Chlorotoluene	50.0	52.0		ug/L		104	78 - 122

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

Lab Sample ID: LCS 680-481703/4
Matrix: Water
Analysis Batch: 481703

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	50.0	51.7		ug/L		103	78 - 123
cis-1,3-Dichloropropene	50.0	47.7		ug/L		95	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	46.6		ug/L		93	62 - 128
Dibromomethane	50.0	48.3		ug/L		97	79 - 123
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	80 - 119
1,3-Dichlorobenzene	50.0	51.8		ug/L		104	80 - 119
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	79 - 118
Dichlorobromomethane	50.0	49.2		ug/L		98	79 - 125
Dichlorodifluoromethane	50.0	41.6		ug/L		83	32 - 152
1,1-Dichloroethane	50.0	46.4		ug/L		93	77 - 125
1,2-Dichloroethane	50.0	50.6		ug/L		101	73 - 128
1,1-Dichloroethene	50.0	48.4		ug/L		97	71 - 131
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121
1,2-Dichloropropane	50.0	46.9		ug/L		94	78 - 122
1,3-Dichloropropane	50.0	49.8		ug/L		100	80 - 119
2,2-Dichloropropane	50.0	51.4		ug/L		103	60 - 139
1,1-Dichloropropene	50.0	50.9		ug/L		102	79 - 125
Ethylbenzene	50.0	51.2		ug/L		102	79 - 121
Ethylene Dibromide	50.0	52.9		ug/L		106	75 - 127
Hexachlorobutadiene	50.0	53.5		ug/L		107	66 - 134
2-Hexanone	250	226		ug/L		90	57 - 139
Isopropylbenzene	50.0	52.2		ug/L		104	72 - 131
4-Isopropyltoluene	50.0	51.2		ug/L		102	77 - 127
Methylene Chloride	50.0	46.1		ug/L		92	74 - 124
4-Methyl-2-pentanone (MIBK)	250	215		ug/L		86	67 - 130
Methyl tert-butyl ether	50.0	48.0		ug/L		96	71 - 124
m-Xylene & p-Xylene	50.0	51.2		ug/L		102	80 - 121
Naphthalene	50.0	46.6		ug/L		93	61 - 128
n-Butylbenzene	50.0	49.9		ug/L		100	75 - 128
N-Propylbenzene	50.0	52.7		ug/L		105	76 - 126
o-Xylene	50.0	50.6		ug/L		101	78 - 122
sec-Butylbenzene	50.0	52.5		ug/L		105	77 - 126
Styrene	50.0	50.9		ug/L		102	78 - 123
tert-Butylbenzene	50.0	50.7		ug/L		101	78 - 124
1,1,1,2-Tetrachloroethane	50.0	51.2		ug/L		102	78 - 124
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	71 - 121
Tetrachloroethene	50.0	57.5		ug/L		115	74 - 129
Toluene	50.0	50.8		ug/L		102	80 - 121
trans-1,2-Dichloroethene	50.0	51.9		ug/L		104	75 - 124
trans-1,3-Dichloropropene	50.0	51.9		ug/L		104	73 - 127
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	69 - 129
1,2,4-Trichlorobenzene	50.0	50.4		ug/L		101	69 - 130
1,1,1-Trichloroethane	50.0	53.9		ug/L		108	74 - 131
1,1,2-Trichloroethane	50.0	51.3		ug/L		103	80 - 119
Trichloroethene	50.0	54.5		ug/L		109	79 - 123
Trichlorofluoromethane	50.0	43.7		ug/L		87	65 - 141
1,2,3-Trichloropropane	50.0	46.3		ug/L		93	73 - 122
1,2,4-Trimethylbenzene	50.0	50.8		ug/L		102	76 - 124

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

Lab Sample ID: LCS 680-481703/4
Matrix: Water
Analysis Batch: 481703

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	51.6		ug/L		103	75 - 124
Vinyl acetate	100	90.5		ug/L		90	54 - 146
Vinyl chloride	50.0	46.1		ug/L		92	58 - 137
Xylenes, Total	100	102		ug/L		102	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*103*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

Lab Sample ID: LCSD 680-481703/5
Matrix: Water
Analysis Batch: 481703

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	250	247		ug/L		99	39 - 160	4	20
Benzene	50.0	47.3		ug/L		95	79 - 120	1	20
Bromobenzene	50.0	55.0		ug/L		110	80 - 120	4	20
Bromoform	50.0	53.5		ug/L		107	66 - 130	5	20
Bromomethane	50.0	44.6		ug/L		89	53 - 141	1	20
2-Butanone (MEK)	250	207		ug/L		83	56 - 143	2	20
Carbon disulfide	50.0	45.0		ug/L		90	64 - 133	2	20
Carbon tetrachloride	50.0	53.3		ug/L		107	72 - 136	1	20
Chlorobenzene	50.0	53.1		ug/L		106	82 - 118	2	20
Chlorobromomethane	50.0	43.1		ug/L		86	78 - 123	1	20
Chlorodibromomethane	50.0	52.9		ug/L		106	74 - 126	1	20
Chloroethane	50.0	37.9		ug/L		76	60 - 138	3	20
Chloroform	50.0	51.0		ug/L		102	79 - 124	0	20
Chloromethane	50.0	41.1		ug/L		82	50 - 139	0	20
2-Chlorotoluene	50.0	52.2		ug/L		104	79 - 122	1	20
4-Chlorotoluene	50.0	53.3		ug/L		107	78 - 122	2	20
cis-1,2-Dichloroethene	50.0	51.3		ug/L		103	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	48.0		ug/L		96	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.1		ug/L		94	62 - 128	1	20
Dibromomethane	50.0	49.5		ug/L		99	79 - 123	2	20
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	80 - 119	0	20
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	80 - 119	3	20
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	79 - 118	0	20
Dichlorobromomethane	50.0	49.9		ug/L		100	79 - 125	1	20
Dichlorodifluoromethane	50.0	41.5		ug/L		83	32 - 152	0	20
1,1-Dichloroethane	50.0	46.5		ug/L		93	77 - 125	0	20
1,2-Dichloroethane	50.0	52.5		ug/L		105	73 - 128	4	20
1,1-Dichloroethene	50.0	50.4		ug/L		101	71 - 131	4	20
1,2-Dichloroethene, Total	100	100		ug/L		100	79 - 121	3	20
1,2-Dichloropropane	50.0	45.9		ug/L		92	78 - 122	2	20
1,3-Dichloropropane	50.0	51.5		ug/L		103	80 - 119	3	20
2,2-Dichloropropane	50.0	50.4		ug/L		101	60 - 139	2	20

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

Lab Sample ID: LCSD 680-481703/5
Matrix: Water
Analysis Batch: 481703

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-Dichloropropene	50.0	51.2		ug/L		102	79 - 125	1	20
Ethylbenzene	50.0	52.2		ug/L		104	79 - 121	2	20
Ethylene Dibromide	50.0	53.4		ug/L		107	75 - 127	1	20
Hexachlorobutadiene	50.0	51.6		ug/L		103	66 - 134	4	20
2-Hexanone	250	235		ug/L		94	57 - 139	4	20
Isopropylbenzene	50.0	53.0		ug/L		106	72 - 131	2	20
4-Isopropyltoluene	50.0	50.2		ug/L		100	77 - 127	2	20
Methylene Chloride	50.0	47.9		ug/L		96	74 - 124	4	20
4-Methyl-2-pentanone (MIBK)	250	219		ug/L		88	67 - 130	2	20
Methyl tert-butyl ether	50.0	48.5		ug/L		97	71 - 124	1	20
m-Xylene & p-Xylene	50.0	52.5		ug/L		105	80 - 121	3	20
Naphthalene	50.0	46.5		ug/L		93	61 - 128	0	20
n-Butylbenzene	50.0	49.1		ug/L		98	75 - 128	2	20
N-Propylbenzene	50.0	53.8		ug/L		108	76 - 126	2	20
o-Xylene	50.0	52.1		ug/L		104	78 - 122	3	20
sec-Butylbenzene	50.0	53.2		ug/L		106	77 - 126	1	20
Styrene	50.0	52.1		ug/L		104	78 - 123	2	20
tert-Butylbenzene	50.0	53.0		ug/L		106	78 - 124	5	20
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/L		106	78 - 124	3	20
1,1,2,2-Tetrachloroethane	50.0	48.7		ug/L		97	71 - 121	0	20
Tetrachloroethene	50.0	55.6		ug/L		111	74 - 129	3	20
Toluene	50.0	50.8		ug/L		102	80 - 121	0	20
trans-1,2-Dichloroethene	50.0	48.9		ug/L		98	75 - 124	6	20
trans-1,3-Dichloropropene	50.0	51.8		ug/L		104	73 - 127	0	20
1,2,3-Trichlorobenzene	50.0	50.2		ug/L		100	69 - 129	3	20
1,2,4-Trichlorobenzene	50.0	50.5		ug/L		101	69 - 130	0	20
1,1,1-Trichloroethane	50.0	52.5		ug/L		105	74 - 131	3	20
1,1,2-Trichloroethane	50.0	52.2		ug/L		104	80 - 119	2	20
Trichloroethene	50.0	54.8		ug/L		110	79 - 123	1	20
Trichlorofluoromethane	50.0	45.5		ug/L		91	65 - 141	4	20
1,2,3-Trichloropropane	50.0	48.3		ug/L		97	73 - 122	4	20
1,2,4-Trimethylbenzene	50.0	52.1		ug/L		104	76 - 124	3	20
1,3,5-Trimethylbenzene	50.0	53.4		ug/L		107	75 - 124	4	20
Vinyl acetate	100	90.8		ug/L		91	54 - 146	0	20
Vinyl chloride	50.0	46.5		ug/L		93	58 - 137	1	20
Xylenes, Total	100	105		ug/L		105	79 - 121	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*
Dibromofluoromethane (Surr)	*106*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-481882/21 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/30/17 20:16	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/30/17 20:16	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		05/30/17 20:16	1
Methane (TCD)	77	U	390	77	39	ug/L		05/30/17 20:16	1

Lab Sample ID: LCS 680-481882/15 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	296		ug/L		103	75 - 125
Ethylene	269	269		ug/L		100	75 - 125
Methane	154	148		ug/L		96	75 - 125

Lab Sample ID: LCS 680-481882/18 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	2020		ug/L		105	75 - 125

Lab Sample ID: LCSD 680-481882/16 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	277		ug/L		96	75 - 125	7	30
Ethylene	269	248		ug/L		92	75 - 125	8	30
Methane	154	135		ug/L		88	75 - 125	9	30

Lab Sample ID: LCSD 680-481882/19 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2000		ug/L		104	75 - 125	1	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-481967/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481967

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		05/31/17 09:14	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 680-481967/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.82		mg/L		98	87 - 112

Lab Sample ID: LCSD 680-481967/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481967

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	9.89		mg/L		99	87 - 112	1	15

Lab Sample ID: MB 680-482246/29 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482246

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		05/31/17 18:24	1

Lab Sample ID: LCS 680-482246/30 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.79		mg/L		98	87 - 112

Lab Sample ID: LCSD 680-482246/31 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482246

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	9.88		mg/L		99	87 - 112	1	15

Lab Sample ID: 680-138853-7 DU — **Client Sample ID: MW-3-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482246

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	2.2		1.89		mg/L		14	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-480630/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 480827 — **Prep Batch: 480630**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/20/17 01:00	1
Manganese	3.0	U	10	3.0	1.0	ug/L		05/20/17 01:00	1

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

Lab Sample ID: LCS 680-480630/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 480827 — **Prep Batch: 480630**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	4950		ug/L		99	87 - 115
Manganese	500	528		ug/L		106	90 - 114

Lab Sample ID: 680-138853-2 MS — **Client Sample ID: G6M-07-02X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 480827 — **Prep Batch: 480630**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	50	U	5000	5030		ug/L		101	87 - 115
Manganese	17		500	551		ug/L		107	90 - 114

Lab Sample ID: 680-138853-2 MSD — **Client Sample ID: G6M-07-02X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 480827 — **Prep Batch: 480630**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	50	U	5000	4620		ug/L		92	87 - 115	9	20
Manganese	17		500	508		ug/L		98	90 - 114	8	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-480627/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481403 — **Prep Batch: 480627**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/24/17 19:47	1

Lab Sample ID: LCS 680-480627/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481403 — **Prep Batch: 480627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	106		ug/L		106	84 - 116

Lab Sample ID: 680-138853-2 MS — **Client Sample ID: G6M-07-02X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481403 — **Prep Batch: 480627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.0	U	100	109		ug/L		109	84 - 116

Lab Sample ID: 680-138853-2 MSD — **Client Sample ID: G6M-07-02X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481403 — **Prep Batch: 480627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.0	U	100	99.2		ug/L		99	84 - 116	10	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-374765/110 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374765

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/23/17 19:32	1

Lab Sample ID: MB 280-374765/66 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374765

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		05/23/17 18:04	1

Lab Sample ID: LCS 280-374765/109 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.19		mg/L		104	90 - 110

Lab Sample ID: LCS 280-374765/65 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.19		mg/L		104	90 - 110

Lab Sample ID: 680-138853-6 MS — **Client Sample ID: G6M-13-02X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374765

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.34	J	4.00	4.76		mg/L		110	90 - 110

Lab Sample ID: 680-138853-6 MSD — **Client Sample ID: G6M-13-02X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374765

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.34	J	4.00	4.77	J	mg/L		111	90 - 110	0	10

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-481049/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481049

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 10:58	1

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 680-481049/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481049

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.4		mg/L		104	75 - 125

Lab Sample ID: LCSD 680-481049/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481049

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	10.2		mg/L		102	75 - 125	1	30

Lab Sample ID: 680-138853-1 DU — **Client Sample ID: G6M-04-13X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481049

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

Lab Sample ID: MB 680-481056/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 11:40	1

Lab Sample ID: LCS 680-481056/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.3		mg/L		103	75 - 125

Lab Sample ID: LCSD 680-481056/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	10.4		mg/L		104	75 - 125	1	30

Lab Sample ID: 680-138853-2 DU — **Client Sample ID: G6M-07-02X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

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

Lab Sample ID: MB 280-375169/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375169

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.322	J	1.0	0.50	0.16	mg/L		05/25/17 20:32	1

Lab Sample ID: LCS 280-375169/34 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	25.2		mg/L		101	88 - 112

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-374638/33 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374638

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	1.98	J	5.0	3.2	1.1	mg/L		05/22/17 14:32	1

Lab Sample ID: LCS 280-374638/31 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	204		mg/L		102	90 - 110

Lab Sample ID: LCSD 280-374638/32 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 374638

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	200	198		mg/L		99	90 - 110	3	10

Lab Sample ID: MB 280-375005/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	2.67	J	5.0	3.2	1.1	mg/L		05/24/17 15:38	1

Lab Sample ID: LCS 280-375005/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	197		mg/L		99	90 - 110

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

GC/MS VOA

Analysis Batch: 481343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	8260B	
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	8260B	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	8260B	
680-138853-3 - DL	G6M-04-02X-SPR17	Total/NA	Water	8260B	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	8260B	
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	8260B	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	8260B	
MB 680-481343/8	Method Blank	Total/NA	Water	8260B	
LCS 680-481343/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-481343/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 481703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-7	MW-3-SPR17	Total/NA	Water	8260B	
680-138853-8	Trip Blank	Total/NA	Water	8260B	
MB 680-481703/9	Method Blank	Total/NA	Water	8260B	
LCS 680-481703/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-481703/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 481882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	RSK-175	
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	RSK-175	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	RSK-175	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	RSK-175	
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	RSK-175	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	RSK-175	
680-138853-7	MW-3-SPR17	Total/NA	Water	RSK-175	
MB 680-481882/21	Method Blank	Total/NA	Water	RSK-175	
LCS 680-481882/15	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-481882/18	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-481882/16	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-481882/19	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 481967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	9056A	
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	9056A	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	9056A	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	9056A	
MB 680-481967/2	Method Blank	Total/NA	Water	9056A	
LCS 680-481967/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-481967/4	Lab Control Sample Dup	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 482246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	9056A	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	9056A	
680-138853-7	MW-3-SPR17	Total/NA	Water	9056A	
MB 680-482246/29	Method Blank	Total/NA	Water	9056A	
LCS 680-482246/30	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-482246/31	Lab Control Sample Dup	Total/NA	Water	9056A	
680-138853-7 DU	MW-3-SPR17	Total/NA	Water	9056A	

Metals

Prep Batch: 480627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Dissolved	Water	3005A	
680-138853-2	G6M-07-02X-SPR17	Dissolved	Water	3005A	
680-138853-3	G6M-04-02X-SPR17	Dissolved	Water	3005A	
680-138853-4	G6M-DUP-2-SPR17	Dissolved	Water	3005A	
680-138853-5	G6M-03-07X-SPR17	Dissolved	Water	3005A	
680-138853-6	G6M-13-02X-SPR17	Dissolved	Water	3005A	
680-138853-7	MW-3-SPR17	Dissolved	Water	3005A	
MB 680-480627/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-480627/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-138853-2 MS	G6M-07-02X-SPR17	Dissolved	Water	3005A	
680-138853-2 MSD	G6M-07-02X-SPR17	Dissolved	Water	3005A	

Prep Batch: 480630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Dissolved	Water	3005A	
680-138853-2	G6M-07-02X-SPR17	Dissolved	Water	3005A	
680-138853-3	G6M-04-02X-SPR17	Dissolved	Water	3005A	
680-138853-4	G6M-DUP-2-SPR17	Dissolved	Water	3005A	
680-138853-5	G6M-03-07X-SPR17	Dissolved	Water	3005A	
680-138853-6	G6M-13-02X-SPR17	Dissolved	Water	3005A	
680-138853-7	MW-3-SPR17	Dissolved	Water	3005A	
MB 680-480630/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-480630/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-138853-2 MS	G6M-07-02X-SPR17	Dissolved	Water	3005A	
680-138853-2 MSD	G6M-07-02X-SPR17	Dissolved	Water	3005A	

Analysis Batch: 480827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Dissolved	Water	6010C	480630
680-138853-2	G6M-07-02X-SPR17	Dissolved	Water	6010C	480630
680-138853-3	G6M-04-02X-SPR17	Dissolved	Water	6010C	480630
680-138853-4	G6M-DUP-2-SPR17	Dissolved	Water	6010C	480630
680-138853-5	G6M-03-07X-SPR17	Dissolved	Water	6010C	480630
680-138853-6	G6M-13-02X-SPR17	Dissolved	Water	6010C	480630
680-138853-7	MW-3-SPR17	Dissolved	Water	6010C	480630
MB 680-480630/1-A	Method Blank	Total Recoverable	Water	6010C	480630
LCS 680-480630/2-A	Lab Control Sample	Total Recoverable	Water	6010C	480630
680-138853-2 MS	G6M-07-02X-SPR17	Dissolved	Water	6010C	480630

Metals (Continued)

Analysis Batch: 480827 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-2 MSD	G6M-07-02X-SPR17	Dissolved	Water	6010C	480630

Analysis Batch: 481403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Dissolved	Water	6020A	480627
680-138853-2	G6M-07-02X-SPR17	Dissolved	Water	6020A	480627
680-138853-3	G6M-04-02X-SPR17	Dissolved	Water	6020A	480627
680-138853-4	G6M-DUP-2-SPR17	Dissolved	Water	6020A	480627
680-138853-5	G6M-03-07X-SPR17	Dissolved	Water	6020A	480627
680-138853-6	G6M-13-02X-SPR17	Dissolved	Water	6020A	480627
680-138853-7	MW-3-SPR17	Dissolved	Water	6020A	480627
MB 680-480627/1-A	Method Blank	Total Recoverable	Water	6020A	480627
LCS 680-480627/2-A	Lab Control Sample	Total Recoverable	Water	6020A	480627
680-138853-2 MS	G6M-07-02X-SPR17	Dissolved	Water	6020A	480627
680-138853-2 MSD	G6M-07-02X-SPR17	Dissolved	Water	6020A	480627

General Chemistry

Analysis Batch: 374638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	SM 2320B	
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	SM 2320B	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	SM 2320B	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	SM 2320B	
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	SM 2320B	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	SM 2320B	
MB 280-374638/33	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-374638/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-374638/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 374765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	353.2	
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	353.2	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	353.2	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	353.2	
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	353.2	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	353.2	
680-138853-7	MW-3-SPR17	Total/NA	Water	353.2	
MB 280-374765/110	Method Blank	Total/NA	Water	353.2	
MB 280-374765/66	Method Blank	Total/NA	Water	353.2	
LCS 280-374765/109	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-374765/65	Lab Control Sample	Total/NA	Water	353.2	
680-138853-6 MS	G6M-13-02X-SPR17	Total/NA	Water	353.2	
680-138853-6 MSD	G6M-13-02X-SPR17	Total/NA	Water	353.2	

Analysis Batch: 375005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-7	MW-3-SPR17	Total/NA	Water	SM 2320B	
MB 280-375005/5	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 375005 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-375005/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 375169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	9060A	
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	9060A	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	9060A	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	9060A	
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	9060A	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	9060A	
680-138853-7	MW-3-SPR17	Total/NA	Water	9060A	
MB 280-375169/35	Method Blank	Total/NA	Water	9060A	
LCS 280-375169/34	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 481049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-1	G6M-04-13X-SPR17	Total/NA	Water	9034	
680-138853-3	G6M-04-02X-SPR17	Total/NA	Water	9034	
680-138853-4	G6M-DUP-2-SPR17	Total/NA	Water	9034	
680-138853-5	G6M-03-07X-SPR17	Total/NA	Water	9034	
680-138853-6	G6M-13-02X-SPR17	Total/NA	Water	9034	
680-138853-7	MW-3-SPR17	Total/NA	Water	9034	
MB 680-481049/1	Method Blank	Total/NA	Water	9034	
LCS 680-481049/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-481049/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-138853-1 DU	G6M-04-13X-SPR17	Total/NA	Water	9034	

Analysis Batch: 481056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138853-2	G6M-07-02X-SPR17	Total/NA	Water	9034	
MB 680-481056/1	Method Blank	Total/NA	Water	9034	
LCS 680-481056/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-481056/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-138853-2 DU	G6M-07-02X-SPR17	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-04-13X-SPR17

Lab Sample ID: 680-138853-1

Date Collected: 05/16/17 09:35

Matrix: Water

Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481343	05/25/17 12:27	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 20:39	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	481967	05/31/17 16:57	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 02:05	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 21:31	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:08	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481049	05/23/17 10:58	LAF	TAL SAV
	Instrument ID:	ICPD								
Total/NA	Analysis	9060A		1			375169	05/26/17 01:20	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			374638	05/22/17 15:10	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-07-02X-SPR17

Lab Sample ID: 680-138853-2

Date Collected: 05/16/17 10:45

Matrix: Water

Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	481343	05/25/17 13:54	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 20:51	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	481967	05/31/17 17:15	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 01:10	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 19:55	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:10	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481056	05/23/17 11:40	LAF	TAL SAV
	Instrument ID:	ICPD								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-07-02X-SPR17 — Lab Sample ID: 680-138853-2

Date Collected: 05/16/17 10:45 — **Matrix: Water**
Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1			375169	05/26/17 01:35	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			374638	05/22/17 15:15	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-04-02X-SPR17 — Lab Sample ID: 680-138853-3

Date Collected: 05/16/17 13:25 — **Matrix: Water**
Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481343	05/25/17 12:49	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	8260B	DL	2	5 mL	5 mL	481343	05/25/17 14:38	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 21:04	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	481967	05/31/17 17:32	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 01:55	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 21:11	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:12	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481049	05/23/17 10:58	LAF	TAL SAV
	Instrument ID:	ICPD								
Total/NA	Analysis	9060A		1			375169	05/26/17 01:50	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			374638	05/22/17 15:21	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-DUP-2-SPR17 — Lab Sample ID: 680-138853-4

Date Collected: 05/16/17 13:50 — **Matrix: Water**
Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	481343	05/25/17 14:16	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 21:17	SMC	TAL SAV
	Instrument ID:	CVGU								

Client Sample ID: G6M-DUP-2-SPR17

Lab Sample ID: 680-138853-4

Date Collected: 05/16/17 13:50

Matrix: Water

Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	5 mL	5 mL	481967	05/31/17 17:50	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 01:35	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 21:03	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:14	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481049	05/23/17 10:58	LAF	TAL SAV
	Instrument ID:	ICPD								
Total/NA	Analysis	9060A		1			375169	05/26/17 02:04	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			374638	05/22/17 15:26	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-03-07X-SPR17

Lab Sample ID: 680-138853-5

Date Collected: 05/16/17 15:40

Matrix: Water

Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481343	05/25/17 13:11	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 21:30	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	482246	05/31/17 19:17	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 01:40	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 21:07	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:16	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481049	05/23/17 10:58	LAF	TAL SAV
	Instrument ID:	ICPD								
Total/NA	Analysis	9060A		1			375169	05/26/17 02:19	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			374638	05/22/17 15:43	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: G6M-13-02X-SPR17

Lab Sample ID: 680-138853-6

Date Collected: 05/16/17 09:40
Matrix: Water
Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481343	05/25/17 13:33	DAS	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 21:43	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	482246	05/31/17 19:34	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 02:10	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 21:35	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:34	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481049	05/23/17 10:58	LAF	TAL SAV
	Instrument ID:	ICPD								
Total/NA	Analysis	9060A		1			375169	05/26/17 02:34	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			374638	05/22/17 15:48	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: MW-3-SPR17

Lab Sample ID: 680-138853-7

Date Collected: 05/17/17 12:15
Matrix: Water
Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481703	05/27/17 16:44	CEJ	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 21:56	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	482246	05/31/17 19:51	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480630	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6010C		1			480827	05/20/17 02:00	BCB	TAL SAV
	Instrument ID:	ICPF								
Dissolved	Prep	3005A			50 mL	250 mL	480627	05/19/17 11:43	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481403	05/24/17 21:27	BJB	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	374765	05/23/17 19:40	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481049	05/23/17 10:58	LAF	TAL SAV
	Instrument ID:	ICPD								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Client Sample ID: MW-3-SPR17

Lab Sample ID: 680-138853-7

Date Collected: 05/17/17 12:15

Matrix: Water

Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1			375169	05/26/17 02:49	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 16:26	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: Trip Blank

Lab Sample ID: 680-138853-8

Date Collected: 05/17/17 00:00

Matrix: Water

Date Received: 05/18/17 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481703	05/27/17 12:23	CEJ	TAL SAV
	Instrument ID:	CMSA2								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

PO # 17-636 | Devens - AOC50 1024-011

Chain of Custody Record

Page: 1 of: 1

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F, Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation: Kevin L. Anderson

Sampler(s) Signature(s)

Laboratory: Test America - Savannah

Address:

Contact: Jerry Lanier

Regulatory Facility No.

Project Name: Devens Spring 2017 LTM

Sampling QAP No.:

Approval Date:

TAT: Routine

Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353 2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Remarks	Lab. No.
66M-04	-13X-SPR17	5/16	935	P	GW	15	X	X	X	X	X	X	X	X		
66M-07	-04X-SPR17	5/16	1045	P	GW	15	X	X	X	X	X	X	X	X		
66M-04	-02X-SPR17	5/16	1325	P	GW	15	X	X	X	X	X	X	X	X		
66M-[illegible]	DUP-2 SPR17	5/16	1350	P	GW	15	X	X	X	X	X	X	X	X		
66M-03	-07X-SPR17	5/16	1540	P	GW	15	X	X	X	X	X	X	X	X		
66M-13	-02X-SPR17	5/17	940	P	GW	15	X	X	X	X	X	X	X	X		
MW-3	-SPR17	5/17	1215	P	GW	15	X	X	X	X	X	X	X	X		
				P	GW											
				P	GW											
	Trip Blank	—	—	O	O	2	X									

Total Number of Containers: 0

Shipping Details: courier pick up

Date Out: Via:

Returned: Via:

Additional Comments:

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[illegible]	5/17/17	1330	[illegible] KGS	5/17/17	1330
	[illegible] KGS	5/17/17	1418	[illegible]	5/17/17	1465
	[illegible]	5/17/17	1610	N. JACKSON TA	5-18-17	905

email logins and results to:

lekes@komangs.com

Lab Comments

3-8/4.3

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other

PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other

COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

680-138853 Chain of Custody

Chain of Custody Record

PO # 17-636 | Devens - AOC50 1024-011 | Page: 1 of: 1

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F, Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation: [illegible]

Sampler(s) Signature(s): [illegible]

Laboratory: Test America - Savannah

Address:

Contact: Jerry Lanier

Regulatory Facility No.

Project Name: Devens Spring 2017 LTM

Sampling QAP No.:

Approval Date:

TAT: Routine

Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested: VOCs/SW8260 3-40-ml VOA vials (HCl); RSK175 3-40-ml VOA vials (HCl); Sulfate-SW9056 1-125-ml poly; Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4); Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH); Alkalinity/SM2320B 1-250-ml poly; TOC/SW9060 1-500-ml amber glass (H2SO4); Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260	RSK175	Sulfate-SW9056	Nitrate/Nitrite-E353.2	Sulfide-SW9034	Alkalinity/SM2320B	TOC/SW9060	Dissolved Metals*	Remarks	Lab. No.
66M-01	-13X-SPR17	5/16	935	P	GW	15	X	X	X	X	X	X	X	X		
66M-07	-02X-SPR17	5/16	1045	P	GW	15	X	X	X	X	X	X	X	X		
66M-04	-02X-SPR17	5/16	1325	P	GW	15	X	X	X	X	X	X	X	X		
66M-[illegible]	DUP-2 SPR17	5/16	1350	P	GW	15	X	X	X	X	X	X	X	X		
66M-03	-07X-SPR17	5/16	1540	P	GW	15	X	X	X	X	X	X	X	X		
66M-13	-07X-SPR17	5/17	940	P	GW	15	X	X	X	X	X	X	X	X		
MW-3	-SPR17	5/17	1215	P	GW	15	X	X	X	X	X	X	X	X		
				P	GW											
				P	GW											
	Trip Blank	—	—	O	O	2	X									

680-138853 Chain of Custody

Shipping Details: courier pick up | Total Number of Containers: 0

Date Out: Via:

Returned: Via:

Additional Comments:

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[illegible]	5/17/17	1330	[illegible] KGS	5/17/17	1330
	[illegible] KGS	5/17/17	1418	[illegible]	5/17/17	1465
	[illegible]	5/17/17	1610	N. JACKSON TA	5-18-17	905

email logins and results to:

lekes@komangs.com

Lab Comments

3-8/4.3

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other

PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other

COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

Chain of Custody Record

PO # 17-636 | Devens - AOC50 1024-011 | Page: 1 of: 1

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F, Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation: [illegible]

Sampler(s) Signature(s): [illegible]

Laboratory: Test America - Savannah

Address:

Contact: Jerry Lanier

Regulatory Facility No.

Project Name: Devens Spring 2017 LTM

Sampling QAP No.:

Approval Date:

TAT: Routine

Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Remarks	Lab. No.
66M-04	-13X-SPR17	5/16	935	P	GW	15	X	X	X	X	X	X	X	X		
66M-07	-02X-SPR17	5/16	1045	P	GW	15	X	X	X	X	X	X	X	X		
66M-04	-01X-SPR17	5/16	1325	P	GW	15	X	X	X	X	X	X	X	X		
66M-[illegible]	DUP-2 SPR17	5/16	1350	P	GW	15	X	X	X	X	X	X	X	X		
66M-07	-07X-SPR17	5/16	1540	P	GW	15	X	X	X	X	X	X	X	X		
66M-13	-02X-SPR17	5/17	940	P	GW	15	X	X	X	X	X	X	X	X		
MW-3	-SPR17	5/17	1215	P	GW	15	X	X	X	X	X	X	X	X		
				P	GW											
				P	GW											
	Trip Blank	—	—	O	O	2	X									

Total Number of Containers

Shipping Details: courier pick up | 0

Date Out: Via:

Returned: Via:

Additional Comments:

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[illegible]	5/17/17	1330	[illegible] KGS	5/17/17	1330
	[illegible] KGS	5/17/17	1418	[illegible]	5/17/17	1415
	[illegible]	5-17-17	1610	[illegible]	5-18-17	0835

email logins and results to:

lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐

On ICE ☐

Temperature 1.1, 1.7 C

IR#7 0.0

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

680-138853 Chain of Custody

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other

PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other

COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-138853-1

Login Number: 138853

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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.	N/A	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138853-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-17 *
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17 *
Florida	NELAP	4	E87052	06-30-17 *
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	N/A	06-30-17 *
Georgia	State Program	4	803	06-30-17 *
Guam	State Program	9	15-005r	04-16-17 *
Hawaii	State Program	9	N/A	06-30-17 *
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17 *
Iowa	State Program	7	353	06-30-17 *
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-17 *
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
Louisiana	NELAP	6	30690	06-30-17 *
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17 *
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-17 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17 *
New Jersey	NELAP	2	GA769	06-30-17 *
New Mexico	State Program	6	N/A	06-30-17 *
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-17 *
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17 *
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-17 *
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17 *
Virginia	NELAP	3	460161	06-14-17 *
Washington	State Program	10	C805	06-10-17 *
West Virginia (DW)	State Program	3	9950C	12-31-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Denver

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

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

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-138990-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
160 East Main St
Suite 2F
Westborough, Massachusetts 01581

Attn: Laurie Ekes

Authorized for release by:
6/13/2017 3:47:42 PM

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LINKS

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 7
Method Summary 8
Definitions/Glossary 9
Detection Summary 11
Client Sample Results 16
Surrogate Summary 48
QC Sample Results 49
QC Association Summary 80
Lab Chronicle 88
Chain of Custody 98
Receipt Checklists 102
Certification Summary 104

Job ID: 680-138990-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-138990-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 05/20/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.0º C, 1.3º C and 2.1º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), Trip Blank (680-138990-10), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/31/2017, 06/01/2017 and 06/02/2017.

The continuing calibration verification (CCV) associated with batch 680-482104 recovered above the upper control limit for 2,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 680-482104/3).

The closing continuing calibration verification (CCVC) associated with batch 680-482104 recovered above the upper control limit for Dichlorodifluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The method blank for preparation batch 482104 contained Carbon Disulfide, Hexachlorobutadiene, Naphthalene, and n-Butylbenzene above the method detection limit (MDL). 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.

Dichlorodifluoromethane exceeded the RPD limit for LCSD 680-482104/5. Refer to the QC report for details.

1,2,3-Trichlorobenzene and Naphthalene exceeded the RPD limit for the MSD of sample G6M-13-06X-SPR17MSD (680-138990-7) in batch 680-482104.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples G6M-03-01X-SPR17 (680-138990-11)[2X], G6M-02-08X-SPR17 (680-138990-12)[20X], G6M-13-05X-SPR17 (680-138990-13)[20X], G6M-DUP-1 (680-138990-14)[20X], IW-17D-SPR17 (680-138990-15)[5X] and IW-18D-SPR17 (680-138990-16)[5X] required dilution

Job ID: 680-138990-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-481931, and 680-482288..

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

DISSOLVED GASES

Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 05/30/2017 and 05/31/2017.

Due to the high concentration of Methane, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 680-481946 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 680-481882.

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

METALS (ICP) - DISSOLVED

Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for Metals (ICP) - Dissolved in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/22/2017 and 05/24/2017 and analyzed on 05/25/2017.

Iron and Manganese failed the recovery criteria low for the MS/MSD of sample G6M-13-06X-SPR17 (680-138990-7) in batch 680-481561.

Refer to the QC report for details.

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

METALS (ICP)

Sample G6M-RB1 SPR17 (680-138990-9) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/30/2017 and analyzed on 06/01/2017.

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

METALS (ICPMS) - DISSOLVED

Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared on 05/22/2017 and 05/24/2017 and analyzed on 05/25/2017 and 05/26/2017.

Arsenic failed the recovery criteria low for the MS of sample G6M-13-06X-SPR17MS (680-138990-7) in batch 680-481584.

Job ID: 680-138990-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Refer to the QC report for details.

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

METALS
Sample G6M-RB1 SPR17 (680-138990-9) was analyzed for Metals in accordance with EPA SW-846 Method 6020. The samples were prepared on 05/30/2017 and analyzed on 05/31/2017.

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

ALKALINITY
Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 05/24/2017 and 05/25/2017.

Alkalinity was detected in method blank MB 280-375005/31 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Alkalinity was detected in method blank MB 280-375005/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Alkalinity was detected in method blank MB 280-375147/31 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN
Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/30/2017.

Nitrate/Nitrite-N failed the recovery criteria low for the MS/MSD of sample G6M-13-04X-SPR17 (680-138990-3) in batch 280-375575.

Nitrate/Nitrite-N failed the recovery criteria low for the MS/MSD of sample G6M-13-06X-SPR17 (680-138990-7) in batch 280-375575.

Refer to the QC report for details.

Sample G6M-02-08X-SPR17 (680-138990-12)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE
Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 05/23/2017, 05/25/2017 and 06/02/2017.

Job ID: 680-138990-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

The following sample(s) was analyzed outside of analytical holding time due to lab scheduling error: IW-18D-SPR17 (680-138990-16)

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)

Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 06/08/2017, 06/09/2017 and 06/11/2017.

Samples G6M-97-05B-SPR17 (680-138990-1)[2X] and G6M-13-04X-SPR17 (680-138990-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL ORGANIC CARBON

Samples G6M-97-05B-SPR17 (680-138990-1), G6M-13-01X-SPR17 (680-138990-2), G6M-13-04X-SPR17 (680-138990-3), G6M-04-09X-SPR17 (680-138990-4), G6M-04-10A-SPR17 (680-138990-5), G6M-04-10X-SPR17 (680-138990-6), G6M-13-06X-SPR17 (680-138990-7), G6M-02-01X-SPR17 (680-138990-8), G6M-RB1 SPR17 (680-138990-9), G6M-03-01X-SPR17 (680-138990-11), G6M-02-08X-SPR17 (680-138990-12), G6M-13-05X-SPR17 (680-138990-13), G6M-DUP-1 (680-138990-14), IW-17D-SPR17 (680-138990-15) and IW-18D-SPR17 (680-138990-16) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 05/25/2017 and 05/26/2017.

The first CCV failed high but the remaining three replicates were within limits. The data is being qualified and reported. TOC 280-375195

Total Organic Carbon - Duplicates was detected in method blank MB 280-375195/35 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples G6M-13-06X-SPR17 (680-138990-7)[1.79X], G6M-02-08X-SPR17 (680-138990-12)[22.73X], IW-17D-SPR17 (680-138990-15) [15X] and IW-18D-SPR17 (680-138990-16)[20.83X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-138990-1	G6M-97-05B-SPR17	Water	05/17/17 14:50	05/20/17 10:12
680-138990-2	G6M-13-01X-SPR17	Water	05/18/17 09:30	05/20/17 10:12
680-138990-3	G6M-13-04X-SPR17	Water	05/18/17 11:10	05/20/17 10:12
680-138990-4	G6M-04-09X-SPR17	Water	05/18/17 13:20	05/20/17 10:12
680-138990-5	G6M-04-10A-SPR17	Water	05/18/17 14:30	05/20/17 10:12
680-138990-6	G6M-04-10X-SPR17	Water	05/18/17 15:55	05/20/17 10:12
680-138990-7	G6M-13-06X-SPR17	Water	05/19/17 08:05	05/20/17 10:12
680-138990-8	G6M-02-01X-SPR17	Water	05/19/17 11:20	05/20/17 10:12
680-138990-9	G6M-RB1 SPR17	Water	05/19/17 12:40	05/20/17 10:12
680-138990-10	Trip Blank	Water	05/19/17 00:00	05/20/17 10:12
680-138990-11	G6M-03-01X-SPR17	Water	05/18/17 10:42	05/20/17 10:12
680-138990-12	G6M-02-08X-SPR17	Water	05/18/17 12:32	05/20/17 10:12
680-138990-13	G6M-13-05X-SPR17	Water	05/18/17 15:02	05/20/17 10:12
680-138990-14	G6M-DUP-1	Water	05/18/17 15:07	05/20/17 10:12
680-138990-15	IW-17D-SPR17	Water	05/19/17 10:02	05/20/17 10:12
680-138990-16	IW-18D-SPR17	Water	05/19/17 11:47	05/20/17 10:12

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
D	The reported value is from a dilution.
M	Manual integrated compound.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
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.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.
H	Sample was prepped or analyzed beyond the specified holding time
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-97-05B-SPR17 — Lab Sample ID: 680-138990-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.71	J	1.0	0.50	0.33	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	8.6		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	8.6		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene	190		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Trichloroethene	15		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Methane	0.84		0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	7.0	D M	2.0	2.0	0.80	mg/L	2		9056A	Total/NA
Nitrate/Nitrite-N	0.94		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.33	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	31	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-13-01X-SPR17 — Lab Sample ID: 680-138990-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.4		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	3.4		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene	13		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Trichloroethene	0.85	J	1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Methane (TCD)	830		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	14	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	39	J	50	50	17	ug/L	1		6010C	Dissolved
Manganese	19		10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate/Nitrite-N	0.14		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.62	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	36	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-13-04X-SPR17 — Lab Sample ID: 680-138990-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	2.7	J	5.0	5.0	2.5	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	9.0		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	9.9		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.91	J	1.0	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	1.8		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Vinyl chloride	7.1		1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Ethane	5.7		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	6.2		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	7600		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	47000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	9000		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	400		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.036	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	2.4		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	250		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-04-09X-SPR17 — Lab Sample ID: 680-138990-4

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-04-09X-SPR17 (Continued) — Lab Sample ID: 680-138990-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.48	J	1.0	1.0	0.47	ug/L	1		8260B	Total/NA
Methane (TCD)	14000		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	5.4	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	180000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	3200		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	430		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.15		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	11		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	190		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-04-10A-SPR17 — Lab Sample ID: 680-138990-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.4		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	1.4	J	2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Trichloroethene	0.52	J	1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Vinyl chloride	0.85	J	1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Methane (TCD)	5500		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	15	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	74000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	4800		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	170		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.12		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	5.7		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	38		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-04-10X-SPR17 — Lab Sample ID: 680-138990-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Methane	180		0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	32		1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	20	J	50	50	17	ug/L	1		6010C	Dissolved
Manganese	1100		10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate/Nitrite-N	0.42		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.81	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	12	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-13-06X-SPR17 — Lab Sample ID: 680-138990-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45		10	10	7.0	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	45		10	10	3.4	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.2		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	2.7		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Ethylbenzene	22		1.0	0.50	0.33	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	0.38	J	1.0	1.0	0.35	ug/L	1		8260B	Total/NA
Toluene	2.8		1.0	1.0	0.48	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-13-06X-SPR17 (Continued) — Lab Sample ID: 680-138990-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	0.45	J	1.0	1.0	0.37	ug/L	1		8260B	Total/NA
Vinyl chloride	2.6		1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Xylenes, Total	0.38	J	2.0	0.50	0.23	ug/L	1		8260B	Total/NA
Ethane	14		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	16		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	17000		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	3.0	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	250000	J	50	50	17	ug/L	1		6010C	Dissolved
Manganese	7000	J	10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	500	J	3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.14	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	70	J	1.8	0.90	0.28	mg/L	1.79		9060A	Total/NA
Alkalinity	470		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-02-01X-SPR17 — Lab Sample ID: 680-138990-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.52	J	1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	1.1		1.0	1.0	0.47	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.36	J	1.0	0.50	0.31	ug/L	1		8260B	Total/NA
Methane (TCD)	24000		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	0.51	J M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	110000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	2600		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	500		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.094	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	4.9		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	220		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-RB1 SPR17 — Lab Sample ID: 680-138990-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	0.30	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-138990-10

No Detections.

Client Sample ID: G6M-03-01X-SPR17 — Lab Sample ID: 680-138990-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	130		10	10	7.0	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	170		10	10	3.4	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.70	J	1.0	1.0	0.36	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	240		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	0.82	J	1.0	1.0	0.35	ug/L	1		8260B	Total/NA
o-Xylene	0.27	J	1.0	0.50	0.23	ug/L	1		8260B	Total/NA
Tetrachloroethene	61		1.0	1.0	0.74	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G6M-03-01X-SPR17 (Continued) — Lab Sample ID: 680-138990-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.4		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.3		1.0	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	77		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Vinyl chloride	73		1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Xylenes, Total	1.1	J	2.0	0.50	0.23	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene - DL	210	D	2.0	2.0	0.82	ug/L	2		8260B	Total/NA
Ethylene	120		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	7900		390	77	39	ug/L	1		RSK-175	Total/NA
Sulfate	8.6	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	120000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	70000	D	100	30	10	ug/L	10		6010C	Dissolved
Arsenic	75		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.084	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	26		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	310	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-02-08X-SPR17 — Lab Sample ID: 680-138990-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	200	D	200	200	140	ug/L	20		8260B	Total/NA
2-Butanone (MEK)	700	D	200	200	68	ug/L	20		8260B	Total/NA
cis-1,2-Dichloroethene	51	D	20	20	8.2	ug/L	20		8260B	Total/NA
1,2-Dichloroethene, Total	51	D	40	20	15	ug/L	20		8260B	Total/NA
2-Hexanone	480	D	200	100	40	ug/L	20		8260B	Total/NA
Toluene	140	D	20	20	9.6	ug/L	20		8260B	Total/NA
Methane (TCD)	15000		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	770000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	4300		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	410		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Total Organic Carbon - Duplicates	740		23	11	3.5	mg/L	22.73		9060A	Total/NA
Alkalinity	930	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-13-05X-SPR17 — Lab Sample ID: 680-138990-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	64	D	20	20	8.2	ug/L	20		8260B	Total/NA
1,2-Dichloroethene, Total	64	D	40	20	15	ug/L	20		8260B	Total/NA
Tetrachloroethene	1300	D	20	20	15	ug/L	20		8260B	Total/NA
Iron	280		50	50	17	ug/L	1		6010C	Dissolved
Manganese	350		10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate/Nitrite-N	1.5		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.50	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	32	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-DUP-1 — Lab Sample ID: 680-138990-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: G6M-DUP-1 (Continued) — Lab Sample ID: 680-138990-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	46	D	20	20	8.2	ug/L	20		8260B	Total/NA
1,2-Dichloroethene, Total	46	D	40	20	15	ug/L	20		8260B	Total/NA
Tetrachloroethene	1200	D	20	20	15	ug/L	20		8260B	Total/NA
Methane	0.49	J	0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Iron	300		50	50	17	ug/L	1		6010C	Dissolved
Manganese	380		10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate/Nitrite-N	1.5		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.45	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	22	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: IW-17D-SPR17 — Lab Sample ID: 680-138990-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	97	D M	50	50	35	ug/L	5		8260B	Total/NA
2-Butanone (MEK)	140	D	50	50	17	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	16	D	5.0	5.0	2.1	ug/L	5		8260B	Total/NA
1,2-Dichloroethene, Total	16	D	10	5.0	3.7	ug/L	5		8260B	Total/NA
Tetrachloroethene	4.1	J D	5.0	5.0	3.7	ug/L	5		8260B	Total/NA
Toluene	270	D	5.0	5.0	2.4	ug/L	5		8260B	Total/NA
Trichloroethene	6.1	D	5.0	5.0	2.4	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	4.3	J D	5.0	5.0	2.4	ug/L	5		8260B	Total/NA
Methane (TCD)	24000		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	130000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	14000		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	110		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.11		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	680		15	7.5	2.3	mg/L	15		9060A	Total/NA
Alkalinity	110		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: IW-18D-SPR17 — Lab Sample ID: 680-138990-16

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	100	D	50	50	35	ug/L	5		8260B	Total/NA
2-Butanone (MEK)	410	D	50	50	17	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	660	D	5.0	5.0	2.1	ug/L	5		8260B	Total/NA
1,2-Dichloroethene, Total	660	D	10	5.0	3.7	ug/L	5		8260B	Total/NA
Tetrachloroethene	5.1	D	5.0	5.0	3.7	ug/L	5		8260B	Total/NA
Toluene	16	D	5.0	5.0	2.4	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	3.1	J D	5.0	5.0	2.4	ug/L	5		8260B	Total/NA
Ethylene	15		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	21000		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	140000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	8900		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	150		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.21		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	680		21	10	3.2	mg/L	20.83		9060A	Total/NA
Alkalinity	110		5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-97-05B-SPR17
Date Collected: 05/17/17 14:50
Date Received: 05/20/17 10:12

Lab Sample ID: 680-138990-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 10:18	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 10:18	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 10:18	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 10:18	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 10:18	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 10:18	1
Carbon tetrachloride	**0.71**	**J**	1.0	0.50	0.33	ug/L		05/31/17 10:18	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 10:18	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 10:18	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 10:18	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 10:18	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 10:18	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 10:18	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 10:18	1
cis-1,2-Dichloroethene	**8.6**		1.0	1.0	0.41	ug/L		05/31/17 10:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 10:18	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 10:18	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 10:18	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 10:18	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 10:18	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 10:18	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 10:18	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 10:18	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 10:18	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 10:18	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 10:18	1
1,2-Dichloroethene, Total	**8.6**		2.0	1.0	0.74	ug/L		05/31/17 10:18	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 10:18	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 10:18	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 10:18	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 10:18	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 10:18	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 10:18	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 10:18	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 10:18	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 10:18	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 10:18	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 10:18	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 10:18	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 10:18	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 10:18	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 10:18	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 10:18	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 10:18	1

Client Sample ID: G6M-97-05B-SPR17

Lab Sample ID: 680-138990-1

Date Collected: 05/17/17 14:50

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 10:18	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 10:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 10:18	1
Tetrachloroethene	**190**		1.0	1.0	0.74	ug/L		05/31/17 10:18	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 10:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 10:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 10:18	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 10:18	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 10:18	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 10:18	1
Trichloroethene	**15**		1.0	1.0	0.48	ug/L		05/31/17 10:18	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 10:18	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 10:18	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 10:18	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 10:18	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 10:18	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 10:18	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 10:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*05/31/17 10:18*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/31/17 10:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*05/31/17 10:18*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/31/17 10:18*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/30/17 22:09	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/30/17 22:09	1
Methane	**0.84**		0.58	0.58	0.29	ug/L		05/30/17 22:09	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**7.0**	**D M**	2.0	2.0	0.80	mg/L		06/08/17 10:54	2

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/25/17 01:43	1
Manganese	3.0	U	10	3.0	1.0	ug/L		05/25/17 01:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/26/17 05:39	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.94**		0.10	0.050	0.019	mg/L		05/30/17 18:23	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 11:40	1
Total Organic Carbon - Duplicates	**0.33**	**J**	1.0	0.50	0.16	mg/L		05/25/17 22:18	1
Alkalinity	**31**	**B**	5.0	3.2	1.1	mg/L		05/24/17 15:53	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-13-01X-SPR17

Lab Sample ID: 680-138990-2

Date Collected: 05/18/17 09:30

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 12:50	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 12:50	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 12:50	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 12:50	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 12:50	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 12:50	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 12:50	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 12:50	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 12:50	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 12:50	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 12:50	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 12:50	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 12:50	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 12:50	1
cis-1,2-Dichloroethene	**3.4**		1.0	1.0	0.41	ug/L		05/31/17 12:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 12:50	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 12:50	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 12:50	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 12:50	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 12:50	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 12:50	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 12:50	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 12:50	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 12:50	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 12:50	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 12:50	1
1,2-Dichloroethene, Total	**3.4**		2.0	1.0	0.74	ug/L		05/31/17 12:50	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 12:50	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 12:50	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 12:50	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 12:50	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 12:50	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 12:50	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 12:50	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 12:50	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 12:50	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 12:50	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 12:50	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 12:50	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 12:50	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 12:50	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 12:50	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 12:50	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 12:50	1

Client Sample ID: G6M-13-01X-SPR17

Lab Sample ID: 680-138990-2

Date Collected: 05/18/17 09:30

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 12:50	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 12:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 12:50	1
Tetrachloroethene	**13**		1.0	1.0	0.74	ug/L		05/31/17 12:50	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 12:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 12:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 12:50	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 12:50	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 12:50	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 12:50	1
Trichloroethene	**0.85**	**J**	1.0	1.0	0.48	ug/L		05/31/17 12:50	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 12:50	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 12:50	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 12:50	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 12:50	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 12:50	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 12:50	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*05/31/17 12:50*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*05/31/17 12:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*05/31/17 12:50*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*05/31/17 12:50*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 13:15	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:15	1
Methane (TCD)	**830**		390	77	39	ug/L		05/31/17 13:15	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**14**	**M**	1.0	1.0	0.40	mg/L		06/08/17 11:29	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**39**	**J**	50	50	17	ug/L		05/25/17 02:40	1
Manganese	**19**		10	3.0	1.0	ug/L		05/25/17 02:40	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/26/17 06:23	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.14**		0.10	0.050	0.019	mg/L		05/30/17 18:25	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**0.62**	**J**	1.0	0.50	0.16	mg/L		05/25/17 22:35	1
Alkalinity	**36**	**B**	5.0	3.2	1.1	mg/L		05/24/17 15:43	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-13-04X-SPR17

Lab Sample ID: 680-138990-3

Date Collected: 05/18/17 11:10

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 13:12	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:12	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:12	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:12	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 13:12	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 13:12	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:12	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 13:12	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:12	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 13:12	1
Chloroethane	**2.7**	**J**	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:12	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 13:12	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 13:12	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:12	1
cis-1,2-Dichloroethene	**9.0**		1.0	1.0	0.41	ug/L		05/31/17 13:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 13:12	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 13:12	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:12	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:12	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:12	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 13:12	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 13:12	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 13:12	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 13:12	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:12	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 13:12	1
1,2-Dichloroethene, Total	**9.9**		2.0	1.0	0.74	ug/L		05/31/17 13:12	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 13:12	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 13:12	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:12	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 13:12	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:12	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 13:12	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 13:12	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:12	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:12	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 13:12	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 13:12	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:12	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 13:12	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 13:12	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 13:12	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:12	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 13:12	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-13-04X-SPR17

Date Collected: 05/18/17 11:10
Date Received: 05/20/17 10:12

Lab Sample ID: 680-138990-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:12	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 13:12	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/31/17 13:12	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:12	1
trans-1,2-Dichloroethene	**0.91**	**J**	1.0	1.0	0.37	ug/L		05/31/17 13:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:12	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:12	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:12	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:12	1
Trichloroethene	**1.8**		1.0	1.0	0.48	ug/L		05/31/17 13:12	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:12	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 13:12	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 13:12	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 13:12	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 13:12	1
Vinyl chloride	**7.1**		1.0	1.0	0.50	ug/L		05/31/17 13:12	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*05/31/17 13:12*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*05/31/17 13:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*		*05/31/17 13:12*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*05/31/17 13:12*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**5.7**		1.1	1.1	0.55	ug/L		05/31/17 13:28	1
Ethylene	**6.2**		1.0	1.0	0.50	ug/L		05/31/17 13:28	1
Methane (TCD)	**7600**		390	77	39	ug/L		05/31/17 13:28	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	5.0	U M	5.0	5.0	2.0	mg/L		06/11/17 16:11	5

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**47000**		50	50	17	ug/L		05/25/17 21:18	1
Manganese	**9000**		10	3.0	1.0	ug/L		05/25/17 21:18	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**400**		3.0	3.0	1.5	ug/L		05/25/17 19:00	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.036**	**J**	0.10	0.050	0.019	mg/L		05/30/17 21:21	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**2.4**		1.0	0.50	0.16	mg/L		05/25/17 22:49	1
Alkalinity	**250**		5.0	3.2	1.1	mg/L		05/24/17 18:42	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-04-09X-SPR17

Lab Sample ID: 680-138990-4

Date Collected: 05/18/17 13:20
Matrix: Water
Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 13:34	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:34	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:34	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:34	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 13:34	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 13:34	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:34	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 13:34	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:34	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 13:34	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:34	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 13:34	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 13:34	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/31/17 13:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 13:34	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 13:34	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:34	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:34	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:34	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 13:34	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 13:34	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 13:34	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 13:34	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:34	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 13:34	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/31/17 13:34	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 13:34	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 13:34	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:34	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 13:34	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:34	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 13:34	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 13:34	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:34	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:34	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 13:34	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 13:34	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:34	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 13:34	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 13:34	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 13:34	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:34	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 13:34	1

Client Sample ID: G6M-04-09X-SPR17

Lab Sample ID: 680-138990-4

Date Collected: 05/18/17 13:20

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:34	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 13:34	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/31/17 13:34	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:34	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:34	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:34	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:34	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:34	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:34	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 13:34	1
1,2,4-Trimethylbenzene	**0.48**	**J**	1.0	1.0	0.47	ug/L		05/31/17 13:34	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 13:34	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 13:34	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:34	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*05/31/17 13:34*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/31/17 13:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*05/31/17 13:34*	*1*
Toluene-d8 (Surr)	*98*		*89 - 112*		*05/31/17 13:34*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 13:41	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:41	1
Methane (TCD)	**14000**		390	77	39	ug/L		05/31/17 13:41	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**5.4**	**M**	1.0	1.0	0.40	mg/L		06/08/17 12:03	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**180000**		50	50	17	ug/L		05/25/17 02:06	1
Manganese	**3200**		10	3.0	1.0	ug/L		05/25/17 02:06	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**430**		3.0	3.0	1.5	ug/L		05/26/17 05:57	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.15**		0.10	0.050	0.019	mg/L		05/30/17 21:27	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**11**		1.0	0.50	0.16	mg/L		05/25/17 23:50	1
Alkalinity	**190**		5.0	3.2	1.1	mg/L		05/24/17 18:37	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-04-10A-SPR17

Lab Sample ID: 680-138990-5

Date Collected: 05/18/17 14:30

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 13:56	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:56	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:56	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:56	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 13:56	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 13:56	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:56	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 13:56	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:56	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 13:56	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:56	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 13:56	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 13:56	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:56	1
cis-1,2-Dichloroethene	**1.4**		1.0	1.0	0.41	ug/L		05/31/17 13:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 13:56	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 13:56	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:56	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:56	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 13:56	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 13:56	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 13:56	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 13:56	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 13:56	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:56	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 13:56	1
1,2-Dichloroethene, Total	**1.4**	**J**	2.0	1.0	0.74	ug/L		05/31/17 13:56	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 13:56	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 13:56	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:56	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 13:56	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:56	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 13:56	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 13:56	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:56	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:56	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 13:56	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 13:56	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 13:56	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 13:56	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 13:56	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 13:56	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:56	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 13:56	1

Client Sample ID: G6M-04-10A-SPR17

Lab Sample ID: 680-138990-5

Date Collected: 05/18/17 14:30

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 13:56	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 13:56	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/31/17 13:56	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 13:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:56	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 13:56	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 13:56	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 13:56	1
Trichloroethene	**0.52**	**J**	1.0	1.0	0.48	ug/L		05/31/17 13:56	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 13:56	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 13:56	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 13:56	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 13:56	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 13:56	1
Vinyl chloride	**0.85**	**J**	1.0	1.0	0.50	ug/L		05/31/17 13:56	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*05/31/17 13:56*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*05/31/17 13:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*		*05/31/17 13:56*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*05/31/17 13:56*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 13:54	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 13:54	1
Methane (TCD)	**5500**		390	77	39	ug/L		05/31/17 13:54	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**15**	**M**	1.0	1.0	0.40	mg/L		06/08/17 12:21	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**74000**		50	50	17	ug/L		05/25/17 02:11	1
Manganese	**4800**		10	3.0	1.0	ug/L		05/25/17 02:11	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**170**		3.0	3.0	1.5	ug/L		05/26/17 06:01	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.12**		0.10	0.050	0.019	mg/L		05/30/17 21:29	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**5.7**		1.0	0.50	0.16	mg/L		05/26/17 00:11	1
Alkalinity	**38**		5.0	3.2	1.1	mg/L		05/24/17 18:26	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-04-10X-SPR17

Lab Sample ID: 680-138990-6

Date Collected: 05/18/17 15:55
Matrix: Water
Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 14:17	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 14:17	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:17	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 14:17	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 14:17	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 14:17	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 14:17	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 14:17	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 14:17	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 14:17	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:17	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 14:17	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 14:17	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 14:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/31/17 14:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 14:17	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 14:17	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 14:17	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:17	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 14:17	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 14:17	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 14:17	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 14:17	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 14:17	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:17	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 14:17	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/31/17 14:17	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 14:17	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 14:17	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:17	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 14:17	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 14:17	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 14:17	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 14:17	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 14:17	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 14:17	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 14:17	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 14:17	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 14:17	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 14:17	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 14:17	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 14:17	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 14:17	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 14:17	1

Client Sample ID: G6M-04-10X-SPR17

Lab Sample ID: 680-138990-6

Date Collected: 05/18/17 15:55

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 14:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 14:17	1
Tetrachloroethene	**1.2**		1.0	1.0	0.74	ug/L		05/31/17 14:17	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 14:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 14:17	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:17	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:17	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 14:17	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 14:17	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 14:17	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 14:17	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 14:17	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 14:17	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 14:17	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:17	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*05/31/17 14:17*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/31/17 14:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*05/31/17 14:17*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/31/17 14:17*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 14:07	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:07	1
Methane	**180**		0.58	0.58	0.29	ug/L		05/31/17 14:07	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**32**		1.0	1.0	0.40	mg/L		06/08/17 12:38	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**20**	**J**	50	50	17	ug/L		05/25/17 02:16	1
Manganese	**1100**		10	3.0	1.0	ug/L		05/25/17 02:16	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/26/17 06:05	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.42**		0.10	0.050	0.019	mg/L		05/30/17 21:31	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**0.81**	**J**	1.0	0.50	0.16	mg/L		05/26/17 04:12	1
Alkalinity	**12**	**B**	5.0	3.2	1.1	mg/L		05/24/17 17:56	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-13-06X-SPR17

Lab Sample ID: 680-138990-7

Date Collected: 05/19/17 08:05

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**45**		10	10	7.0	ug/L		06/01/17 13:47	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 13:47	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 13:47	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 13:47	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
2-Butanone (MEK)	**45**		10	10	3.4	ug/L		06/01/17 13:47	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		06/01/17 13:47	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 13:47	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		06/01/17 13:47	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 13:47	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		06/01/17 13:47	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 13:47	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		06/01/17 13:47	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		06/01/17 13:47	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 13:47	1
cis-1,2-Dichloroethene	**2.2**		1.0	1.0	0.41	ug/L		06/01/17 13:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		06/01/17 13:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		06/01/17 13:47	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 13:47	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 13:47	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 13:47	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		06/01/17 13:47	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		06/01/17 13:47	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		06/01/17 13:47	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		06/01/17 13:47	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 13:47	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		06/01/17 13:47	1
1,2-Dichloroethene, Total	**2.7**		2.0	1.0	0.74	ug/L		06/01/17 13:47	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		06/01/17 13:47	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		06/01/17 13:47	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 13:47	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		06/01/17 13:47	1
Ethylbenzene	**22**		1.0	0.50	0.33	ug/L		06/01/17 13:47	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		06/01/17 13:47	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		06/01/17 13:47	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 13:47	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 13:47	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		06/01/17 13:47	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		06/01/17 13:47	1
m-Xylene & p-Xylene	**0.38**	**J**	1.0	1.0	0.35	ug/L		06/01/17 13:47	1
Naphthalene	5.0	U J	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/01/17 13:47	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		06/01/17 13:47	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		06/01/17 13:47	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 13:47	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		06/01/17 13:47	1

Client Sample ID: G6M-13-06X-SPR17

Lab Sample ID: 680-138990-7

Date Collected: 05/19/17 08:05

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 13:47	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 13:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		06/01/17 13:47	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		06/01/17 13:47	1
Toluene	**2.8**		1.0	1.0	0.48	ug/L		06/01/17 13:47	1
trans-1,2-Dichloroethene	**0.45**	**J**	1.0	1.0	0.37	ug/L		06/01/17 13:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 13:47	1
1,2,3-Trichlorobenzene	5.0	U J	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 13:47	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 13:47	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 13:47	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 13:47	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 13:47	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		06/01/17 13:47	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/01/17 13:47	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		06/01/17 13:47	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		06/01/17 13:47	1
Vinyl chloride	**2.6**		1.0	1.0	0.50	ug/L		06/01/17 13:47	1
Xylenes, Total	**0.38**	**J**	2.0	0.50	0.23	ug/L		06/01/17 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*85 - 114*		*06/01/17 13:47*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*06/01/17 13:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*81 - 118*		*06/01/17 13:47*	*1*
Toluene-d8 (Surr)	*111*		*89 - 112*		*06/01/17 13:47*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**14**		1.1	1.1	0.55	ug/L		05/31/17 14:20	1
Ethylene	**16**		1.0	1.0	0.50	ug/L		05/31/17 14:20	1
Methane (TCD)	**17000**		390	77	39	ug/L		05/31/17 14:20	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**3.0**	**M**	1.0	1.0	0.40	mg/L		06/09/17 15:25	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**250000**	**J**	50	50	17	ug/L		05/25/17 20:52	1
Manganese	**7000**	**J**	10	3.0	1.0	ug/L		05/25/17 20:52	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**500**	**J**	3.0	3.0	1.5	ug/L		05/25/17 18:42	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.14**	**J**	0.10	0.050	0.019	mg/L		05/30/17 21:51	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**70**	**J**	1.8	0.90	0.28	mg/L		05/26/17 04:28	1.79
Alkalinity	**470**		5.0	3.2	1.1	mg/L		05/25/17 15:46	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-02-01X-SPR17

Lab Sample ID: 680-138990-8

Date Collected: 05/19/17 11:20

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		06/02/17 10:37	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 10:37	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:37	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 10:37	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		06/02/17 10:37	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		06/02/17 10:37	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 10:37	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		06/02/17 10:37	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 10:37	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		06/02/17 10:37	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:37	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		06/02/17 10:37	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		06/02/17 10:37	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 10:37	1
cis-1,2-Dichloroethene	**0.52**	**J**	1.0	1.0	0.41	ug/L		06/02/17 10:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		06/02/17 10:37	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		06/02/17 10:37	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 10:37	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:37	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 10:37	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		06/02/17 10:37	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		06/02/17 10:37	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		06/02/17 10:37	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		06/02/17 10:37	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:37	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		06/02/17 10:37	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		06/02/17 10:37	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		06/02/17 10:37	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		06/02/17 10:37	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:37	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		06/02/17 10:37	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 10:37	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		06/02/17 10:37	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		06/02/17 10:37	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 10:37	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 10:37	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		06/02/17 10:37	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		06/02/17 10:37	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 10:37	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/02/17 10:37	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		06/02/17 10:37	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		06/02/17 10:37	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 10:37	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		06/02/17 10:37	1

Client Sample ID: G6M-02-01X-SPR17

Lab Sample ID: 680-138990-8

Date Collected: 05/19/17 11:20

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 10:37	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		06/02/17 10:37	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		06/02/17 10:37	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 10:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 10:37	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:37	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:37	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 10:37	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 10:37	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 10:37	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		06/02/17 10:37	1
1,2,4-Trimethylbenzene	**1.1**		1.0	1.0	0.47	ug/L		06/02/17 10:37	1
1,3,5-Trimethylbenzene	**0.36**	**J**	1.0	0.50	0.31	ug/L		06/02/17 10:37	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		06/02/17 10:37	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:37	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		06/02/17 10:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*06/02/17 10:37*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/02/17 10:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*06/02/17 10:37*	*1*
Toluene-d8 (Surr)	*97*		*89 - 112*		*06/02/17 10:37*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 16:33	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 16:33	1
Methane (TCD)	**24000**		390	77	39	ug/L		05/31/17 16:33	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**0.51**	**J M**	1.0	1.0	0.40	mg/L		06/09/17 16:17	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**110000**		50	50	17	ug/L		05/25/17 01:57	1
Manganese	**2600**		10	3.0	1.0	ug/L		05/25/17 01:57	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**500**		3.0	3.0	1.5	ug/L		05/26/17 05:50	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.094**	**J**	0.10	0.050	0.019	mg/L		05/30/17 21:33	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**4.9**		1.0	0.50	0.16	mg/L		05/26/17 05:23	1
Alkalinity	**220**		5.0	3.2	1.1	mg/L		05/25/17 15:52	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-RB1 SPR17

Lab Sample ID: 680-138990-9

Date Collected: 05/19/17 12:40

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		06/02/17 10:59	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 10:59	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:59	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 10:59	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		06/02/17 10:59	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		06/02/17 10:59	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 10:59	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		06/02/17 10:59	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 10:59	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		06/02/17 10:59	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:59	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		06/02/17 10:59	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		06/02/17 10:59	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 10:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		06/02/17 10:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		06/02/17 10:59	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		06/02/17 10:59	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 10:59	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:59	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 10:59	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		06/02/17 10:59	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		06/02/17 10:59	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		06/02/17 10:59	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		06/02/17 10:59	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:59	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		06/02/17 10:59	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		06/02/17 10:59	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		06/02/17 10:59	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		06/02/17 10:59	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:59	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		06/02/17 10:59	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 10:59	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		06/02/17 10:59	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		06/02/17 10:59	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 10:59	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 10:59	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		06/02/17 10:59	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		06/02/17 10:59	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 10:59	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/02/17 10:59	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		06/02/17 10:59	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		06/02/17 10:59	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 10:59	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		06/02/17 10:59	1

Client Sample ID: G6M-RB1 SPR17

Lab Sample ID: 680-138990-9

Date Collected: 05/19/17 12:40

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 10:59	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		06/02/17 10:59	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		06/02/17 10:59	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 10:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 10:59	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 10:59	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 10:59	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 10:59	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 10:59	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 10:59	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		06/02/17 10:59	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/02/17 10:59	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		06/02/17 10:59	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		06/02/17 10:59	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 10:59	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		06/02/17 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*06/02/17 10:59*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*06/02/17 10:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*06/02/17 10:59*	*1*
Toluene-d8 (Surr)	*97*		*89 - 112*		*06/02/17 10:59*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 16:46	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 16:46	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		05/31/17 16:46	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/08/17 14:58	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		06/01/17 07:17	1
Manganese	3.0	U	10	3.0	1.0	ug/L		06/01/17 07:17	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/31/17 19:31	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		05/30/17 21:37	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**0.30**	**J**	1.0	0.50	0.16	mg/L		05/26/17 05:38	1
Alkalinity	3.2	U	5.0	3.2	1.1	mg/L		05/25/17 16:10	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-138990-10

Date Collected: 05/19/17 00:00
Matrix: Water
Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		06/01/17 12:40	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 12:40	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 12:40	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 12:40	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		06/01/17 12:40	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		06/01/17 12:40	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 12:40	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		06/01/17 12:40	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 12:40	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		06/01/17 12:40	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 12:40	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		06/01/17 12:40	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		06/01/17 12:40	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 12:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		06/01/17 12:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		06/01/17 12:40	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		06/01/17 12:40	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 12:40	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 12:40	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 12:40	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		06/01/17 12:40	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		06/01/17 12:40	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		06/01/17 12:40	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		06/01/17 12:40	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 12:40	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		06/01/17 12:40	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		06/01/17 12:40	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		06/01/17 12:40	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		06/01/17 12:40	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 12:40	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		06/01/17 12:40	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 12:40	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		06/01/17 12:40	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		06/01/17 12:40	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 12:40	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 12:40	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		06/01/17 12:40	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		06/01/17 12:40	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 12:40	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/01/17 12:40	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		06/01/17 12:40	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		06/01/17 12:40	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 12:40	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		06/01/17 12:40	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-138990-10

Date Collected: 05/19/17 00:00

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 12:40	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 12:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		06/01/17 12:40	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		06/01/17 12:40	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 12:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 12:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 12:40	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 12:40	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 12:40	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 12:40	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 12:40	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 12:40	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		06/01/17 12:40	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/01/17 12:40	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		06/01/17 12:40	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		06/01/17 12:40	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 12:40	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		06/01/17 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*85 - 114*		*06/01/17 12:40*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 119*		*06/01/17 12:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*81 - 118*		*06/01/17 12:40*	*1*
Toluene-d8 (Surr)	*112*		*89 - 112*		*06/01/17 12:40*	*1*

Client Sample ID: G6M-03-01X-SPR17

Lab Sample ID: 680-138990-11

Date Collected: 05/18/17 10:42

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**130**		10	10	7.0	ug/L		05/31/17 14:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 14:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 14:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
2-Butanone (MEK)	**170**		10	10	3.4	ug/L		05/31/17 14:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 14:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 14:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 14:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 14:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 14:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 14:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 14:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 14:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 14:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 14:39	1

Client Sample ID: G6M-03-01X-SPR17
Date Collected: 05/18/17 10:42
Date Received: 05/20/17 10:12

Lab Sample ID: 680-138990-11
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 14:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 14:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 14:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 14:39	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 14:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 14:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 14:39	1
1,1-Dichloroethene	**0.70**	**J**	1.0	1.0	0.36	ug/L		05/31/17 14:39	1
1,2-Dichloroethene, Total	**240**		2.0	1.0	0.74	ug/L		05/31/17 14:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 14:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 14:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:39	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 14:39	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 14:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 14:39	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 14:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 14:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 14:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 14:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 14:39	1
m-Xylene & p-Xylene	**0.82**	**J**	1.0	1.0	0.35	ug/L		05/31/17 14:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 14:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 14:39	1
o-Xylene	**0.27**	**J**	1.0	0.50	0.23	ug/L		05/31/17 14:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 14:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 14:39	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 14:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 14:39	1
Tetrachloroethene	**61**		1.0	1.0	0.74	ug/L		05/31/17 14:39	1
Toluene	**1.4**		1.0	1.0	0.48	ug/L		05/31/17 14:39	1
trans-1,2-Dichloroethene	**2.3**		1.0	1.0	0.37	ug/L		05/31/17 14:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 14:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 14:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 14:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 14:39	1
Trichloroethene	**77**		1.0	1.0	0.48	ug/L		05/31/17 14:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 14:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 14:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 14:39	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 14:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 14:39	1
Vinyl chloride	**73**		1.0	1.0	0.50	ug/L		05/31/17 14:39	1
Xylenes, Total	**1.1**	**J**	2.0	0.50	0.23	ug/L		05/31/17 14:39	1

Client Sample ID: G6M-03-01X-SPR17

Lab Sample ID: 680-138990-11

Date Collected: 05/18/17 10:42

Matrix: Water

Date Received: 05/20/17 10:12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		85 - 114		05/31/17 14:39	1
Dibromofluoromethane (Surr)	99		80 - 119		05/31/17 14:39	1
1,2-Dichloroethane-d4 (Surr)	98		81 - 118		05/31/17 14:39	1
Toluene-d8 (Surr)	102		89 - 112		05/31/17 14:39	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
cis-1,2-Dichloroethene	210	D	2.0	2.0	0.82	ug/L		06/01/17 13:03	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		85 - 114		06/01/17 13:03	2
Dibromofluoromethane (Surr)	107		80 - 119		06/01/17 13:03	2
1,2-Dichloroethane-d4 (Surr)	114		81 - 118		06/01/17 13:03	2
Toluene-d8 (Surr)	106		89 - 112		06/01/17 13:03	2

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 16:58	1
Ethylene	120		1.0	1.0	0.50	ug/L		05/31/17 16:58	1
Methane (TCD)	7900		390	77	39	ug/L		05/31/17 16:58	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	8.6	M	1.0	1.0	0.40	mg/L		06/08/17 15:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	120000		50	50	17	ug/L		05/25/17 01:52	1
Manganese	70000	D	100	30	10	ug/L		05/25/17 16:16	10

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	75		3.0	3.0	1.5	ug/L		05/26/17 05:46	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.084	J	0.10	0.050	0.019	mg/L		05/30/17 21:57	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	26		1.0	0.50	0.16	mg/L		05/26/17 05:52	1
Alkalinity	310	B	5.0	3.2	1.1	mg/L		05/24/17 17:51	1

Client Sample ID: G6M-02-08X-SPR17

Lab Sample ID: 680-138990-12

Date Collected: 05/18/17 12:32

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	D	200	200	140	ug/L		05/31/17 15:01	20
Benzene	20	U	20	20	8.6	ug/L		05/31/17 15:01	20
Bromobenzene	20	U	20	20	10	ug/L		05/31/17 15:01	20
Bromoform	20	U	20	20	8.6	ug/L		05/31/17 15:01	20
Bromomethane	100	U	100	100	50	ug/L		05/31/17 15:01	20

Client Sample ID: G6M-02-08X-SPR17
Date Collected: 05/18/17 12:32
Date Received: 05/20/17 10:12

Lab Sample ID: 680-138990-12
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Butanone (MEK)	**700**	**D**	200	200	68	ug/L		05/31/17 15:01	20
Carbon disulfide	40	U	40	40	8.6	ug/L		05/31/17 15:01	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		05/31/17 15:01	20
Chlorobenzene	10	U	20	10	5.2	ug/L		05/31/17 15:01	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		05/31/17 15:01	20
Chlorodibromomethane	10	U	20	10	6.4	ug/L		05/31/17 15:01	20
Chloroethane	100	U	100	100	50	ug/L		05/31/17 15:01	20
Chloroform	20	U	20	20	10	ug/L		05/31/17 15:01	20
Chloromethane	20	U	20	20	8.0	ug/L		05/31/17 15:01	20
2-Chlorotoluene	10	U	20	10	5.4	ug/L		05/31/17 15:01	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		05/31/17 15:01	20
cis-1,2-Dichloroethene	**51**	**D**	20	20	8.2	ug/L		05/31/17 15:01	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		05/31/17 15:01	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		05/31/17 15:01	20
Dibromomethane	20	U	20	20	7.0	ug/L		05/31/17 15:01	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		05/31/17 15:01	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		05/31/17 15:01	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		05/31/17 15:01	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		05/31/17 15:01	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		05/31/17 15:01	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		05/31/17 15:01	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		05/31/17 15:01	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		05/31/17 15:01	20
1,2-Dichloroethene, Total	**51**	**D**	40	20	15	ug/L		05/31/17 15:01	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		05/31/17 15:01	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		05/31/17 15:01	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		05/31/17 15:01	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		05/31/17 15:01	20
Ethylbenzene	10	U	20	10	6.6	ug/L		05/31/17 15:01	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		05/31/17 15:01	20
Hexachlorobutadiene	100	U	100	100	50	ug/L		05/31/17 15:01	20
2-Hexanone	**480**	**D**	200	100	40	ug/L		05/31/17 15:01	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		05/31/17 15:01	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		05/31/17 15:01	20
Methylene Chloride	100	U	100	100	50	ug/L		05/31/17 15:01	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		05/31/17 15:01	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		05/31/17 15:01	20
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		05/31/17 15:01	20
Naphthalene	100	U	100	100	50	ug/L		05/31/17 15:01	20
n-Butylbenzene	20	U	20	20	9.4	ug/L		05/31/17 15:01	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		05/31/17 15:01	20
o-Xylene	10	U	20	10	4.6	ug/L		05/31/17 15:01	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		05/31/17 15:01	20
Styrene	10	U	20	10	5.4	ug/L		05/31/17 15:01	20
tert-Butylbenzene	20	U	20	20	9.0	ug/L		05/31/17 15:01	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		05/31/17 15:01	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		05/31/17 15:01	20
Tetrachloroethene	20	U	20	20	15	ug/L		05/31/17 15:01	20
Toluene	**140**	**D**	20	20	9.6	ug/L		05/31/17 15:01	20

Client Sample ID: G6M-02-08X-SPR17

Lab Sample ID: 680-138990-12

Date Collected: 05/18/17 12:32

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		05/31/17 15:01	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		05/31/17 15:01	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		05/31/17 15:01	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		05/31/17 15:01	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		05/31/17 15:01	20
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		05/31/17 15:01	20
Trichloroethene	20	U	20	20	9.6	ug/L		05/31/17 15:01	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		05/31/17 15:01	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		05/31/17 15:01	20
1,2,4-Trimethylbenzene	20	U	20	20	9.4	ug/L		05/31/17 15:01	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		05/31/17 15:01	20
Vinyl acetate	40	U	40	40	16	ug/L		05/31/17 15:01	20
Vinyl chloride	20	U	20	20	10	ug/L		05/31/17 15:01	20
Xylenes, Total	10	U	40	10	4.6	ug/L		05/31/17 15:01	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*05/31/17 15:01*	*20*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/31/17 15:01*	*20*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*05/31/17 15:01*	*20*
Toluene-d8 (Surr)	*97*		*89 - 112*		*05/31/17 15:01*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 17:11	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 17:11	1
Methane (TCD)	**15000**		390	77	39	ug/L		05/31/17 17:11	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/09/17 17:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**770000**		50	50	17	ug/L		05/25/17 02:35	1
Manganese	**4300**		10	3.0	1.0	ug/L		05/25/17 02:35	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**410**		3.0	3.0	1.5	ug/L		05/26/17 06:19	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.10	U	0.20	0.10	0.038	mg/L		05/30/17 21:59	2
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**740**		23	11	3.5	mg/L		05/26/17 06:11	22.73
Alkalinity	**930**	**B**	5.0	3.2	1.1	mg/L		05/24/17 17:46	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-13-05X-SPR17
Date Collected: 05/18/17 15:02
Date Received: 05/20/17 10:12

Lab Sample ID: 680-138990-13
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	U	200	200	140	ug/L		05/31/17 15:23	20
Benzene	20	U	20	20	8.6	ug/L		05/31/17 15:23	20
Bromobenzene	20	U	20	20	10	ug/L		05/31/17 15:23	20
Bromoform	20	U	20	20	8.6	ug/L		05/31/17 15:23	20
Bromomethane	100	U	100	100	50	ug/L		05/31/17 15:23	20
2-Butanone (MEK)	200	U	200	200	68	ug/L		05/31/17 15:23	20
Carbon disulfide	40	U	40	40	8.6	ug/L		05/31/17 15:23	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		05/31/17 15:23	20
Chlorobenzene	10	U	20	10	5.2	ug/L		05/31/17 15:23	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		05/31/17 15:23	20
Chlorodibromomethane	10	U	20	10	6.4	ug/L		05/31/17 15:23	20
Chloroethane	100	U	100	100	50	ug/L		05/31/17 15:23	20
Chloroform	20	U	20	20	10	ug/L		05/31/17 15:23	20
Chloromethane	20	U	20	20	8.0	ug/L		05/31/17 15:23	20
2-Chlorotoluene	10	U	20	10	5.4	ug/L		05/31/17 15:23	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		05/31/17 15:23	20
cis-1,2-Dichloroethene	**64**	**D**	20	20	8.2	ug/L		05/31/17 15:23	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		05/31/17 15:23	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		05/31/17 15:23	20
Dibromomethane	20	U	20	20	7.0	ug/L		05/31/17 15:23	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		05/31/17 15:23	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		05/31/17 15:23	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		05/31/17 15:23	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		05/31/17 15:23	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		05/31/17 15:23	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		05/31/17 15:23	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		05/31/17 15:23	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		05/31/17 15:23	20
1,2-Dichloroethene, Total	**64**	**D**	40	20	15	ug/L		05/31/17 15:23	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		05/31/17 15:23	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		05/31/17 15:23	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		05/31/17 15:23	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		05/31/17 15:23	20
Ethylbenzene	10	U	20	10	6.6	ug/L		05/31/17 15:23	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		05/31/17 15:23	20
Hexachlorobutadiene	100	U	100	100	50	ug/L		05/31/17 15:23	20
2-Hexanone	100	U	200	100	40	ug/L		05/31/17 15:23	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		05/31/17 15:23	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		05/31/17 15:23	20
Methylene Chloride	100	U	100	100	50	ug/L		05/31/17 15:23	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		05/31/17 15:23	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		05/31/17 15:23	20
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		05/31/17 15:23	20
Naphthalene	100	U	100	100	50	ug/L		05/31/17 15:23	20
n-Butylbenzene	20	U	20	20	9.4	ug/L		05/31/17 15:23	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		05/31/17 15:23	20
o-Xylene	10	U	20	10	4.6	ug/L		05/31/17 15:23	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		05/31/17 15:23	20
Styrene	10	U	20	10	5.4	ug/L		05/31/17 15:23	20

Client Sample ID: G6M-13-05X-SPR17

Lab Sample ID: 680-138990-13

Date Collected: 05/18/17 15:02

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	20	U	20	20	9.0	ug/L		05/31/17 15:23	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		05/31/17 15:23	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		05/31/17 15:23	20
Tetrachloroethene	**1300**	**D**	20	20	15	ug/L		05/31/17 15:23	20
Toluene	20	U	20	20	9.6	ug/L		05/31/17 15:23	20
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		05/31/17 15:23	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		05/31/17 15:23	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		05/31/17 15:23	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		05/31/17 15:23	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		05/31/17 15:23	20
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		05/31/17 15:23	20
Trichloroethene	20	U	20	20	9.6	ug/L		05/31/17 15:23	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		05/31/17 15:23	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		05/31/17 15:23	20
1,2,4-Trimethylbenzene	20	U	20	20	9.4	ug/L		05/31/17 15:23	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		05/31/17 15:23	20
Vinyl acetate	40	U	40	40	16	ug/L		05/31/17 15:23	20
Vinyl chloride	20	U	20	20	10	ug/L		05/31/17 15:23	20
Xylenes, Total	10	U	40	10	4.6	ug/L		05/31/17 15:23	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*		*05/31/17 15:23*	*20*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/31/17 15:23*	*20*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*05/31/17 15:23*	*20*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/31/17 15:23*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 17:24	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 17:24	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		05/31/17 17:24	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U M	1.0	1.0	0.40	mg/L		06/08/17 16:25	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**280**		50	50	17	ug/L		05/25/17 02:02	1
Manganese	**350**		10	3.0	1.0	ug/L		05/25/17 02:02	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/26/17 05:54	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**1.5**		0.10	0.050	0.019	mg/L		05/30/17 22:01	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**0.50**	**J**	1.0	0.50	0.16	mg/L		05/26/17 06:28	1
Alkalinity	**32**	**B**	5.0	3.2	1.1	mg/L		05/24/17 17:37	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-DUP-1

Date Collected: 05/18/17 15:07
Date Received: 05/20/17 10:12

Lab Sample ID: 680-138990-14

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	U	200	200	140	ug/L		05/31/17 15:45	20
Benzene	20	U	20	20	8.6	ug/L		05/31/17 15:45	20
Bromobenzene	20	U	20	20	10	ug/L		05/31/17 15:45	20
Bromoform	20	U	20	20	8.6	ug/L		05/31/17 15:45	20
Bromomethane	100	U	100	100	50	ug/L		05/31/17 15:45	20
2-Butanone (MEK)	200	U	200	200	68	ug/L		05/31/17 15:45	20
Carbon disulfide	40	U	40	40	8.6	ug/L		05/31/17 15:45	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		05/31/17 15:45	20
Chlorobenzene	10	U	20	10	5.2	ug/L		05/31/17 15:45	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		05/31/17 15:45	20
Chlorodibromomethane	10	U	20	10	6.4	ug/L		05/31/17 15:45	20
Chloroethane	100	U	100	100	50	ug/L		05/31/17 15:45	20
Chloroform	20	U	20	20	10	ug/L		05/31/17 15:45	20
Chloromethane	20	U	20	20	8.0	ug/L		05/31/17 15:45	20
2-Chlorotoluene	10	U	20	10	5.4	ug/L		05/31/17 15:45	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		05/31/17 15:45	20
cis-1,2-Dichloroethene	**46**	**D**	20	20	8.2	ug/L		05/31/17 15:45	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		05/31/17 15:45	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		05/31/17 15:45	20
Dibromomethane	20	U	20	20	7.0	ug/L		05/31/17 15:45	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		05/31/17 15:45	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		05/31/17 15:45	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		05/31/17 15:45	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		05/31/17 15:45	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		05/31/17 15:45	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		05/31/17 15:45	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		05/31/17 15:45	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		05/31/17 15:45	20
1,2-Dichloroethene, Total	**46**	**D**	40	20	15	ug/L		05/31/17 15:45	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		05/31/17 15:45	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		05/31/17 15:45	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		05/31/17 15:45	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		05/31/17 15:45	20
Ethylbenzene	10	U	20	10	6.6	ug/L		05/31/17 15:45	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		05/31/17 15:45	20
Hexachlorobutadiene	100	U	100	100	50	ug/L		05/31/17 15:45	20
2-Hexanone	100	U	200	100	40	ug/L		05/31/17 15:45	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		05/31/17 15:45	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		05/31/17 15:45	20
Methylene Chloride	100	U	100	100	50	ug/L		05/31/17 15:45	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		05/31/17 15:45	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		05/31/17 15:45	20
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		05/31/17 15:45	20
Naphthalene	100	U	100	100	50	ug/L		05/31/17 15:45	20
n-Butylbenzene	20	U	20	20	9.4	ug/L		05/31/17 15:45	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		05/31/17 15:45	20
o-Xylene	10	U	20	10	4.6	ug/L		05/31/17 15:45	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		05/31/17 15:45	20
Styrene	10	U	20	10	5.4	ug/L		05/31/17 15:45	20

Client Sample ID: G6M-DUP-1

Lab Sample ID: 680-138990-14

Date Collected: 05/18/17 15:07

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	20	U	20	20	9.0	ug/L		05/31/17 15:45	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		05/31/17 15:45	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		05/31/17 15:45	20
Tetrachloroethene	**1200**	**D**	20	20	15	ug/L		05/31/17 15:45	20
Toluene	20	U	20	20	9.6	ug/L		05/31/17 15:45	20
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		05/31/17 15:45	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		05/31/17 15:45	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		05/31/17 15:45	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		05/31/17 15:45	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		05/31/17 15:45	20
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		05/31/17 15:45	20
Trichloroethene	20	U	20	20	9.6	ug/L		05/31/17 15:45	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		05/31/17 15:45	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		05/31/17 15:45	20
1,2,4-Trimethylbenzene	20	U	20	20	9.4	ug/L		05/31/17 15:45	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		05/31/17 15:45	20
Vinyl acetate	40	U	40	40	16	ug/L		05/31/17 15:45	20
Vinyl chloride	20	U	20	20	10	ug/L		05/31/17 15:45	20
Xylenes, Total	10	U	40	10	4.6	ug/L		05/31/17 15:45	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*05/31/17 15:45*	*20*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*05/31/17 15:45*	*20*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*05/31/17 15:45*	*20*
Toluene-d8 (Surr)	*101*		*89 - 112*		*05/31/17 15:45*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 17:37	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 17:37	1
Methane	**0.49**	**J**	0.58	0.58	0.29	ug/L		05/31/17 17:37	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U M	1.0	1.0	0.40	mg/L		06/08/17 16:42	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**300**		50	50	17	ug/L		05/25/17 02:44	1
Manganese	**380**		10	3.0	1.0	ug/L		05/25/17 02:44	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/26/17 06:27	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**1.5**		0.10	0.050	0.019	mg/L		05/30/17 22:03	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**0.45**	**J**	1.0	0.50	0.16	mg/L		05/26/17 06:43	1
Alkalinity	**22**	**B**	5.0	3.2	1.1	mg/L		05/24/17 17:31	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: IW-17D-SPR17

Lab Sample ID: 680-138990-15

Date Collected: 05/19/17 10:02

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**97**	**D M**	50	50	35	ug/L		06/01/17 14:09	5
Benzene	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:09	5
Bromobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:09	5
Bromoform	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:09	5
Bromomethane	25	U	25	25	13	ug/L		06/01/17 14:09	5
2-Butanone (MEK)	**140**	**D**	50	50	17	ug/L		06/01/17 14:09	5
Carbon disulfide	10	U	10	10	2.2	ug/L		06/01/17 14:09	5
Carbon tetrachloride	2.5	U	5.0	2.5	1.7	ug/L		06/01/17 14:09	5
Chlorobenzene	2.5	U	5.0	2.5	1.3	ug/L		06/01/17 14:09	5
Chlorobromomethane	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:09	5
Chlorodibromomethane	2.5	U	5.0	2.5	1.6	ug/L		06/01/17 14:09	5
Chloroethane	25	U	25	25	13	ug/L		06/01/17 14:09	5
Chloroform	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:09	5
Chloromethane	5.0	U	5.0	5.0	2.0	ug/L		06/01/17 14:09	5
2-Chlorotoluene	2.5	U	5.0	2.5	1.4	ug/L		06/01/17 14:09	5
4-Chlorotoluene	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:09	5
cis-1,2-Dichloroethene	**16**	**D**	5.0	5.0	2.1	ug/L		06/01/17 14:09	5
cis-1,3-Dichloropropene	5.0	U	5.0	5.0	2.0	ug/L		06/01/17 14:09	5
1,2-Dibromo-3-Chloropropane	10	U	25	10	5.5	ug/L		06/01/17 14:09	5
Dibromomethane	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:09	5
1,2-Dichlorobenzene	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
1,3-Dichlorobenzene	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:09	5
1,4-Dichlorobenzene	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:09	5
Dichlorobromomethane	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:09	5
Dichlorodifluoromethane	5.0	U Q	5.0	5.0	3.0	ug/L		06/01/17 14:09	5
1,1-Dichloroethane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
1,2-Dichloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:09	5
1,1-Dichloroethene	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:09	5
1,2-Dichloroethene, Total	**16**	**D**	10	5.0	3.7	ug/L		06/01/17 14:09	5
1,2-Dichloropropane	5.0	U	5.0	5.0	3.4	ug/L		06/01/17 14:09	5
1,3-Dichloropropane	5.0	U	5.0	5.0	1.7	ug/L		06/01/17 14:09	5
2,2-Dichloropropane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
1,1-Dichloropropene	5.0	U	5.0	5.0	1.7	ug/L		06/01/17 14:09	5
Ethylbenzene	2.5	U	5.0	2.5	1.7	ug/L		06/01/17 14:09	5
Ethylene Dibromide	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:09	5
Hexachlorobutadiene	25	U	25	25	13	ug/L		06/01/17 14:09	5
2-Hexanone	25	U	50	25	10	ug/L		06/01/17 14:09	5
Isopropylbenzene	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:09	5
4-Isopropyltoluene	5.0	U	5.0	5.0	2.4	ug/L		06/01/17 14:09	5
Methylene Chloride	25	U	25	25	13	ug/L		06/01/17 14:09	5
4-Methyl-2-pentanone (MIBK)	25	U	50	25	11	ug/L		06/01/17 14:09	5
Methyl tert-butyl ether	2.5	U	50	2.5	1.5	ug/L		06/01/17 14:09	5
m-Xylene & p-Xylene	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:09	5
Naphthalene	25	U	25	25	13	ug/L		06/01/17 14:09	5
n-Butylbenzene	5.0	U	5.0	5.0	2.4	ug/L		06/01/17 14:09	5
N-Propylbenzene	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
o-Xylene	2.5	U	5.0	2.5	1.2	ug/L		06/01/17 14:09	5
sec-Butylbenzene	5.0	U	5.0	5.0	2.1	ug/L		06/01/17 14:09	5
Styrene	2.5	U	5.0	2.5	1.4	ug/L		06/01/17 14:09	5

Client Sample ID: IW-17D-SPR17

Lab Sample ID: 680-138990-15

Date Collected: 05/19/17 10:02

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:09	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	5.0	3.1	ug/L		06/01/17 14:09	5
Tetrachloroethene	**4.1**	**J D**	5.0	5.0	3.7	ug/L		06/01/17 14:09	5
Toluene	**270**	**D**	5.0	5.0	2.4	ug/L		06/01/17 14:09	5
trans-1,2-Dichloroethene	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
trans-1,3-Dichloropropene	5.0	U	5.0	5.0	2.1	ug/L		06/01/17 14:09	5
1,2,3-Trichlorobenzene	25	U	25	25	13	ug/L		06/01/17 14:09	5
1,2,4-Trichlorobenzene	25	U	25	25	13	ug/L		06/01/17 14:09	5
1,1,1-Trichloroethane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:09	5
1,1,2-Trichloroethane	2.5	U	5.0	2.5	1.7	ug/L		06/01/17 14:09	5
Trichloroethene	**6.1**	**D**	5.0	5.0	2.4	ug/L		06/01/17 14:09	5
Trichlorofluoromethane	5.0	U	5.0	5.0	2.1	ug/L		06/01/17 14:09	5
1,2,3-Trichloropropane	5.0	U	5.0	5.0	2.0	ug/L		06/01/17 14:09	5
1,2,4-Trimethylbenzene	**4.3**	**J D**	5.0	5.0	2.4	ug/L		06/01/17 14:09	5
1,3,5-Trimethylbenzene	2.5	U	5.0	2.5	1.6	ug/L		06/01/17 14:09	5
Vinyl acetate	10	U	10	10	4.1	ug/L		06/01/17 14:09	5
Vinyl chloride	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:09	5
Xylenes, Total	2.5	U	10	2.5	1.2	ug/L		06/01/17 14:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*		*06/01/17 14:09*	*5*
Dibromofluoromethane (Surr)	*105*		*80 - 119*		*06/01/17 14:09*	*5*
1,2-Dichloroethane-d4 (Surr)	*109*		*81 - 118*		*06/01/17 14:09*	*5*
Toluene-d8 (Surr)	*110*		*89 - 112*		*06/01/17 14:09*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 17:50	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 17:50	1
Methane (TCD)	**24000**		390	77	39	ug/L		05/31/17 17:50	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/08/17 16:59	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**130000**		50	50	17	ug/L		05/25/17 21:23	1
Manganese	**14000**		10	3.0	1.0	ug/L		05/25/17 21:23	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**110**		3.0	3.0	1.5	ug/L		05/25/17 19:04	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.11**		0.10	0.050	0.019	mg/L		05/30/17 22:05	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1
Total Organic Carbon - Duplicates	**680**		15	7.5	2.3	mg/L		05/26/17 07:34	15
Alkalinity	**110**		5.0	3.2	1.1	mg/L		05/25/17 16:14	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: IW-18D-SPR17

Lab Sample ID: 680-138990-16

Date Collected: 05/19/17 11:47

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**100**	**D**	50	50	35	ug/L		06/01/17 14:32	5
Benzene	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:32	5
Bromobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:32	5
Bromoform	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:32	5
Bromomethane	25	U	25	25	13	ug/L		06/01/17 14:32	5
2-Butanone (MEK)	**410**	**D**	50	50	17	ug/L		06/01/17 14:32	5
Carbon disulfide	10	U	10	10	2.2	ug/L		06/01/17 14:32	5
Carbon tetrachloride	2.5	U	5.0	2.5	1.7	ug/L		06/01/17 14:32	5
Chlorobenzene	2.5	U	5.0	2.5	1.3	ug/L		06/01/17 14:32	5
Chlorobromomethane	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:32	5
Chlorodibromomethane	2.5	U	5.0	2.5	1.6	ug/L		06/01/17 14:32	5
Chloroethane	25	U	25	25	13	ug/L		06/01/17 14:32	5
Chloroform	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:32	5
Chloromethane	5.0	U	5.0	5.0	2.0	ug/L		06/01/17 14:32	5
2-Chlorotoluene	2.5	U	5.0	2.5	1.4	ug/L		06/01/17 14:32	5
4-Chlorotoluene	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:32	5
cis-1,2-Dichloroethene	**660**	**D**	5.0	5.0	2.1	ug/L		06/01/17 14:32	5
cis-1,3-Dichloropropene	5.0	U	5.0	5.0	2.0	ug/L		06/01/17 14:32	5
1,2-Dibromo-3-Chloropropane	10	U	25	10	5.5	ug/L		06/01/17 14:32	5
Dibromomethane	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:32	5
1,2-Dichlorobenzene	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
1,3-Dichlorobenzene	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:32	5
1,4-Dichlorobenzene	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:32	5
Dichlorobromomethane	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:32	5
Dichlorodifluoromethane	5.0	U Q	5.0	5.0	3.0	ug/L		06/01/17 14:32	5
1,1-Dichloroethane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
1,2-Dichloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:32	5
1,1-Dichloroethene	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:32	5
1,2-Dichloroethene, Total	**660**	**D**	10	5.0	3.7	ug/L		06/01/17 14:32	5
1,2-Dichloropropane	5.0	U	5.0	5.0	3.4	ug/L		06/01/17 14:32	5
1,3-Dichloropropane	5.0	U	5.0	5.0	1.7	ug/L		06/01/17 14:32	5
2,2-Dichloropropane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
1,1-Dichloropropene	5.0	U	5.0	5.0	1.7	ug/L		06/01/17 14:32	5
Ethylbenzene	2.5	U	5.0	2.5	1.7	ug/L		06/01/17 14:32	5
Ethylene Dibromide	5.0	U	5.0	5.0	2.2	ug/L		06/01/17 14:32	5
Hexachlorobutadiene	25	U	25	25	13	ug/L		06/01/17 14:32	5
2-Hexanone	25	U	50	25	10	ug/L		06/01/17 14:32	5
Isopropylbenzene	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:32	5
4-Isopropyltoluene	5.0	U	5.0	5.0	2.4	ug/L		06/01/17 14:32	5
Methylene Chloride	25	U	25	25	13	ug/L		06/01/17 14:32	5
4-Methyl-2-pentanone (MIBK)	25	U	50	25	11	ug/L		06/01/17 14:32	5
Methyl tert-butyl ether	2.5	U	50	2.5	1.5	ug/L		06/01/17 14:32	5
m-Xylene & p-Xylene	5.0	U	5.0	5.0	1.8	ug/L		06/01/17 14:32	5
Naphthalene	25	U	25	25	13	ug/L		06/01/17 14:32	5
n-Butylbenzene	5.0	U	5.0	5.0	2.4	ug/L		06/01/17 14:32	5
N-Propylbenzene	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
o-Xylene	2.5	U	5.0	2.5	1.2	ug/L		06/01/17 14:32	5
sec-Butylbenzene	5.0	U	5.0	5.0	2.1	ug/L		06/01/17 14:32	5
Styrene	2.5	U	5.0	2.5	1.4	ug/L		06/01/17 14:32	5

Client Sample ID: IW-18D-SPR17

Lab Sample ID: 680-138990-16

Date Collected: 05/19/17 11:47

Matrix: Water

Date Received: 05/20/17 10:12

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	5.0	U	5.0	5.0	2.3	ug/L		06/01/17 14:32	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	5.0	3.1	ug/L		06/01/17 14:32	5
Tetrachloroethene	**5.1**	**D**	5.0	5.0	3.7	ug/L		06/01/17 14:32	5
Toluene	**16**	**D**	5.0	5.0	2.4	ug/L		06/01/17 14:32	5
trans-1,2-Dichloroethene	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
trans-1,3-Dichloropropene	5.0	U	5.0	5.0	2.1	ug/L		06/01/17 14:32	5
1,2,3-Trichlorobenzene	25	U	25	25	13	ug/L		06/01/17 14:32	5
1,2,4-Trichlorobenzene	25	U	25	25	13	ug/L		06/01/17 14:32	5
1,1,1-Trichloroethane	5.0	U	5.0	5.0	1.9	ug/L		06/01/17 14:32	5
1,1,2-Trichloroethane	2.5	U	5.0	2.5	1.7	ug/L		06/01/17 14:32	5
Trichloroethene	5.0	U	5.0	5.0	2.4	ug/L		06/01/17 14:32	5
Trichlorofluoromethane	5.0	U	5.0	5.0	2.1	ug/L		06/01/17 14:32	5
1,2,3-Trichloropropane	5.0	U	5.0	5.0	2.0	ug/L		06/01/17 14:32	5
1,2,4-Trimethylbenzene	**3.1**	**J D**	5.0	5.0	2.4	ug/L		06/01/17 14:32	5
1,3,5-Trimethylbenzene	2.5	U	5.0	2.5	1.6	ug/L		06/01/17 14:32	5
Vinyl acetate	10	U	10	10	4.1	ug/L		06/01/17 14:32	5
Vinyl chloride	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 14:32	5
Xylenes, Total	2.5	U	10	2.5	1.2	ug/L		06/01/17 14:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*85 - 114*		*06/01/17 14:32*	*5*
Dibromofluoromethane (Surr)	*105*		*80 - 119*		*06/01/17 14:32*	*5*
1,2-Dichloroethane-d4 (Surr)	*110*		*81 - 118*		*06/01/17 14:32*	*5*
Toluene-d8 (Surr)	*111*		*89 - 112*		*06/01/17 14:32*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 18:03	1
Ethylene	**15**		1.0	1.0	0.50	ug/L		05/31/17 18:03	1
Methane (TCD)	**21000**		390	77	39	ug/L		05/31/17 18:03	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/09/17 17:27	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**140000**		50	50	17	ug/L		05/25/17 01:47	1
Manganese	**8900**		10	3.0	1.0	ug/L		05/25/17 01:47	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**150**		3.0	3.0	1.5	ug/L		05/26/17 05:43	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.21**		0.10	0.050	0.019	mg/L		05/30/17 22:07	1
Sulfide	1.0	U H	1.0	1.0	1.0	mg/L		06/02/17 09:41	1
Total Organic Carbon - Duplicates	**680**		21	10	3.2	mg/L		05/26/17 07:51	20.83
Alkalinity	**110**		5.0	3.2	1.1	mg/L		05/25/17 16:18	1

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-138990-1	G6M-97-05B-SPR17	95	102	96	100
680-138990-2	G6M-13-01X-SPR17	93	104	96	99
680-138990-3	G6M-13-04X-SPR17	92	104	99	101
680-138990-4	G6M-04-09X-SPR17	93	102	98	98
680-138990-5	G6M-04-10A-SPR17	95	104	95	99
680-138990-6	G6M-04-10X-SPR17	94	101	97	100
680-138990-7	G6M-13-06X-SPR17	111	104	110	111
680-138990-7 MS	G6M-13-06X-SPR17	99	107	106	109
680-138990-7 MSD	G6M-13-06X-SPR17	99	108	107	109
680-138990-8	G6M-02-01X-SPR17	93	100	97	97
680-138990-9	G6M-RB1 SPR17	93	99	98	97
680-138990-10	Trip Blank	112	106	108	112
680-138990-11	G6M-03-01X-SPR17	93	99	98	102
680-138990-11 - DL	G6M-03-01X-SPR17	108	107	114	106
680-138990-12	G6M-02-08X-SPR17	92	102	98	97
680-138990-13	G6M-13-05X-SPR17	91	102	97	100
680-138990-14	G6M-DUP-1	93	100	97	101
680-138990-15	IW-17D-SPR17	108	105	109	110
680-138990-16	IW-18D-SPR17	105	105	110	111
LCS 680-481931/3	Lab Control Sample	97	100	97	105
LCS 680-482104/4	Lab Control Sample	101	111	112	108
LCS 680-482288/3	Lab Control Sample	95	98	94	101
LCSD 680-481931/4	Lab Control Sample Dup	93	104	100	102
LCSD 680-482104/5	Lab Control Sample Dup	100	114	117	105
LCSD 680-482288/4	Lab Control Sample Dup	95	100	100	103
MB 680-481931/8	Method Blank	93	102	97	97
MB 680-482104/7	Method Blank	109	104	105	110
MB 680-482288/8	Method Blank	93	100	98	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-481931/8
Matrix: Water
Analysis Batch: 481931

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		05/31/17 08:50	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 08:50	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 08:50	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 08:50	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		05/31/17 08:50	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		05/31/17 08:50	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 08:50	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		05/31/17 08:50	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 08:50	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		05/31/17 08:50	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 08:50	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 08:50	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 08:50	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 08:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		05/31/17 08:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		05/31/17 08:50	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		05/31/17 08:50	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 08:50	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 08:50	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		05/31/17 08:50	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		05/31/17 08:50	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 08:50	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		05/31/17 08:50	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 08:50	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 08:50	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		05/31/17 08:50	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		05/31/17 08:50	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		05/31/17 08:50	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 08:50	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 08:50	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		05/31/17 08:50	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 08:50	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		05/31/17 08:50	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		05/31/17 08:50	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 08:50	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 08:50	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		05/31/17 08:50	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		05/31/17 08:50	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		05/31/17 08:50	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 08:50	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		05/31/17 08:50	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		05/31/17 08:50	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 08:50	1

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

Lab Sample ID: MB 680-481931/8
Matrix: Water
Analysis Batch: 481931

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		05/31/17 08:50	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		05/31/17 08:50	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 08:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		05/31/17 08:50	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		05/31/17 08:50	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 08:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 08:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 08:50	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		05/31/17 08:50	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		05/31/17 08:50	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		05/31/17 08:50	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		05/31/17 08:50	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		05/31/17 08:50	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		05/31/17 08:50	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		05/31/17 08:50	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		05/31/17 08:50	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		05/31/17 08:50	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 08:50	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		05/31/17 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*05/31/17 08:50*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*05/31/17 08:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*05/31/17 08:50*	*1*
Toluene-d8 (Surr)	*97*		*89 - 112*		*05/31/17 08:50*	*1*

Lab Sample ID: LCS 680-481931/3
Matrix: Water
Analysis Batch: 481931

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	223		ug/L		89	39 - 160
Benzene	50.0	47.2		ug/L		94	79 - 120
Bromobenzene	50.0	53.1		ug/L		106	80 - 120
Bromoform	50.0	49.2		ug/L		98	66 - 130
Bromomethane	50.0	41.7		ug/L		83	53 - 141
2-Butanone (MEK)	250	197		ug/L		79	56 - 143
Carbon disulfide	50.0	45.0		ug/L		90	64 - 133
Carbon tetrachloride	50.0	53.7		ug/L		107	72 - 136
Chlorobenzene	50.0	52.1		ug/L		104	82 - 118
Chlorobromomethane	50.0	40.0		ug/L		80	78 - 123
Chlorodibromomethane	50.0	51.9		ug/L		104	74 - 126
Chloroethane	50.0	36.7		ug/L		73	60 - 138
Chloroform	50.0	48.6		ug/L		97	79 - 124
Chloromethane	50.0	38.4		ug/L		77	50 - 139
2-Chlorotoluene	50.0	51.4		ug/L		103	79 - 122
4-Chlorotoluene	50.0	52.9		ug/L		106	78 - 122

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

Lab Sample ID: LCS 680-481931/3
Matrix: Water
Analysis Batch: 481931

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	50.0	50.8		ug/L		102	78 - 123
cis-1,3-Dichloropropene	50.0	47.4		ug/L		95	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/L		93	62 - 128
Dibromomethane	50.0	46.9		ug/L		94	79 - 123
1,2-Dichlorobenzene	50.0	51.3		ug/L		103	80 - 119
1,3-Dichlorobenzene	50.0	51.4		ug/L		103	80 - 119
1,4-Dichlorobenzene	50.0	51.4		ug/L		103	79 - 118
Dichlorobromomethane	50.0	50.0		ug/L		100	79 - 125
Dichlorodifluoromethane	50.0	40.9		ug/L		82	32 - 152
1,1-Dichloroethane	50.0	44.7		ug/L		89	77 - 125
1,2-Dichloroethane	50.0	49.4		ug/L		99	73 - 128
1,1-Dichloroethene	50.0	47.4		ug/L		95	71 - 131
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121
1,2-Dichloropropane	50.0	45.3		ug/L		91	78 - 122
1,3-Dichloropropane	50.0	48.7		ug/L		97	80 - 119
2,2-Dichloropropane	50.0	52.6		ug/L		105	60 - 139
1,1-Dichloropropene	50.0	52.1		ug/L		104	79 - 125
Ethylbenzene	50.0	51.1		ug/L		102	79 - 121
Ethylene Dibromide	50.0	50.6		ug/L		101	75 - 127
Hexachlorobutadiene	50.0	54.7		ug/L		109	66 - 134
2-Hexanone	250	221		ug/L		88	57 - 139
Isopropylbenzene	50.0	51.9		ug/L		104	72 - 131
4-Isopropyltoluene	50.0	50.7		ug/L		101	77 - 127
Methylene Chloride	50.0	46.0		ug/L		92	74 - 124
4-Methyl-2-pentanone (MIBK)	250	207		ug/L		83	67 - 130
Methyl tert-butyl ether	50.0	47.9		ug/L		96	71 - 124
m-Xylene & p-Xylene	50.0	52.3		ug/L		105	80 - 121
Naphthalene	50.0	45.3		ug/L		91	61 - 128
n-Butylbenzene	50.0	50.6		ug/L		101	75 - 128
N-Propylbenzene	50.0	53.9		ug/L		108	76 - 126
o-Xylene	50.0	51.3		ug/L		103	78 - 122
sec-Butylbenzene	50.0	52.9		ug/L		106	77 - 126
Styrene	50.0	51.3		ug/L		103	78 - 123
tert-Butylbenzene	50.0	51.8		ug/L		104	78 - 124
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/L		103	78 - 124
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/L		95	71 - 121
Tetrachloroethene	50.0	57.5		ug/L		115	74 - 129
Toluene	50.0	50.1		ug/L		100	80 - 121
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	75 - 124
trans-1,3-Dichloropropene	50.0	48.3		ug/L		97	73 - 127
1,2,3-Trichlorobenzene	50.0	49.6		ug/L		99	69 - 129
1,2,4-Trichlorobenzene	50.0	50.6		ug/L		101	69 - 130
1,1,1-Trichloroethane	50.0	52.9		ug/L		106	74 - 131
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 119
Trichloroethene	50.0	53.5		ug/L		107	79 - 123
Trichlorofluoromethane	50.0	44.5		ug/L		89	65 - 141
1,2,3-Trichloropropane	50.0	46.6		ug/L		93	73 - 122
1,2,4-Trimethylbenzene	50.0	51.3		ug/L		103	76 - 124

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

Lab Sample ID: LCS 680-481931/3
Matrix: Water
Analysis Batch: 481931

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	52.1		ug/L		104	75 - 124
Vinyl acetate	100	78.9		ug/L		79	54 - 146
Vinyl chloride	50.0	46.5		ug/L		93	58 - 137
Xylenes, Total	100	104		ug/L		104	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

Lab Sample ID: LCSD 680-481931/4
Matrix: Water
Analysis Batch: 481931

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	250	236		ug/L		95	39 - 160	6	20
Benzene	50.0	47.0		ug/L		94	79 - 120	0	20
Bromobenzene	50.0	53.7		ug/L		107	80 - 120	1	20
Bromoform	50.0	50.8		ug/L		102	66 - 130	3	20
Bromomethane	50.0	42.9		ug/L		86	53 - 141	3	20
2-Butanone (MEK)	250	206		ug/L		82	56 - 143	4	20
Carbon disulfide	50.0	43.8		ug/L		88	64 - 133	3	20
Carbon tetrachloride	50.0	51.5		ug/L		103	72 - 136	4	20
Chlorobenzene	50.0	51.4		ug/L		103	82 - 118	1	20
Chlorobromomethane	50.0	40.8		ug/L		82	78 - 123	2	20
Chlorodibromomethane	50.0	52.6		ug/L		105	74 - 126	1	20
Chloroethane	50.0	36.9		ug/L		74	60 - 138	1	20
Chloroform	50.0	49.9		ug/L		100	79 - 124	3	20
Chloromethane	50.0	38.1		ug/L		76	50 - 139	1	20
2-Chlorotoluene	50.0	51.1		ug/L		102	79 - 122	1	20
4-Chlorotoluene	50.0	53.2		ug/L		106	78 - 122	1	20
cis-1,2-Dichloroethene	50.0	50.8		ug/L		102	78 - 123	0	20
cis-1,3-Dichloropropene	50.0	48.3		ug/L		97	75 - 124	2	20
1,2-Dibromo-3-Chloropropane	50.0	47.1		ug/L		94	62 - 128	1	20
Dibromomethane	50.0	49.2		ug/L		98	79 - 123	5	20
1,2-Dichlorobenzene	50.0	49.6		ug/L		99	80 - 119	3	20
1,3-Dichlorobenzene	50.0	49.9		ug/L		100	80 - 119	3	20
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	79 - 118	4	20
Dichlorobromomethane	50.0	50.0		ug/L		100	79 - 125	0	20
Dichlorodifluoromethane	50.0	40.8		ug/L		82	32 - 152	0	20
1,1-Dichloroethane	50.0	44.5		ug/L		89	77 - 125	1	20
1,2-Dichloroethane	50.0	50.0		ug/L		100	73 - 128	1	20
1,1-Dichloroethene	50.0	47.2		ug/L		94	71 - 131	0	20
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121	1	20
1,2-Dichloropropane	50.0	45.3		ug/L		91	78 - 122	0	20
1,3-Dichloropropane	50.0	49.3		ug/L		99	80 - 119	1	20
2,2-Dichloropropane	50.0	50.4		ug/L		101	60 - 139	4	20

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

Lab Sample ID: LCSD 680-481931/4
Matrix: Water
Analysis Batch: 481931

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-Dichloropropene			50.0	50.4		ug/L		101	79 - 125	3	20
Ethylbenzene			50.0	49.4		ug/L		99	79 - 121	3	20
Ethylene Dibromide			50.0	52.7		ug/L		105	75 - 127	4	20
Hexachlorobutadiene			50.0	53.3		ug/L		107	66 - 134	3	20
2-Hexanone			250	227		ug/L		91	57 - 139	3	20
Isopropylbenzene			50.0	50.5		ug/L		101	72 - 131	3	20
4-Isopropyltoluene			50.0	48.2		ug/L		96	77 - 127	5	20
Methylene Chloride			50.0	45.9		ug/L		92	74 - 124	0	20
4-Methyl-2-pentanone (MIBK)			250	212		ug/L		85	67 - 130	2	20
Methyl tert-butyl ether			50.0	48.9		ug/L		98	71 - 124	2	20
m-Xylene & p-Xylene			50.0	51.7		ug/L		103	80 - 121	1	20
Naphthalene			50.0	46.0		ug/L		92	61 - 128	2	20
n-Butylbenzene			50.0	47.6		ug/L		95	75 - 128	6	20
N-Propylbenzene			50.0	52.1		ug/L		104	76 - 126	3	20
o-Xylene			50.0	49.9		ug/L		100	78 - 122	3	20
sec-Butylbenzene			50.0	51.7		ug/L		103	77 - 126	2	20
Styrene			50.0	50.1		ug/L		100	78 - 123	2	20
tert-Butylbenzene			50.0	50.7		ug/L		101	78 - 124	2	20
1,1,1,2-Tetrachloroethane			50.0	51.7		ug/L		103	78 - 124	0	20
1,1,2,2-Tetrachloroethane			50.0	46.8		ug/L		94	71 - 121	1	20
Tetrachloroethene			50.0	57.2		ug/L		114	74 - 129	1	20
Toluene			50.0	49.4		ug/L		99	80 - 121	1	20
trans-1,2-Dichloroethene			50.0	49.8		ug/L		100	75 - 124	1	20
trans-1,3-Dichloropropene			50.0	50.3		ug/L		101	73 - 127	4	20
1,2,3-Trichlorobenzene			50.0	49.9		ug/L		100	69 - 129	0	20
1,2,4-Trichlorobenzene			50.0	50.2		ug/L		100	69 - 130	1	20
1,1,1-Trichloroethane			50.0	51.5		ug/L		103	74 - 131	3	20
1,1,2-Trichloroethane			50.0	51.5		ug/L		103	80 - 119	3	20
Trichloroethene			50.0	52.5		ug/L		105	79 - 123	2	20
Trichlorofluoromethane			50.0	44.7		ug/L		89	65 - 141	0	20
1,2,3-Trichloropropane			50.0	47.1		ug/L		94	73 - 122	1	20
1,2,4-Trimethylbenzene			50.0	50.6		ug/L		101	76 - 124	1	20
1,3,5-Trimethylbenzene			50.0	51.1		ug/L		102	75 - 124	2	20
Vinyl acetate			100	81.2		ug/L		81	54 - 146	3	20
Vinyl chloride			50.0	45.5		ug/L		91	58 - 137	2	20
Xylenes, Total			100	102		ug/L		102	79 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*
Dibromofluoromethane (Surr)	*104*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*
Toluene-d8 (Surr)	*102*		*89 - 112*

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

Lab Sample ID: MB 680-482104/7
Matrix: Water
Analysis Batch: 482104

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		06/01/17 08:31	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 08:31	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 08:31	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 08:31	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		06/01/17 08:31	1
Carbon disulfide	0.552	J	2.0	2.0	0.43	ug/L		06/01/17 08:31	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 08:31	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		06/01/17 08:31	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 08:31	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		06/01/17 08:31	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 08:31	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		06/01/17 08:31	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		06/01/17 08:31	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 08:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		06/01/17 08:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		06/01/17 08:31	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		06/01/17 08:31	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 08:31	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 08:31	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		06/01/17 08:31	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		06/01/17 08:31	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		06/01/17 08:31	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		06/01/17 08:31	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		06/01/17 08:31	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 08:31	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		06/01/17 08:31	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		06/01/17 08:31	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		06/01/17 08:31	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		06/01/17 08:31	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 08:31	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		06/01/17 08:31	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 08:31	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		06/01/17 08:31	1
Hexachlorobutadiene	2.73	J	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		06/01/17 08:31	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 08:31	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 08:31	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		06/01/17 08:31	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		06/01/17 08:31	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		06/01/17 08:31	1
Naphthalene	3.77	J	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
n-Butylbenzene	0.689	J	1.0	1.0	0.47	ug/L		06/01/17 08:31	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		06/01/17 08:31	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		06/01/17 08:31	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 08:31	1

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

Lab Sample ID: MB 680-482104/7
Matrix: Water
Analysis Batch: 482104

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		06/01/17 08:31	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		06/01/17 08:31	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 08:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		06/01/17 08:31	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		06/01/17 08:31	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 08:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 08:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 08:31	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/01/17 08:31	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/01/17 08:31	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		06/01/17 08:31	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		06/01/17 08:31	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		06/01/17 08:31	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		06/01/17 08:31	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/01/17 08:31	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		06/01/17 08:31	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		06/01/17 08:31	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		06/01/17 08:31	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		06/01/17 08:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*85 - 114*		*06/01/17 08:31*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*06/01/17 08:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*81 - 118*		*06/01/17 08:31*	*1*
Toluene-d8 (Surr)	*110*		*89 - 112*		*06/01/17 08:31*	*1*

Lab Sample ID: LCS 680-482104/4
Matrix: Water
Analysis Batch: 482104

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	265		ug/L		106	39 - 160
Benzene	50.0	54.4		ug/L		109	79 - 120
Bromobenzene	50.0	51.6		ug/L		103	80 - 120
Bromoform	50.0	44.0		ug/L		88	66 - 130
Bromomethane	50.0	53.8		ug/L		108	53 - 141
2-Butanone (MEK)	250	257		ug/L		103	56 - 143
Carbon disulfide	50.0	50.3		ug/L		101	64 - 133
Carbon tetrachloride	50.0	50.5		ug/L		101	72 - 136
Chlorobenzene	50.0	52.9		ug/L		106	82 - 118
Chlorobromomethane	50.0	54.0		ug/L		108	78 - 123
Chlorodibromomethane	50.0	49.6		ug/L		99	74 - 126
Chloroethane	50.0	57.7		ug/L		115	60 - 138
Chloroform	50.0	54.5		ug/L		109	79 - 124
Chloromethane	50.0	40.3		ug/L		81	50 - 139
2-Chlorotoluene	50.0	54.3		ug/L		109	79 - 122
4-Chlorotoluene	50.0	55.9		ug/L		112	78 - 122

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

Lab Sample ID: LCS 680-482104/4
Matrix: Water
Analysis Batch: 482104

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	50.0	56.3		ug/L		113	78 - 123
cis-1,3-Dichloropropene	50.0	54.4		ug/L		109	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	46.1		ug/L		92	62 - 128
Dibromomethane	50.0	55.5		ug/L		111	79 - 123
1,2-Dichlorobenzene	50.0	54.7		ug/L		109	80 - 119
1,3-Dichlorobenzene	50.0	53.2		ug/L		106	80 - 119
1,4-Dichlorobenzene	50.0	54.5		ug/L		109	79 - 118
Dichlorobromomethane	50.0	52.3		ug/L		105	79 - 125
Dichlorodifluoromethane	50.0	38.2		ug/L		76	32 - 152
1,1-Dichloroethane	50.0	53.5		ug/L		107	77 - 125
1,2-Dichloroethane	50.0	55.7		ug/L		111	73 - 128
1,1-Dichloroethene	50.0	55.8		ug/L		112	71 - 131
1,2-Dichloroethene, Total	100	110		ug/L		110	79 - 121
1,2-Dichloropropane	50.0	54.0		ug/L		108	78 - 122
1,3-Dichloropropane	50.0	55.1		ug/L		110	80 - 119
2,2-Dichloropropane	50.0	58.7		ug/L		117	60 - 139
1,1-Dichloropropene	50.0	55.3		ug/L		111	79 - 125
Ethylbenzene	50.0	54.3		ug/L		109	79 - 121
Ethylene Dibromide	50.0	53.7		ug/L		107	75 - 127
Hexachlorobutadiene	50.0	59.1		ug/L		118	66 - 134
2-Hexanone	250	279		ug/L		112	57 - 139
Isopropylbenzene	50.0	54.6		ug/L		109	72 - 131
4-Isopropyltoluene	50.0	60.0		ug/L		120	77 - 127
Methylene Chloride	50.0	56.8		ug/L		114	74 - 124
4-Methyl-2-pentanone (MIBK)	250	275		ug/L		110	67 - 130
Methyl tert-butyl ether	50.0	54.5		ug/L		109	71 - 124
m-Xylene & p-Xylene	50.0	53.7		ug/L		107	80 - 121
Naphthalene	50.0	59.2		ug/L		118	61 - 128
n-Butylbenzene	50.0	60.4		ug/L		121	75 - 128
N-Propylbenzene	50.0	57.0		ug/L		114	76 - 126
o-Xylene	50.0	54.2		ug/L		108	78 - 122
sec-Butylbenzene	50.0	57.9		ug/L		116	77 - 126
Styrene	50.0	54.7		ug/L		109	78 - 123
tert-Butylbenzene	50.0	55.2		ug/L		110	78 - 124
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/L		102	78 - 124
1,1,2,2-Tetrachloroethane	50.0	55.0		ug/L		110	71 - 121
Tetrachloroethene	50.0	52.4		ug/L		105	74 - 129
Toluene	50.0	54.7		ug/L		109	80 - 121
trans-1,2-Dichloroethene	50.0	53.7		ug/L		107	75 - 124
trans-1,3-Dichloropropene	50.0	54.6		ug/L		109	73 - 127
1,2,3-Trichlorobenzene	50.0	58.5		ug/L		117	69 - 129
1,2,4-Trichlorobenzene	50.0	55.8		ug/L		112	69 - 130
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	55.2		ug/L		110	80 - 119
Trichloroethene	50.0	53.2		ug/L		106	79 - 123
Trichlorofluoromethane	50.0	56.7		ug/L		113	65 - 141
1,2,3-Trichloropropane	50.0	54.2		ug/L		108	73 - 122
1,2,4-Trimethylbenzene	50.0	58.4		ug/L		117	76 - 124

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

Lab Sample ID: LCS 680-482104/4
Matrix: Water
Analysis Batch: 482104

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	56.3		ug/L		113	75 - 124
Vinyl acetate	100	109		ug/L		109	54 - 146
Vinyl chloride	50.0	46.1		ug/L		92	58 - 137
Xylenes, Total	100	108		ug/L		108	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*
Dibromofluoromethane (Surr)	*111*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*112*		*81 - 118*
Toluene-d8 (Surr)	*108*		*89 - 112*

Lab Sample ID: LCSD 680-482104/5
Matrix: Water
Analysis Batch: 482104

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	250	272		ug/L		109	39 - 160	3	20
Benzene	50.0	55.5		ug/L		111	79 - 120	2	20
Bromobenzene	50.0	51.7		ug/L		103	80 - 120	0	20
Bromoform	50.0	44.6		ug/L		89	66 - 130	1	20
Bromomethane	50.0	55.6		ug/L		111	53 - 141	3	20
2-Butanone (MEK)	250	270		ug/L		108	56 - 143	5	20
Carbon disulfide	50.0	50.3		ug/L		101	64 - 133	0	20
Carbon tetrachloride	50.0	50.4		ug/L		101	72 - 136	0	20
Chlorobenzene	50.0	52.5		ug/L		105	82 - 118	1	20
Chlorobromomethane	50.0	55.1		ug/L		110	78 - 123	2	20
Chlorodibromomethane	50.0	50.9		ug/L		102	74 - 126	3	20
Chloroethane	50.0	59.4		ug/L		119	60 - 138	3	20
Chloroform	50.0	55.7		ug/L		111	79 - 124	2	20
Chloromethane	50.0	39.9		ug/L		80	50 - 139	1	20
2-Chlorotoluene	50.0	52.8		ug/L		106	79 - 122	3	20
4-Chlorotoluene	50.0	53.2		ug/L		106	78 - 122	5	20
cis-1,2-Dichloroethene	50.0	57.2		ug/L		114	78 - 123	2	20
cis-1,3-Dichloropropene	50.0	55.3		ug/L		111	75 - 124	2	20
1,2-Dibromo-3-Chloropropane	50.0	48.9		ug/L		98	62 - 128	6	20
Dibromomethane	50.0	57.4		ug/L		115	79 - 123	3	20
1,2-Dichlorobenzene	50.0	54.3		ug/L		109	80 - 119	1	20
1,3-Dichlorobenzene	50.0	52.7		ug/L		105	80 - 119	1	20
1,4-Dichlorobenzene	50.0	53.0		ug/L		106	79 - 118	3	20
Dichlorobromomethane	50.0	54.3		ug/L		109	79 - 125	4	20
Dichlorodifluoromethane	50.0	27.8	Q	ug/L		56	32 - 152	32	20
1,1-Dichloroethane	50.0	54.8		ug/L		110	77 - 125	2	20
1,2-Dichloroethane	50.0	57.9		ug/L		116	73 - 128	4	20
1,1-Dichloroethene	50.0	55.5		ug/L		111	71 - 131	0	20
1,2-Dichloroethene, Total	100	111		ug/L		111	79 - 121	1	20
1,2-Dichloropropane	50.0	56.8		ug/L		114	78 - 122	5	20
1,3-Dichloropropane	50.0	57.5		ug/L		115	80 - 119	4	20
2,2-Dichloropropane	50.0	57.4		ug/L		115	60 - 139	2	20

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

Lab Sample ID: LCSD 680-482104/5
Matrix: Water
Analysis Batch: 482104

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-Dichloropropene	50.0	55.4		ug/L		111	79 - 125	0	20
Ethylbenzene	50.0	52.8		ug/L		106	79 - 121	3	20
Ethylene Dibromide	50.0	55.6		ug/L		111	75 - 127	3	20
Hexachlorobutadiene	50.0	57.0		ug/L		114	66 - 134	4	20
2-Hexanone	250	284		ug/L		114	57 - 139	2	20
Isopropylbenzene	50.0	53.0		ug/L		106	72 - 131	3	20
4-Isopropyltoluene	50.0	57.5		ug/L		115	77 - 127	4	20
Methylene Chloride	50.0	57.4		ug/L		115	74 - 124	1	20
4-Methyl-2-pentanone (MIBK)	250	281		ug/L		112	67 - 130	2	20
Methyl tert-butyl ether	50.0	56.5		ug/L		113	71 - 124	4	20
m-Xylene & p-Xylene	50.0	52.3		ug/L		105	80 - 121	3	20
Naphthalene	50.0	61.4		ug/L		123	61 - 128	4	20
n-Butylbenzene	50.0	57.1		ug/L		114	75 - 128	6	20
N-Propylbenzene	50.0	54.9		ug/L		110	76 - 126	4	20
o-Xylene	50.0	53.0		ug/L		106	78 - 122	2	20
sec-Butylbenzene	50.0	55.6		ug/L		111	77 - 126	4	20
Styrene	50.0	54.1		ug/L		108	78 - 123	1	20
tert-Butylbenzene	50.0	52.6		ug/L		105	78 - 124	5	20
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/L		100	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	53.8		ug/L		108	71 - 121	2	20
Tetrachloroethene	50.0	51.4		ug/L		103	74 - 129	2	20
Toluene	50.0	55.0		ug/L		110	80 - 121	1	20
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	75 - 124	1	20
trans-1,3-Dichloropropene	50.0	55.9		ug/L		112	73 - 127	2	20
1,2,3-Trichlorobenzene	50.0	61.1		ug/L		122	69 - 129	4	20
1,2,4-Trichlorobenzene	50.0	56.1		ug/L		112	69 - 130	0	20
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	74 - 131	3	20
1,1,2-Trichloroethane	50.0	57.9		ug/L		116	80 - 119	5	20
Trichloroethene	50.0	52.3		ug/L		105	79 - 123	2	20
Trichlorofluoromethane	50.0	54.6		ug/L		109	65 - 141	4	20
1,2,3-Trichloropropane	50.0	53.8		ug/L		108	73 - 122	1	20
1,2,4-Trimethylbenzene	50.0	56.9		ug/L		114	76 - 124	3	20
1,3,5-Trimethylbenzene	50.0	54.4		ug/L		109	75 - 124	4	20
Vinyl acetate	100	115		ug/L		115	54 - 146	5	20
Vinyl chloride	50.0	45.1		ug/L		90	58 - 137	2	20
Xylenes, Total	100	105		ug/L		105	79 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*114*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*117*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

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

Lab Sample ID: 680-138990-7 MS
Matrix: Water
Analysis Batch: 482104

Client Sample ID: G6M-13-06X-SPR17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	45		250	295		ug/L		100	39 - 160
Benzene	1.0	U	50.0	54.8		ug/L		110	79 - 120
Bromobenzene	1.0	U	50.0	50.2		ug/L		100	80 - 120
Bromoform	1.0	U	50.0	44.0		ug/L		88	66 - 130
Bromomethane	5.0	U	50.0	56.1		ug/L		112	53 - 141
2-Butanone (MEK)	45		250	296		ug/L		100	56 - 143
Carbon disulfide	2.0	U	50.0	53.4		ug/L		107	64 - 133
Carbon tetrachloride	0.50	U	50.0	52.2		ug/L		104	72 - 136
Chlorobenzene	0.50	U	50.0	52.3		ug/L		105	82 - 118
Chlorobromomethane	1.0	U	50.0	50.9		ug/L		102	78 - 123
Chlorodibromomethane	0.50	U	50.0	46.3		ug/L		93	74 - 126
Chloroethane	5.0	U	50.0	60.0		ug/L		120	60 - 138
Chloroform	1.0	U	50.0	52.8		ug/L		106	79 - 124
Chloromethane	1.0	U	50.0	56.8		ug/L		114	50 - 139
2-Chlorotoluene	0.50	U	50.0	54.6		ug/L		109	79 - 122
4-Chlorotoluene	1.0	U	50.0	55.1		ug/L		110	78 - 122
cis-1,2-Dichloroethene	2.2		50.0	56.9		ug/L		109	78 - 123
cis-1,3-Dichloropropene	1.0	U	50.0	50.5		ug/L		101	75 - 124
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	49.7		ug/L		99	62 - 128
Dibromomethane	1.0	U	50.0	51.4		ug/L		103	79 - 123
1,2-Dichlorobenzene	1.0	U	50.0	51.8		ug/L		104	80 - 119
1,3-Dichlorobenzene	1.0	U	50.0	51.9		ug/L		104	80 - 119
1,4-Dichlorobenzene	1.0	U	50.0	52.3		ug/L		105	79 - 118
Dichlorobromomethane	1.0	U	50.0	51.3		ug/L		103	79 - 125
Dichlorodifluoromethane	1.0	U Q	50.0	61.5		ug/L		123	32 - 152
1,1-Dichloroethane	1.0	U	50.0	54.2		ug/L		108	77 - 125
1,2-Dichloroethane	1.0	U	50.0	52.9		ug/L		106	73 - 128
1,1-Dichloroethene	1.0	U	50.0	56.7		ug/L		113	71 - 131
1,2-Dichloroethene, Total	2.7		100	112		ug/L		110	79 - 121
1,2-Dichloropropane	1.0	U	50.0	54.2		ug/L		108	78 - 122
1,3-Dichloropropane	1.0	U	50.0	51.8		ug/L		104	80 - 119
2,2-Dichloropropane	1.0	U	50.0	57.3		ug/L		115	60 - 139
1,1-Dichloropropene	1.0	U	50.0	59.0		ug/L		118	79 - 125
Ethylbenzene	22		50.0	78.3		ug/L		112	79 - 121
Ethylene Dibromide	1.0	U	50.0	50.6		ug/L		101	75 - 127
Hexachlorobutadiene	5.0	U	50.0	49.2		ug/L		98	66 - 134
2-Hexanone	5.0	U	250	288		ug/L		115	57 - 139
Isopropylbenzene	1.0	U	50.0	56.0		ug/L		112	72 - 131
4-Isopropyltoluene	1.0	U	50.0	57.9		ug/L		116	77 - 127
Methylene Chloride	5.0	U	50.0	50.0		ug/L		100	74 - 124
4-Methyl-2-pentanone (MIBK)	5.0	U	250	276		ug/L		110	67 - 130
Methyl tert-butyl ether	0.50	U	50.0	50.5		ug/L		101	71 - 124
m-Xylene & p-Xylene	0.38	J	50.0	54.7		ug/L		109	80 - 121
Naphthalene	5.0	U J	50.0	47.8		ug/L		96	61 - 128
n-Butylbenzene	1.0	U	50.0	58.4		ug/L		117	75 - 128
N-Propylbenzene	1.0	U	50.0	58.5		ug/L		117	76 - 126
o-Xylene	0.50	U	50.0	54.3		ug/L		109	78 - 122
sec-Butylbenzene	1.0	U	50.0	58.6		ug/L		117	77 - 126

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

Lab Sample ID: 680-138990-7 MS
Matrix: Water
Analysis Batch: 482104

Client Sample ID: G6M-13-06X-SPR17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.50	U	50.0	54.7		ug/L		109	78 - 123
tert-Butylbenzene	1.0	U	50.0	56.4		ug/L		113	78 - 124
1,1,1,2-Tetrachloroethane	1.0	U	50.0	51.0		ug/L		102	78 - 124
1,1,2,2-Tetrachloroethane	1.0	U	50.0	53.8		ug/L		108	71 - 121
Tetrachloroethene	1.0	U	50.0	52.4		ug/L		105	74 - 129
Toluene	2.8		50.0	56.9		ug/L		108	80 - 121
trans-1,2-Dichloroethene	0.45	J	50.0	55.5		ug/L		110	75 - 124
trans-1,3-Dichloropropene	1.0	U	50.0	50.3		ug/L		101	73 - 127
1,2,3-Trichlorobenzene	5.0	U J	50.0	45.9		ug/L		92	69 - 129
1,2,4-Trichlorobenzene	5.0	U	50.0	47.7		ug/L		95	69 - 130
1,1,1-Trichloroethane	1.0	U	50.0	54.0		ug/L		108	74 - 131
1,1,2-Trichloroethane	0.50	U	50.0	54.1		ug/L		108	80 - 119
Trichloroethene	1.0	U	50.0	51.9		ug/L		104	79 - 123
Trichlorofluoromethane	1.0	U	50.0	54.6		ug/L		109	65 - 141
1,2,3-Trichloropropane	1.0	U	50.0	55.2		ug/L		110	73 - 122
1,2,4-Trimethylbenzene	1.0	U	50.0	58.4		ug/L		117	76 - 124
1,3,5-Trimethylbenzene	0.50	U	50.0	56.5		ug/L		113	75 - 124
Vinyl acetate	2.0	U	100	96.1		ug/L		96	54 - 146
Vinyl chloride	2.6		50.0	63.2		ug/L		121	58 - 137
Xylenes, Total	0.38	J	100	109		ug/L		109	79 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*107*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*106*		*81 - 118*
Toluene-d8 (Surr)	*109*		*89 - 112*

Lab Sample ID: 680-138990-7 MSD
Matrix: Water
Analysis Batch: 482104

Client Sample ID: G6M-13-06X-SPR17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	45		250	286		ug/L		96	39 - 160	3	20
Benzene	1.0	U	50.0	55.7		ug/L		111	79 - 120	2	20
Bromobenzene	1.0	U	50.0	49.4		ug/L		99	80 - 120	2	20
Bromoform	1.0	U	50.0	45.1		ug/L		90	66 - 130	2	20
Bromomethane	5.0	U	50.0	61.8		ug/L		124	53 - 141	10	20
2-Butanone (MEK)	45		250	292		ug/L		99	56 - 143	1	20
Carbon disulfide	2.0	U	50.0	55.8		ug/L		112	64 - 133	4	20
Carbon tetrachloride	0.50	U	50.0	53.7		ug/L		107	72 - 136	3	20
Chlorobenzene	0.50	U	50.0	52.1		ug/L		104	82 - 118	0	20
Chlorobromomethane	1.0	U	50.0	50.8		ug/L		102	78 - 123	0	20
Chlorodibromomethane	0.50	U	50.0	47.9		ug/L		96	74 - 126	3	20
Chloroethane	5.0	U	50.0	56.2		ug/L		112	60 - 138	6	20
Chloroform	1.0	U	50.0	54.1		ug/L		108	79 - 124	2	20
Chloromethane	1.0	U	50.0	57.6		ug/L		115	50 - 139	1	20
2-Chlorotoluene	0.50	U	50.0	54.4		ug/L		109	79 - 122	0	20
4-Chlorotoluene	1.0	U	50.0	54.5		ug/L		109	78 - 122	1	20

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

Lab Sample ID: 680-138990-7 MSD
Matrix: Water
Analysis Batch: 482104

Client Sample ID: G6M-13-06X-SPR17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	2.2		50.0	57.5		ug/L		111	78 - 123	1	20
cis-1,3-Dichloropropene	1.0	U	50.0	51.9		ug/L		104	75 - 124	3	20
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	53.6		ug/L		107	62 - 128	8	20
Dibromomethane	1.0	U	50.0	51.5		ug/L		103	79 - 123	0	20
1,2-Dichlorobenzene	1.0	U	50.0	53.0		ug/L		106	80 - 119	2	20
1,3-Dichlorobenzene	1.0	U	50.0	52.9		ug/L		106	80 - 119	2	20
1,4-Dichlorobenzene	1.0	U	50.0	52.2		ug/L		104	79 - 118	0	20
Dichlorobromomethane	1.0	U	50.0	52.4		ug/L		105	79 - 125	2	20
Dichlorodifluoromethane	1.0	U Q	50.0	59.6		ug/L		119	32 - 152	3	20
1,1-Dichloroethane	1.0	U	50.0	53.7		ug/L		107	77 - 125	1	20
1,2-Dichloroethane	1.0	U	50.0	52.8		ug/L		106	73 - 128	0	20
1,1-Dichloroethene	1.0	U	50.0	57.0		ug/L		114	71 - 131	1	20
1,2-Dichloroethene, Total	2.7		100	115		ug/L		112	79 - 121	2	20
1,2-Dichloropropane	1.0	U	50.0	53.5		ug/L		107	78 - 122	1	20
1,3-Dichloropropane	1.0	U	50.0	51.5		ug/L		103	80 - 119	1	20
2,2-Dichloropropane	1.0	U	50.0	59.4		ug/L		119	60 - 139	4	20
1,1-Dichloropropene	1.0	U	50.0	60.0		ug/L		120	79 - 125	2	20
Ethylbenzene	22		50.0	77.5		ug/L		110	79 - 121	1	20
Ethylene Dibromide	1.0	U	50.0	51.5		ug/L		103	75 - 127	2	20
Hexachlorobutadiene	5.0	U	50.0	59.0		ug/L		118	66 - 134	18	20
2-Hexanone	5.0	U	250	290		ug/L		116	57 - 139	1	20
Isopropylbenzene	1.0	U	50.0	54.9		ug/L		110	72 - 131	2	20
4-Isopropyltoluene	1.0	U	50.0	58.2		ug/L		116	77 - 127	0	20
Methylene Chloride	5.0	U	50.0	51.6		ug/L		103	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	5.0	U	250	276		ug/L		110	67 - 130	0	20
Methyl tert-butyl ether	0.50	U	50.0	53.4		ug/L		107	71 - 124	6	20
m-Xylene & p-Xylene	0.38	J	50.0	54.0		ug/L		107	80 - 121	1	20
Naphthalene	5.0	U J	50.0	64.2	J	ug/L		128	61 - 128	29	20
n-Butylbenzene	1.0	U	50.0	59.5		ug/L		119	75 - 128	2	20
N-Propylbenzene	1.0	U	50.0	57.5		ug/L		115	76 - 126	2	20
o-Xylene	0.50	U	50.0	53.7		ug/L		107	78 - 122	1	20
sec-Butylbenzene	1.0	U	50.0	57.6		ug/L		115	77 - 126	2	20
Styrene	0.50	U	50.0	53.4		ug/L		107	78 - 123	2	20
tert-Butylbenzene	1.0	U	50.0	55.7		ug/L		111	78 - 124	1	20
1,1,1,2-Tetrachloroethane	1.0	U	50.0	51.1		ug/L		102	78 - 124	0	20
1,1,2,2-Tetrachloroethane	1.0	U	50.0	55.4		ug/L		111	71 - 121	3	20
Tetrachloroethene	1.0	U	50.0	52.5		ug/L		105	74 - 129	0	20
Toluene	2.8		50.0	58.2		ug/L		111	80 - 121	2	20
trans-1,2-Dichloroethene	0.45	J	50.0	57.2		ug/L		113	75 - 124	3	20
trans-1,3-Dichloropropene	1.0	U	50.0	49.9		ug/L		100	73 - 127	1	20
1,2,3-Trichlorobenzene	5.0	U J	50.0	62.5	J	ug/L		125	69 - 129	31	20
1,2,4-Trichlorobenzene	5.0	U	50.0	56.4		ug/L		113	69 - 130	17	20
1,1,1-Trichloroethane	1.0	U	50.0	54.8		ug/L		110	74 - 131	1	20
1,1,2-Trichloroethane	0.50	U	50.0	54.3		ug/L		109	80 - 119	0	20
Trichloroethene	1.0	U	50.0	52.6		ug/L		105	79 - 123	1	20
Trichlorofluoromethane	1.0	U	50.0	52.5		ug/L		105	65 - 141	4	20
1,2,3-Trichloropropane	1.0	U	50.0	55.1		ug/L		110	73 - 122	0	20
1,2,4-Trimethylbenzene	1.0	U	50.0	57.7		ug/L		115	76 - 124	1	20

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

Lab Sample ID: 680-138990-7 MSD
Matrix: Water
Analysis Batch: 482104

Client Sample ID: G6M-13-06X-SPR17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	0.50	U	50.0	55.9		ug/L		112	75 - 124	1	20
Vinyl acetate	2.0	U	100	100		ug/L		100	54 - 146	4	20
Vinyl chloride	2.6		50.0	64.7		ug/L		124	58 - 137	2	20
Xylenes, Total	0.38	J	100	108		ug/L		107	79 - 121	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*108*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*107*		*81 - 118*
Toluene-d8 (Surr)	*109*		*89 - 112*

Lab Sample ID: MB 680-482288/8
Matrix: Water
Analysis Batch: 482288

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		06/02/17 09:10	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 09:10	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 09:10	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 09:10	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		06/02/17 09:10	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		06/02/17 09:10	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 09:10	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		06/02/17 09:10	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 09:10	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		06/02/17 09:10	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 09:10	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		06/02/17 09:10	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		06/02/17 09:10	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 09:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		06/02/17 09:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		06/02/17 09:10	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		06/02/17 09:10	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 09:10	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 09:10	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		06/02/17 09:10	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		06/02/17 09:10	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		06/02/17 09:10	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		06/02/17 09:10	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		06/02/17 09:10	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 09:10	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		06/02/17 09:10	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		06/02/17 09:10	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		06/02/17 09:10	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		06/02/17 09:10	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 09:10	1

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

Lab Sample ID: MB 680-482288/8
Matrix: Water
Analysis Batch: 482288

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		06/02/17 09:10	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 09:10	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		06/02/17 09:10	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		06/02/17 09:10	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 09:10	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 09:10	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		06/02/17 09:10	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		06/02/17 09:10	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		06/02/17 09:10	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/02/17 09:10	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		06/02/17 09:10	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		06/02/17 09:10	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 09:10	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		06/02/17 09:10	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		06/02/17 09:10	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 09:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		06/02/17 09:10	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		06/02/17 09:10	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 09:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 09:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 09:10	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		06/02/17 09:10	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		06/02/17 09:10	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		06/02/17 09:10	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		06/02/17 09:10	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		06/02/17 09:10	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		06/02/17 09:10	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		06/02/17 09:10	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		06/02/17 09:10	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		06/02/17 09:10	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		06/02/17 09:10	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		06/02/17 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*06/02/17 09:10*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/02/17 09:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*06/02/17 09:10*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*06/02/17 09:10*	*1*

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

Lab Sample ID: LCS 680-482288/3
Matrix: Water
Analysis Batch: 482288

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	215		ug/L		86	39 - 160
Benzene	50.0	45.9		ug/L		92	79 - 120
Bromobenzene	50.0	53.2		ug/L		106	80 - 120
Bromoform	50.0	51.5		ug/L		103	66 - 130
Bromomethane	50.0	51.2		ug/L		102	53 - 141
2-Butanone (MEK)	250	200		ug/L		80	56 - 143
Carbon disulfide	50.0	44.6		ug/L		89	64 - 133
Carbon tetrachloride	50.0	53.2		ug/L		106	72 - 136
Chlorobenzene	50.0	52.8		ug/L		106	82 - 118
Chlorobromomethane	50.0	40.5		ug/L		81	78 - 123
Chlorodibromomethane	50.0	50.1		ug/L		100	74 - 126
Chloroethane	50.0	36.1		ug/L		72	60 - 138
Chloroform	50.0	48.5		ug/L		97	79 - 124
Chloromethane	50.0	42.5		ug/L		85	50 - 139
2-Chlorotoluene	50.0	52.9		ug/L		106	79 - 122
4-Chlorotoluene	50.0	54.3		ug/L		109	78 - 122
cis-1,2-Dichloroethene	50.0	49.1		ug/L		98	78 - 123
cis-1,3-Dichloropropene	50.0	46.5		ug/L		93	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	46.0		ug/L		92	62 - 128
Dibromomethane	50.0	46.5		ug/L		93	79 - 123
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	80 - 119
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	80 - 119
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	79 - 118
Dichlorobromomethane	50.0	48.9		ug/L		98	79 - 125
Dichlorodifluoromethane	50.0	48.0		ug/L		96	32 - 152
1,1-Dichloroethane	50.0	43.5		ug/L		87	77 - 125
1,2-Dichloroethane	50.0	50.2		ug/L		100	73 - 128
1,1-Dichloroethene	50.0	46.1		ug/L		92	71 - 131
1,2-Dichloroethene, Total	100	99.1		ug/L		99	79 - 121
1,2-Dichloropropane	50.0	44.4		ug/L		89	78 - 122
1,3-Dichloropropane	50.0	47.6		ug/L		95	80 - 119
2,2-Dichloropropane	50.0	51.5		ug/L		103	60 - 139
1,1-Dichloropropene	50.0	51.6		ug/L		103	79 - 125
Ethylbenzene	50.0	50.9		ug/L		102	79 - 121
Ethylene Dibromide	50.0	50.8		ug/L		102	75 - 127
Hexachlorobutadiene	50.0	54.3		ug/L		109	66 - 134
2-Hexanone	250	213		ug/L		85	57 - 139
Isopropylbenzene	50.0	53.1		ug/L		106	72 - 131
4-Isopropyltoluene	50.0	51.0		ug/L		102	77 - 127
Methylene Chloride	50.0	45.4		ug/L		91	74 - 124
4-Methyl-2-pentanone (MIBK)	250	201		ug/L		81	67 - 130
Methyl tert-butyl ether	50.0	46.5		ug/L		93	71 - 124
m-Xylene & p-Xylene	50.0	52.2		ug/L		104	80 - 121
Naphthalene	50.0	48.5		ug/L		97	61 - 128
n-Butylbenzene	50.0	50.3		ug/L		101	75 - 128
N-Propylbenzene	50.0	54.2		ug/L		108	76 - 126
o-Xylene	50.0	51.4		ug/L		103	78 - 122
sec-Butylbenzene	50.0	54.1		ug/L		108	77 - 126

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

Lab Sample ID: LCS 680-482288/3
Matrix: Water
Analysis Batch: 482288

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	52.0		ug/L		104	78 - 123
tert-Butylbenzene	50.0	54.1		ug/L		108	78 - 124
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/L		104	78 - 124
1,1,2,2-Tetrachloroethane	50.0	46.0		ug/L		92	71 - 121
Tetrachloroethene	50.0	58.2		ug/L		116	74 - 129
Toluene	50.0	48.4		ug/L		97	80 - 121
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	75 - 124
trans-1,3-Dichloropropene	50.0	49.1		ug/L		98	73 - 127
1,2,3-Trichlorobenzene	50.0	50.5		ug/L		101	69 - 129
1,2,4-Trichlorobenzene	50.0	50.4		ug/L		101	69 - 130
1,1,1-Trichloroethane	50.0	51.8		ug/L		104	74 - 131
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	80 - 119
Trichloroethene	50.0	53.6		ug/L		107	79 - 123
Trichlorofluoromethane	50.0	44.3		ug/L		89	65 - 141
1,2,3-Trichloropropane	50.0	46.2		ug/L		92	73 - 122
1,2,4-Trimethylbenzene	50.0	52.3		ug/L		105	76 - 124
1,3,5-Trimethylbenzene	50.0	53.7		ug/L		107	75 - 124
Vinyl acetate	100	75.4		ug/L		75	54 - 146
Vinyl chloride	50.0	46.6		ug/L		93	58 - 137
Xylenes, Total	100	104		ug/L		104	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*
Dibromofluoromethane (Surr)	*98*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*94*		*81 - 118*
Toluene-d8 (Surr)	*101*		*89 - 112*

Lab Sample ID: LCSD 680-482288/4
Matrix: Water
Analysis Batch: 482288

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	250	235		ug/L		94	39 - 160	9	20
Benzene	50.0	47.3		ug/L		95	79 - 120	3	20
Bromobenzene	50.0	54.4		ug/L		109	80 - 120	2	20
Bromoform	50.0	52.7		ug/L		105	66 - 130	2	20
Bromomethane	50.0	51.5		ug/L		103	53 - 141	1	20
2-Butanone (MEK)	250	205		ug/L		82	56 - 143	2	20
Carbon disulfide	50.0	44.5		ug/L		89	64 - 133	0	20
Carbon tetrachloride	50.0	52.3		ug/L		105	72 - 136	2	20
Chlorobenzene	50.0	52.7		ug/L		105	82 - 118	0	20
Chlorobromomethane	50.0	42.9		ug/L		86	78 - 123	6	20
Chlorodibromomethane	50.0	53.2		ug/L		106	74 - 126	6	20
Chloroethane	50.0	36.8		ug/L		74	60 - 138	2	20
Chloroform	50.0	49.0		ug/L		98	79 - 124	1	20
Chloromethane	50.0	42.3		ug/L		85	50 - 139	0	20
2-Chlorotoluene	50.0	52.3		ug/L		105	79 - 122	1	20
4-Chlorotoluene	50.0	54.8		ug/L		110	78 - 122	1	20

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

Lab Sample ID: LCSD 680-482288/4
Matrix: Water
Analysis Batch: 482288

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	50.0	50.8		ug/L		102	78 - 123	3	20
cis-1,3-Dichloropropene	50.0	48.1		ug/L		96	75 - 124	4	20
1,2-Dibromo-3-Chloropropane	50.0	47.4		ug/L		95	62 - 128	3	20
Dibromomethane	50.0	49.1		ug/L		98	79 - 123	5	20
1,2-Dichlorobenzene	50.0	51.1		ug/L		102	80 - 119	1	20
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	80 - 119	2	20
1,4-Dichlorobenzene	50.0	51.1		ug/L		102	79 - 118	0	20
Dichlorobromomethane	50.0	51.0		ug/L		102	79 - 125	4	20
Dichlorodifluoromethane	50.0	46.7		ug/L		93	32 - 152	3	20
1,1-Dichloroethane	50.0	43.4		ug/L		87	77 - 125	0	20
1,2-Dichloroethane	50.0	50.6		ug/L		101	73 - 128	1	20
1,1-Dichloroethene	50.0	48.7		ug/L		97	71 - 131	5	20
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121	2	20
1,2-Dichloropropane	50.0	45.0		ug/L		90	78 - 122	1	20
1,3-Dichloropropane	50.0	49.6		ug/L		99	80 - 119	4	20
2,2-Dichloropropane	50.0	50.0		ug/L		100	60 - 139	3	20
1,1-Dichloropropene	50.0	50.9		ug/L		102	79 - 125	1	20
Ethylbenzene	50.0	51.3		ug/L		103	79 - 121	1	20
Ethylene Dibromide	50.0	53.5		ug/L		107	75 - 127	5	20
Hexachlorobutadiene	50.0	53.6		ug/L		107	66 - 134	1	20
2-Hexanone	250	223		ug/L		89	57 - 139	5	20
Isopropylbenzene	50.0	52.4		ug/L		105	72 - 131	1	20
4-Isopropyltoluene	50.0	48.4		ug/L		97	77 - 127	5	20
Methylene Chloride	50.0	45.8		ug/L		92	74 - 124	1	20
4-Methyl-2-pentanone (MIBK)	250	209		ug/L		84	67 - 130	4	20
Methyl tert-butyl ether	50.0	48.6		ug/L		97	71 - 124	4	20
m-Xylene & p-Xylene	50.0	51.8		ug/L		104	80 - 121	1	20
Naphthalene	50.0	48.1		ug/L		96	61 - 128	1	20
n-Butylbenzene	50.0	49.1		ug/L		98	75 - 128	2	20
N-Propylbenzene	50.0	53.7		ug/L		107	76 - 126	1	20
o-Xylene	50.0	51.5		ug/L		103	78 - 122	0	20
sec-Butylbenzene	50.0	52.4		ug/L		105	77 - 126	3	20
Styrene	50.0	51.4		ug/L		103	78 - 123	1	20
tert-Butylbenzene	50.0	51.8		ug/L		104	78 - 124	4	20
1,1,1,2-Tetrachloroethane	50.0	53.8		ug/L		108	78 - 124	4	20
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/L		96	71 - 121	4	20
Tetrachloroethene	50.0	58.2		ug/L		116	74 - 129	0	20
Toluene	50.0	49.4		ug/L		99	80 - 121	2	20
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	75 - 124	1	20
trans-1,3-Dichloropropene	50.0	50.9		ug/L		102	73 - 127	4	20
1,2,3-Trichlorobenzene	50.0	51.7		ug/L		103	69 - 129	2	20
1,2,4-Trichlorobenzene	50.0	49.8		ug/L		100	69 - 130	1	20
1,1,1-Trichloroethane	50.0	51.9		ug/L		104	74 - 131	0	20
1,1,2-Trichloroethane	50.0	49.6		ug/L		99	80 - 119	0	20
Trichloroethene	50.0	53.3		ug/L		107	79 - 123	0	20
Trichlorofluoromethane	50.0	45.3		ug/L		91	65 - 141	2	20
1,2,3-Trichloropropane	50.0	47.4		ug/L		95	73 - 122	3	20
1,2,4-Trimethylbenzene	50.0	50.9		ug/L		102	76 - 124	3	20

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

Lab Sample ID: LCSD 680-482288/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482288

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	50.0	52.7		ug/L		105	75 - 124	2	20
Vinyl acetate	100	78.5		ug/L		78	54 - 146	4	20
Vinyl chloride	50.0	45.9		ug/L		92	58 - 137	1	20
Xylenes, Total	100	103		ug/L		103	79 - 121	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*
Toluene-d8 (Surr)	*103*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-481882/21 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/30/17 20:16	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/30/17 20:16	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		05/30/17 20:16	1
Methane (TCD)	77	U	390	77	39	ug/L		05/30/17 20:16	1

Lab Sample ID: LCS 680-481882/15 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	296		ug/L		103	75 - 125
Ethylene	269	269		ug/L		100	75 - 125
Methane	154	148		ug/L		96	75 - 125

Lab Sample ID: LCS 680-481882/18 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	2020		ug/L		105	75 - 125

Lab Sample ID: LCSD 680-481882/16 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	277		ug/L		96	75 - 125	7	30
Ethylene	269	248		ug/L		92	75 - 125	8	30
Methane	154	135		ug/L		88	75 - 125	9	30

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

Lab Sample ID: LCSD 680-481882/19 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481882

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2000		ug/L		104	75 - 125	1	30

Lab Sample ID: MB 680-481946/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		05/31/17 11:02	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		05/31/17 11:02	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		05/31/17 11:02	1
Methane (TCD)	77	U	390	77	39	ug/L		05/31/17 11:02	1

Lab Sample ID: LCS 680-481946/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	288		ug/L		100	75 - 125
Ethylene	269	256		ug/L		95	75 - 125
Methane	154	145		ug/L		94	75 - 125

Lab Sample ID: LCS 680-481946/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	2080		ug/L		108	75 - 125

Lab Sample ID: LCSD 680-481946/10 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	289		ug/L		100	75 - 125	0	30
Ethylene	269	254		ug/L		94	75 - 125	1	30
Methane	154	140		ug/L		91	75 - 125	4	30

Lab Sample ID: LCSD 680-481946/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2070		ug/L		108	75 - 125	0	30

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

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	14		288	268		ug/L		88	75 - 125
Ethylene	16		269	240		ug/L		83	75 - 125
Methane	15000	J	154	17400	J 4	ug/L		1740	75 - 125

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	14		288	252		ug/L		83	75 - 125	6	30
Ethylene	16		269	223		ug/L		77	75 - 125	7	30
Methane	15000	J	154	15200	J 4	ug/L		308	75 - 125	14	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-483093/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/08/17 09:42	1

Lab Sample ID: LCS 680-483093/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.6		mg/L		106	87 - 112

Lab Sample ID: LCSD 680-483093/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.7		mg/L		107	87 - 112	1	15

Lab Sample ID: 680-138990-12 MS — **Client Sample ID: G6M-02-08X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.0	U	20.0	18.6	D M	mg/L		93	87 - 112

Lab Sample ID: 680-138990-12 MSD — **Client Sample ID: G6M-02-08X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.0	U	20.0	18.8	D M	mg/L		94	87 - 112	1	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 680-138990-1 DU — **Client Sample ID: G6M-97-05B-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	7.0	D M		7.04	D M	mg/L				0.7	15

Lab Sample ID: 680-138990-8 DU — **Client Sample ID: G6M-02-01X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483093

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	10	U		10	U	mg/L				NC	15

Lab Sample ID: MB 680-483342/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483342

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/09/17 12:28	1

Lab Sample ID: LCS 680-483342/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483342

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.26		mg/L		93	87 - 112		

Lab Sample ID: LCSD 680-483342/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483342

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			10.0	9.27		mg/L		93	87 - 112	0	15

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483342

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	3.0	M	10.0	12.0	M	mg/L		90	87 - 112		

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483342

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3.0	M	10.0	11.9	M	mg/L		90	87 - 112	1	15

Lab Sample ID: 680-138990-8 DU — **Client Sample ID: G6M-02-01X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483342

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	0.51	J M		0.502	J M	mg/L				0.6	15

QC Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Lab Sample ID: MB 680-483394/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483394

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		06/11/17 11:05	1

Lab Sample ID: LCS 680-483394/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.1		mg/L		101	87 - 112

Lab Sample ID: LCSD 680-483394/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483394

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.1		mg/L		101	87 - 112	0	15

Lab Sample ID: 680-138990-1 MS — **Client Sample ID: G6M-97-05B-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483394

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	6.3	D M	50.0	58.7	D M	mg/L		105	87 - 112

Lab Sample ID: 680-138990-1 MSD — **Client Sample ID: G6M-97-05B-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483394

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	6.3	D M	50.0	58.8	D M	mg/L		105	87 - 112	0	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-481901/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482191 — **Prep Batch: 481901**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		06/01/17 07:07	1
Manganese	3.0	U	10	3.0	1.0	ug/L		06/01/17 07:07	1

Lab Sample ID: LCS 680-481901/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482191 — **Prep Batch: 481901**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	4870		ug/L		97	87 - 115
Manganese	500	515		ug/L		103	90 - 114

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

Lab Sample ID: 680-138990-9 MS — **Client Sample ID: G6M-RB1 SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482191 — **Prep Batch: 481901**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	50	U	5000	4810		ug/L		96	87 - 115
Manganese	3.0	U	500	509		ug/L		102	90 - 114

Lab Sample ID: 680-138990-9 MSD — **Client Sample ID: G6M-RB1 SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482191 — **Prep Batch: 481901**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	50	U	5000	4930		ug/L		99	87 - 115	2	20
Manganese	3.0	U	500	523		ug/L		105	90 - 114	3	20

Lab Sample ID: MB 680-480933/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481381 — **Prep Batch: 480933**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/25/17 00:41	1
Manganese	3.0	U	10	3.0	1.0	ug/L		05/25/17 00:41	1

Lab Sample ID: LCS 680-480933/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481381 — **Prep Batch: 480933**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	4850		ug/L		97	87 - 115
Manganese	500	518		ug/L		104	90 - 114

Lab Sample ID: MB 680-481290/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481561 — **Prep Batch: 481290**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		05/25/17 20:31	1
Manganese	3.0	U	10	3.0	1.0	ug/L		05/25/17 20:31	1

Lab Sample ID: LCS 680-481290/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481561 — **Prep Batch: 481290**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	4930		ug/L		99	87 - 115
Manganese	500	523		ug/L		105	90 - 114

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481561 — **Prep Batch: 481290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	250000	J	5000	250000	4	ug/L		-33	87 - 115

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

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481561 — **Prep Batch: 481290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	7000	J	500	7340	4	ug/L		62	90 - 114

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481561 — **Prep Batch: 481290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	250000	J	5000	243000	4	ug/L		-165	87 - 115	3	20
Manganese	7000	J	500	7130	4	ug/L		21	90 - 114	3	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-481899/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482141 — **Prep Batch: 481899**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/31/17 19:22	1

Lab Sample ID: LCS 680-481899/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482141 — **Prep Batch: 481899**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	103		ug/L		103	84 - 116

Lab Sample ID: 680-138990-9 MS — **Client Sample ID: G6M-RB1 SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482141 — **Prep Batch: 481899**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.0	U	100	105		ug/L		105	84 - 116

Lab Sample ID: 680-138990-9 MSD — **Client Sample ID: G6M-RB1 SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482141 — **Prep Batch: 481899**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.0	U	100	102		ug/L		102	84 - 116	3	20

Lab Sample ID: MB 680-480928/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481584 — **Prep Batch: 480928**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/26/17 04:52	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-480928/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481584 — **Prep Batch: 480928**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	108		ug/L		108	84 - 116

Lab Sample ID: MB 680-481288/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481584 — **Prep Batch: 481288**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		05/25/17 18:35	1

Lab Sample ID: LCS 680-481288/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 481584 — **Prep Batch: 481288**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	102		ug/L		102	84 - 116

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481584 — **Prep Batch: 481288**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	500	J	100	581	4	ug/L		81	84 - 116

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 481584 — **Prep Batch: 481288**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	500	J	100	603	4	ug/L		103	84 - 116	4	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-375556/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375556

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		05/30/17 17:37	1

Lab Sample ID: LCS 280-375556/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	5.09		mg/L		102	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: MB 280-375575/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375575

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		05/30/17 21:19	1

Lab Sample ID: LCS 280-375575/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375575

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	5.00		mg/L		100	90 - 110

Lab Sample ID: 680-138990-3 MS — **Client Sample ID: G6M-13-04X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	0.036	J J	4.00	3.21	J	mg/L		79	90 - 110

Lab Sample ID: 680-138990-3 MSD — **Client Sample ID: G6M-13-04X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375575

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite-N	0.036	J J	4.00	3.19	J	mg/L		79	90 - 110	1	10

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	0.14	J	4.00	2.24	J	mg/L		53	90 - 110

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375575

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite-N	0.14	J	4.00	2.24	J	mg/L		53	90 - 110	0	10

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-481056/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/23/17 11:40	1

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 680-481056/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			10.0	10.3		mg/L		103	75 - 125		

Lab Sample ID: LCSD 680-481056/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide			10.0	10.4		mg/L		104	75 - 125	1	30

Lab Sample ID: 680-138990-1 DU — **Client Sample ID: G6M-97-05B-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481056

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfide	1.0	U		1.0	U	mg/L				NC	30

Lab Sample ID: MB 680-481339/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481339

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		05/25/17 04:24	1

Lab Sample ID: LCS 680-481339/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481339

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			10.0	8.89		mg/L		89	75 - 125		

Lab Sample ID: LCSD 680-481339/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481339

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide			10.0	8.54		mg/L		85	75 - 125	4	30

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.0	U	10.0	9.61		mg/L		96	75 - 125		

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.0	U	10.0	9.48		mg/L		95	75 - 125	1	30

Lab Sample ID: 680-138990-6 DU — **Client Sample ID: G6M-04-10X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 481339

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfide	1.0	U		1.0	U	mg/L				NC	30

Lab Sample ID: MB 680-482328/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482328

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		06/02/17 09:41	1

Lab Sample ID: LCS 680-482328/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482328

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			10.0	12.4		mg/L		124	75 - 125		

Lab Sample ID: LCSD 680-482328/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 482328

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide			10.0	12.0		mg/L		120	75 - 125	3	30

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

Lab Sample ID: MB 280-375195/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375195

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.198	J	1.0	0.50	0.16	mg/L		05/25/17 23:19	1

Lab Sample ID: MB 280-375195/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375195

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.50	U	1.0	0.50	0.16	mg/L		05/25/17 15:09	1

Lab Sample ID: LCS 280-375195/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375195

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates			25.0	26.3		mg/L		105	88 - 112		

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

Lab Sample ID: LCS 280-375195/34 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	26.9		mg/L		107	88 - 112

Lab Sample ID: 680-138990-7 MS — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375195

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	70	J	25.0	93.1		mg/L		93	88 - 112

Lab Sample ID: 680-138990-7 MSD — **Client Sample ID: G6M-13-06X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375195

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	70	J	25.0	93.2		mg/L		94	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-375005/31 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	2.34	J	5.0	3.2	1.1	mg/L		05/24/17 18:22	1

Lab Sample ID: MB 280-375005/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	2.67	J	5.0	3.2	1.1	mg/L		05/24/17 15:38	1

Lab Sample ID: LCS 280-375005/30 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	194		mg/L		97	90 - 110

Lab Sample ID: LCS 280-375005/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	197		mg/L		99	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 680-138990-2 DU — **Client Sample ID: G6M-13-01X-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	36	B		35.6		mg/L				1	10

Lab Sample ID: 680-138990-5 DU — **Client Sample ID: G6M-04-10A-SPR17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375005

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	38			37.2		mg/L				3	10

Lab Sample ID: MB 280-375147/31 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375147

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	2.15	J	5.0	3.2	1.1	mg/L		05/25/17 14:28	1

Lab Sample ID: LCS 280-375147/30 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 375147

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			200	195		mg/L		97	90 - 110		

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

GC/MS VOA

Analysis Batch: 481931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	8260B	
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	8260B	
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	8260B	
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	8260B	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	8260B	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	8260B	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	8260B	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	8260B	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	8260B	
680-138990-14	G6M-DUP-1	Total/NA	Water	8260B	
MB 680-481931/8	Method Blank	Total/NA	Water	8260B	
LCS 680-481931/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-481931/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 482104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	8260B	
680-138990-10	Trip Blank	Total/NA	Water	8260B	
680-138990-11 - DL	G6M-03-01X-SPR17	Total/NA	Water	8260B	
680-138990-15	IW-17D-SPR17	Total/NA	Water	8260B	
680-138990-16	IW-18D-SPR17	Total/NA	Water	8260B	
MB 680-482104/7	Method Blank	Total/NA	Water	8260B	
LCS 680-482104/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-482104/5	Lab Control Sample Dup	Total/NA	Water	8260B	
680-138990-7 MS	G6M-13-06X-SPR17	Total/NA	Water	8260B	
680-138990-7 MSD	G6M-13-06X-SPR17	Total/NA	Water	8260B	

Analysis Batch: 482288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	8260B	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	8260B	
MB 680-482288/8	Method Blank	Total/NA	Water	8260B	
LCS 680-482288/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-482288/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 481882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	RSK-175	
MB 680-481882/21	Method Blank	Total/NA	Water	RSK-175	
LCS 680-481882/15	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-481882/18	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-481882/16	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-481882/19	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 481946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	RSK-175	
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 481946 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	RSK-175	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	RSK-175	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	RSK-175	
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	RSK-175	
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	RSK-175	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	RSK-175	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	RSK-175	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	RSK-175	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	RSK-175	
680-138990-14	G6M-DUP-1	Total/NA	Water	RSK-175	
680-138990-15	IW-17D-SPR17	Total/NA	Water	RSK-175	
680-138990-16	IW-18D-SPR17	Total/NA	Water	RSK-175	
MB 680-481946/9	Method Blank	Total/NA	Water	RSK-175	
LCS 680-481946/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-481946/6	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-481946/10	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-481946/7	Lab Control Sample Dup	Total/NA	Water	RSK-175	
680-138990-7 MS	G6M-13-06X-SPR17	Total/NA	Water	RSK-175	
680-138990-7 MSD	G6M-13-06X-SPR17	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 483093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	9056A	
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	9056A	
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	9056A	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	9056A	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	9056A	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	9056A	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	9056A	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	9056A	
680-138990-14	G6M-DUP-1	Total/NA	Water	9056A	
680-138990-15	IW-17D-SPR17	Total/NA	Water	9056A	
MB 680-483093/2	Method Blank	Total/NA	Water	9056A	
LCS 680-483093/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-483093/4	Lab Control Sample Dup	Total/NA	Water	9056A	
680-138990-12 MS	G6M-02-08X-SPR17	Total/NA	Water	9056A	
680-138990-12 MSD	G6M-02-08X-SPR17	Total/NA	Water	9056A	
680-138990-1 DU	G6M-97-05B-SPR17	Total/NA	Water	9056A	
680-138990-8 DU	G6M-02-01X-SPR17	Total/NA	Water	9056A	

Analysis Batch: 483342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	9056A	
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	9056A	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	9056A	
680-138990-16	IW-18D-SPR17	Total/NA	Water	9056A	
MB 680-483342/2	Method Blank	Total/NA	Water	9056A	
LCS 680-483342/3	Lab Control Sample	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 483342 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 680-483342/4	Lab Control Sample Dup	Total/NA	Water	9056A	
680-138990-7 MS	G6M-13-06X-SPR17	Total/NA	Water	9056A	
680-138990-7 MSD	G6M-13-06X-SPR17	Total/NA	Water	9056A	
680-138990-8 DU	G6M-02-01X-SPR17	Total/NA	Water	9056A	

Analysis Batch: 483394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	9056A	
MB 680-483394/2	Method Blank	Total/NA	Water	9056A	
LCS 680-483394/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-483394/4	Lab Control Sample Dup	Total/NA	Water	9056A	
680-138990-1 MS	G6M-97-05B-SPR17	Total/NA	Water	9056A	
680-138990-1 MSD	G6M-97-05B-SPR17	Total/NA	Water	9056A	

Metals

Prep Batch: 480928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Dissolved	Water	3005A	
680-138990-2	G6M-13-01X-SPR17	Dissolved	Water	3005A	
680-138990-4	G6M-04-09X-SPR17	Dissolved	Water	3005A	
680-138990-5	G6M-04-10A-SPR17	Dissolved	Water	3005A	
680-138990-6	G6M-04-10X-SPR17	Dissolved	Water	3005A	
680-138990-8	G6M-02-01X-SPR17	Dissolved	Water	3005A	
680-138990-11	G6M-03-01X-SPR17	Dissolved	Water	3005A	
680-138990-12	G6M-02-08X-SPR17	Dissolved	Water	3005A	
680-138990-13	G6M-13-05X-SPR17	Dissolved	Water	3005A	
680-138990-14	G6M-DUP-1	Dissolved	Water	3005A	
680-138990-16	IW-18D-SPR17	Dissolved	Water	3005A	
MB 680-480928/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-480928/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 480933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Dissolved	Water	3005A	
680-138990-2	G6M-13-01X-SPR17	Dissolved	Water	3005A	
680-138990-4	G6M-04-09X-SPR17	Dissolved	Water	3005A	
680-138990-5	G6M-04-10A-SPR17	Dissolved	Water	3005A	
680-138990-6	G6M-04-10X-SPR17	Dissolved	Water	3005A	
680-138990-8	G6M-02-01X-SPR17	Dissolved	Water	3005A	
680-138990-11	G6M-03-01X-SPR17	Dissolved	Water	3005A	
680-138990-12	G6M-02-08X-SPR17	Dissolved	Water	3005A	
680-138990-13	G6M-13-05X-SPR17	Dissolved	Water	3005A	
680-138990-14	G6M-DUP-1	Dissolved	Water	3005A	
680-138990-16	IW-18D-SPR17	Dissolved	Water	3005A	
MB 680-480933/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-480933/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 481288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-3	G6M-13-04X-SPR17	Dissolved	Water	3005A	
680-138990-7	G6M-13-06X-SPR17	Dissolved	Water	3005A	
680-138990-15	IW-17D-SPR17	Dissolved	Water	3005A	
MB 680-481288/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-481288/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-138990-7 MS	G6M-13-06X-SPR17	Dissolved	Water	3005A	
680-138990-7 MSD	G6M-13-06X-SPR17	Dissolved	Water	3005A	

Prep Batch: 481290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-3	G6M-13-04X-SPR17	Dissolved	Water	3005A	
680-138990-7	G6M-13-06X-SPR17	Dissolved	Water	3005A	
680-138990-15	IW-17D-SPR17	Dissolved	Water	3005A	
MB 680-481290/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-481290/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-138990-7 MS	G6M-13-06X-SPR17	Dissolved	Water	3005A	
680-138990-7 MSD	G6M-13-06X-SPR17	Dissolved	Water	3005A	

Analysis Batch: 481381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Dissolved	Water	6010C	480933
680-138990-2	G6M-13-01X-SPR17	Dissolved	Water	6010C	480933
680-138990-4	G6M-04-09X-SPR17	Dissolved	Water	6010C	480933
680-138990-5	G6M-04-10A-SPR17	Dissolved	Water	6010C	480933
680-138990-6	G6M-04-10X-SPR17	Dissolved	Water	6010C	480933
680-138990-8	G6M-02-01X-SPR17	Dissolved	Water	6010C	480933
680-138990-11	G6M-03-01X-SPR17	Dissolved	Water	6010C	480933
680-138990-12	G6M-02-08X-SPR17	Dissolved	Water	6010C	480933
680-138990-13	G6M-13-05X-SPR17	Dissolved	Water	6010C	480933
680-138990-14	G6M-DUP-1	Dissolved	Water	6010C	480933
680-138990-16	IW-18D-SPR17	Dissolved	Water	6010C	480933
MB 680-480933/1-A	Method Blank	Total Recoverable	Water	6010C	480933
LCS 680-480933/2-A	Lab Control Sample	Total Recoverable	Water	6010C	480933

Analysis Batch: 481561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-3	G6M-13-04X-SPR17	Dissolved	Water	6010C	481290
680-138990-7	G6M-13-06X-SPR17	Dissolved	Water	6010C	481290
680-138990-11	G6M-03-01X-SPR17	Dissolved	Water	6010C	480933
680-138990-15	IW-17D-SPR17	Dissolved	Water	6010C	481290
MB 680-481290/1-A	Method Blank	Total Recoverable	Water	6010C	481290
LCS 680-481290/2-A	Lab Control Sample	Total Recoverable	Water	6010C	481290
680-138990-7 MS	G6M-13-06X-SPR17	Dissolved	Water	6010C	481290
680-138990-7 MSD	G6M-13-06X-SPR17	Dissolved	Water	6010C	481290

Analysis Batch: 481584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Dissolved	Water	6020A	480928
680-138990-2	G6M-13-01X-SPR17	Dissolved	Water	6020A	480928
680-138990-3	G6M-13-04X-SPR17	Dissolved	Water	6020A	481288
680-138990-4	G6M-04-09X-SPR17	Dissolved	Water	6020A	480928

Metals (Continued)

Analysis Batch: 481584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-5	G6M-04-10A-SPR17	Dissolved	Water	6020A	480928
680-138990-6	G6M-04-10X-SPR17	Dissolved	Water	6020A	480928
680-138990-7	G6M-13-06X-SPR17	Dissolved	Water	6020A	481288
680-138990-8	G6M-02-01X-SPR17	Dissolved	Water	6020A	480928
680-138990-11	G6M-03-01X-SPR17	Dissolved	Water	6020A	480928
680-138990-12	G6M-02-08X-SPR17	Dissolved	Water	6020A	480928
680-138990-13	G6M-13-05X-SPR17	Dissolved	Water	6020A	480928
680-138990-14	G6M-DUP-1	Dissolved	Water	6020A	480928
680-138990-15	IW-17D-SPR17	Dissolved	Water	6020A	481288
680-138990-16	IW-18D-SPR17	Dissolved	Water	6020A	480928
MB 680-480928/1-A	Method Blank	Total Recoverable	Water	6020A	480928
MB 680-481288/1-A	Method Blank	Total Recoverable	Water	6020A	481288
LCS 680-480928/2-A	Lab Control Sample	Total Recoverable	Water	6020A	480928
LCS 680-481288/2-A	Lab Control Sample	Total Recoverable	Water	6020A	481288
680-138990-7 MS	G6M-13-06X-SPR17	Dissolved	Water	6020A	481288
680-138990-7 MSD	G6M-13-06X-SPR17	Dissolved	Water	6020A	481288

Prep Batch: 481899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	3010A	
MB 680-481899/1-A	Method Blank	Total/NA	Water	3010A	
LCS 680-481899/2-A	Lab Control Sample	Total/NA	Water	3010A	
680-138990-9 MS	G6M-RB1 SPR17	Total/NA	Water	3010A	
680-138990-9 MSD	G6M-RB1 SPR17	Total/NA	Water	3010A	

Prep Batch: 481901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	3010A	
MB 680-481901/1-A	Method Blank	Total/NA	Water	3010A	
LCS 680-481901/2-A	Lab Control Sample	Total/NA	Water	3010A	
680-138990-9 MS	G6M-RB1 SPR17	Total/NA	Water	3010A	
680-138990-9 MSD	G6M-RB1 SPR17	Total/NA	Water	3010A	

Analysis Batch: 482141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	6020A	481899
MB 680-481899/1-A	Method Blank	Total/NA	Water	6020A	481899
LCS 680-481899/2-A	Lab Control Sample	Total/NA	Water	6020A	481899
680-138990-9 MS	G6M-RB1 SPR17	Total/NA	Water	6020A	481899
680-138990-9 MSD	G6M-RB1 SPR17	Total/NA	Water	6020A	481899

Analysis Batch: 482191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	6010C	481901
MB 680-481901/1-A	Method Blank	Total/NA	Water	6010C	481901
LCS 680-481901/2-A	Lab Control Sample	Total/NA	Water	6010C	481901
680-138990-9 MS	G6M-RB1 SPR17	Total/NA	Water	6010C	481901
680-138990-9 MSD	G6M-RB1 SPR17	Total/NA	Water	6010C	481901

General Chemistry

Analysis Batch: 375005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	SM 2320B	
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	SM 2320B	
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	SM 2320B	
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	SM 2320B	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	SM 2320B	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	SM 2320B	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	SM 2320B	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	SM 2320B	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	SM 2320B	
680-138990-14	G6M-DUP-1	Total/NA	Water	SM 2320B	
MB 280-375005/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-375005/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-375005/30	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-375005/4	Lab Control Sample	Total/NA	Water	SM 2320B	
680-138990-2 DU	G6M-13-01X-SPR17	Total/NA	Water	SM 2320B	
680-138990-5 DU	G6M-04-10A-SPR17	Total/NA	Water	SM 2320B	

Analysis Batch: 375147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	SM 2320B	
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	SM 2320B	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	SM 2320B	
680-138990-15	IW-17D-SPR17	Total/NA	Water	SM 2320B	
680-138990-16	IW-18D-SPR17	Total/NA	Water	SM 2320B	
MB 280-375147/31	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-375147/30	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 375195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	9060A	
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	9060A	
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	9060A	
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	9060A	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	9060A	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	9060A	
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	9060A	
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	9060A	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	9060A	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	9060A	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	9060A	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	9060A	
680-138990-14	G6M-DUP-1	Total/NA	Water	9060A	
680-138990-15	IW-17D-SPR17	Total/NA	Water	9060A	
680-138990-16	IW-18D-SPR17	Total/NA	Water	9060A	
MB 280-375195/35	Method Blank	Total/NA	Water	9060A	
MB 280-375195/4	Method Blank	Total/NA	Water	9060A	
LCS 280-375195/3	Lab Control Sample	Total/NA	Water	9060A	
LCS 280-375195/34	Lab Control Sample	Total/NA	Water	9060A	
680-138990-7 MS	G6M-13-06X-SPR17	Total/NA	Water	9060A	
680-138990-7 MSD	G6M-13-06X-SPR17	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 375556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	353.2	
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	353.2	
MB 280-375556/22	Method Blank	Total/NA	Water	353.2	
LCS 280-375556/21	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 375575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	353.2	
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	353.2	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	353.2	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	353.2	
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	353.2	
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	353.2	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	353.2	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	353.2	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	353.2	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	353.2	
680-138990-14	G6M-DUP-1	Total/NA	Water	353.2	
680-138990-15	IW-17D-SPR17	Total/NA	Water	353.2	
680-138990-16	IW-18D-SPR17	Total/NA	Water	353.2	
MB 280-375575/22	Method Blank	Total/NA	Water	353.2	
LCS 280-375575/21	Lab Control Sample	Total/NA	Water	353.2	
680-138990-3 MS	G6M-13-04X-SPR17	Total/NA	Water	353.2	
680-138990-3 MSD	G6M-13-04X-SPR17	Total/NA	Water	353.2	
680-138990-7 MS	G6M-13-06X-SPR17	Total/NA	Water	353.2	
680-138990-7 MSD	G6M-13-06X-SPR17	Total/NA	Water	353.2	

Analysis Batch: 481056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-1	G6M-97-05B-SPR17	Total/NA	Water	9034	
MB 680-481056/1	Method Blank	Total/NA	Water	9034	
LCS 680-481056/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-481056/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-138990-1 DU	G6M-97-05B-SPR17	Total/NA	Water	9034	

Analysis Batch: 481339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-2	G6M-13-01X-SPR17	Total/NA	Water	9034	
680-138990-3	G6M-13-04X-SPR17	Total/NA	Water	9034	
680-138990-4	G6M-04-09X-SPR17	Total/NA	Water	9034	
680-138990-5	G6M-04-10A-SPR17	Total/NA	Water	9034	
680-138990-6	G6M-04-10X-SPR17	Total/NA	Water	9034	
680-138990-7	G6M-13-06X-SPR17	Total/NA	Water	9034	
680-138990-8	G6M-02-01X-SPR17	Total/NA	Water	9034	
680-138990-9	G6M-RB1 SPR17	Total/NA	Water	9034	
680-138990-11	G6M-03-01X-SPR17	Total/NA	Water	9034	
680-138990-12	G6M-02-08X-SPR17	Total/NA	Water	9034	
680-138990-13	G6M-13-05X-SPR17	Total/NA	Water	9034	
680-138990-14	G6M-DUP-1	Total/NA	Water	9034	
680-138990-15	IW-17D-SPR17	Total/NA	Water	9034	
MB 680-481339/1	Method Blank	Total/NA	Water	9034	

General Chemistry (Continued)

Analysis Batch: 481339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-481339/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-481339/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-138990-7 MS	G6M-13-06X-SPR17	Total/NA	Water	9034	
680-138990-7 MSD	G6M-13-06X-SPR17	Total/NA	Water	9034	
680-138990-6 DU	G6M-04-10X-SPR17	Total/NA	Water	9034	

Analysis Batch: 482328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138990-16	IW-18D-SPR17	Total/NA	Water	9034	
MB 680-482328/1	Method Blank	Total/NA	Water	9034	
LCS 680-482328/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-482328/3	Lab Control Sample Dup	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-97-05B-SPR17

Lab Sample ID: 680-138990-1

Date Collected: 05/17/17 14:50

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 10:18	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481882	05/30/17 22:09	SMC	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		2	5 mL	5 mL	483093	06/08/17 10:54	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 01:43	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 05:39	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375556	05/30/17 18:23	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481056	05/23/17 11:40	LAF	TAL SAV
	Instrument ID:	ICPD								
Total/NA	Analysis	9060A		1			375195	05/25/17 22:18	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 15:53	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-13-01X-SPR17

Lab Sample ID: 680-138990-2

Date Collected: 05/18/17 09:30

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 12:50	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 13:15	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 11:29	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 02:40	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 06:23	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375556	05/30/17 18:25	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								

Client Sample ID: G6M-13-01X-SPR17 — Lab Sample ID: 680-138990-2

Date Collected: 05/18/17 09:30 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1			375195	05/25/17 22:35	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 15:43	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-13-04X-SPR17 — Lab Sample ID: 680-138990-3

Date Collected: 05/18/17 11:10 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 13:12	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 13:28	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		5	5 mL	5 mL	483394	06/11/17 16:11	DAS	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	481290	05/24/17 14:16	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481561	05/25/17 21:18	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	481288	05/24/17 14:16	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/25/17 19:00	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:21	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/25/17 22:49	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 18:42	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-04-09X-SPR17 — Lab Sample ID: 680-138990-4

Date Collected: 05/18/17 13:20 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 13:34	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 13:41	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 12:03	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-04-09X-SPR17

Lab Sample ID: 680-138990-4

Date Collected: 05/18/17 13:20
Matrix: Water
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010C		1			481381	05/25/17 02:06	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 05:57	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:27	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/25/17 23:50	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 18:37	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-04-10A-SPR17

Lab Sample ID: 680-138990-5

Date Collected: 05/18/17 14:30
Matrix: Water
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 13:56	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 13:54	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 12:21	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 02:11	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 06:01	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:29	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/26/17 00:11	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 18:26	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-04-10X-SPR17

Lab Sample ID: 680-138990-6

Date Collected: 05/18/17 15:55

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 14:17	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 14:07	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 12:38	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 02:16	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 06:05	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:31	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/26/17 04:12	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 17:56	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-13-06X-SPR17

Lab Sample ID: 680-138990-7

Date Collected: 05/19/17 08:05

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	482104	06/01/17 13:47	CEJ	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 14:20	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483342	06/09/17 15:25	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	481290	05/24/17 14:16	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481561	05/25/17 20:52	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	481288	05/24/17 14:16	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/25/17 18:42	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:51	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								

Client Sample ID: G6M-13-06X-SPR17 — Lab Sample ID: 680-138990-7

Date Collected: 05/19/17 08:05 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1.79			375195	05/26/17 04:28	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375147	05/25/17 15:46	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-02-01X-SPR17 — Lab Sample ID: 680-138990-8

Date Collected: 05/19/17 11:20 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	482288	06/02/17 10:37	CEJ	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 16:33	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483342	06/09/17 16:17	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 01:57	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 05:50	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:33	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/26/17 05:23	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375147	05/25/17 15:52	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-RB1 SPR17 — Lab Sample ID: 680-138990-9

Date Collected: 05/19/17 12:40 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	482288	06/02/17 10:59	CEJ	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 16:46	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 14:58	UI	TAL SAV
	Instrument ID:	CICK								
Total/NA	Prep	3010A			50 mL	50 mL	481901	05/30/17 14:56	AJR	TAL SAV

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: G6M-RB1 SPR17

Lab Sample ID: 680-138990-9

Date Collected: 05/19/17 12:40
Matrix: Water
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1			482191	06/01/17 07:17	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Prep	3010A			50 mL	250 mL	481899	05/30/17 14:56	AJR	TAL SAV
Total/NA	Analysis	6020A		1			482141	05/31/17 19:31	BJB	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:37	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			375195	05/26/17 05:38	CCJ	TAL DEN
	Instrument ID: WC_SHI3									
Total/NA	Analysis	SM 2320B		1			375147	05/25/17 16:10	A1D	TAL DEN
	Instrument ID: WC_AT2									

Client Sample ID: Trip Blank

Lab Sample ID: 680-138990-10

Date Collected: 05/19/17 00:00
Matrix: Water
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	482104	06/01/17 12:40	CEJ	TAL SAV
	Instrument ID: CMSB									

Client Sample ID: G6M-03-01X-SPR17

Lab Sample ID: 680-138990-11

Date Collected: 05/18/17 10:42
Matrix: Water
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	481931	05/31/17 14:39	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B	DL	2	5 mL	5 mL	482104	06/01/17 13:03	CEJ	TAL SAV
	Instrument ID: CMSB									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 16:58	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 15:15	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 01:52	BCB	TAL SAV
	Instrument ID: ICPE									
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		10			481561	05/25/17 16:16	BCB	TAL SAV
	Instrument ID: ICPE									
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV

Client Sample ID: G6M-03-01X-SPR17 — Lab Sample ID: 680-138990-11

Date Collected: 05/18/17 10:42 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		1			481584	05/26/17 05:46	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 21:57	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/26/17 05:52	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 17:51	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-02-08X-SPR17 — Lab Sample ID: 680-138990-12

Date Collected: 05/18/17 12:32 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	481931	05/31/17 15:01	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 17:11	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483342	06/09/17 17:09	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 02:35	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 06:19	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		2	100 mL	100 mL	375575	05/30/17 21:59	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		22.73			375195	05/26/17 06:11	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 17:46	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-13-05X-SPR17 — Lab Sample ID: 680-138990-13

Date Collected: 05/18/17 15:02 — **Matrix: Water**
Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	481931	05/31/17 15:23	JD1	TAL SAV

Client Sample ID: G6M-13-05X-SPR17

Lab Sample ID: 680-138990-13

Date Collected: 05/18/17 15:02

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	481931	05/31/17 15:23	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 17:24	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 16:25	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 02:02	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 05:54	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 22:01	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			375195	05/26/17 06:28	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 17:37	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-DUP-1

Lab Sample ID: 680-138990-14

Date Collected: 05/18/17 15:07

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	481931	05/31/17 15:45	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 17:37	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 16:42	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481381	05/25/17 02:44	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 06:27	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 22:03	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								

Client Sample ID: G6M-DUP-1

Lab Sample ID: 680-138990-14

Date Collected: 05/18/17 15:07

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1			375195	05/26/17 06:43	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375005	05/24/17 17:31	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: IW-17D-SPR17

Lab Sample ID: 680-138990-15

Date Collected: 05/19/17 10:02

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	482104	06/01/17 14:09	CEJ	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 17:50	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483093	06/08/17 16:59	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	50 mL	481290	05/24/17 14:16	AJR	TAL SAV
Dissolved	Analysis	6010C		1			481561	05/25/17 21:23	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	481288	05/24/17 14:16	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/25/17 19:04	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 22:05	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	481339	05/25/17 04:24	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		15			375195	05/26/17 07:34	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375147	05/25/17 16:14	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: IW-18D-SPR17

Lab Sample ID: 680-138990-16

Date Collected: 05/19/17 11:47

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	482104	06/01/17 14:32	CEJ	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	481946	05/31/17 18:03	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	483342	06/09/17 17:27	ALR	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	480933	05/22/17 16:38	AJR	TAL SAV

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Client Sample ID: IW-18D-SPR17

Lab Sample ID: 680-138990-16

Date Collected: 05/19/17 11:47

Matrix: Water

Date Received: 05/20/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010C		1			481381	05/25/17 01:47	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	480928	05/22/17 16:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			481584	05/26/17 05:43	BWR	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	375575	05/30/17 22:07	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	482328	06/02/17 09:41	LAF	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		20.83			375195	05/26/17 07:51	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			375147	05/25/17 16:18	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

PO #	17-636	Devens - AOC50 1024-011

Chain of Custody Record

Page: 1 of: 2

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F
Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation: Melissa Miller/KGS

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address:
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Spring 2017 LTM
Sampling QAP No.:
Approval Date:
TAT: Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	TOC MS/MSD (HNO3)		Remarks	Lab. No.
66M-97-05B-SPR17		5/17	1450	P	GW	13	X	X	X	X	X	X	X	X				
66M-13-01X-SPR17		5/18	930	P	GW	13	X	X	X	X	X	X	X	X				
66M-13-04X-SPR17		5/18	1110	P	GW	13	X	X	X	X	X	X	X	X				
66M-04-09X-SPR17		5/18	1370	P	GW	13	X	X	X	X	X	X	X	X				
66M-04-10X-SPR17		5/18	1430	P	GW	13	X	X	X	X	X	X	X	X				
66M-04-10X-SPR17		5/18	1555	P	GW	13	X	X	X	X	X	X	X	X				
66M-13-06X-SPR17		5/19	805	P	GW	37	X	X	X	X	X	X	X	X			MS/MSD Collected	
66M-02-01X-SPR17		5/19	1120	P	GW	13	X	X	X	X	X	X	X	X			~~MS/MSD collected~~	
66M-RB1-SPR17		5/19	1240	P	GW	13	X	X	X	X	X	X	X		X			
	Trip Blank			O	O	2	X											
66M-03-01X_SPR17		5/18	1042	P	GW	13	X	X	X	X	X	X	X	X				
66M-02-08X_SPR17		5/18	1232	P	GW	13	X	X	X	X	X	X	X	X				
66M-13-05X_SPR17		5/18	1502	P	GW	13	X	X	X	X	X	X	X	X				

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:			5/19/17	1520			5/19/17	1320
Additional Comments:				5/19/17	1428			5/19/17	1430
* = Dissolved Metals include: Fe, Mn (6010); As (6020)				5/19/17	1515			5-20-17	1012

email logins and results to:
lekes@komangs.com

Lab Comments

0.8/1.3
05/1.0
1.6/2.1

Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Si
COLLECTION METHOD C = Composite G=Grab P= Pumping

ks) O = Other
ethanol O = Other
O = Other

680-138990 Chain of Custody

PO # 17-636 | Devens - AOC50 1024-011

Chain of Custody Record

Page: 2 of: 2

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F, Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation: [illegible] / Melissa Miller / KGS

Sampler(s) Signature(s): [illegible] / Melissa A. Miller

Laboratory: Test America - Savannah

Address:

Contact: Jerry Lanier

Regulatory Facility No.

Project Name: Devens Spring 2017 LTM

Sampling QAP No.:

Approval Date:

TAT: Routine

Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)			Remarks	Lab. No.
G6M-DUP-1		5/18	1507	P	GW	13	X	X	X	X	X	X	X	X				
IW-17D-Spr17		5/19	1002	P	GW	13	X	X	X	X	X	X	X	X				
IW-18D-Spr17		5/19	1147	P	GW	13	X	X	X	X	X	X	X	X				
				P	GW													
				P	GW													
				P	GW													
				P	GW													
				P	GW													
				P	GW													
	~~Trip~~ Blank			O	~~W~~		~~X~~											

Shipping Details: courier pick up | 0 ← Total Number of Containers

Date Out: Via:

Returned: Via:

Additional Comments:

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
	[illegible]	5/19/17	1320		[illegible]	5/19/17	[illegible]
	Melissa Miller	5/19/17	1428		[illegible]	5/19/17	1432
	[illegible]	5/19/17	1515		[illegible]	5/20/17	1000

email logins and results to:

lekes@komangs.com

Lab Comments

0.8/1.3
0.5/1.0
1.4/2.1

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other

PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other

COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

360325-Boston

360325-Boston

PO #	17-636	Devens - AOC50 1024-011	**Chain of Custody Record**	Page: 1 of: 2

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F
Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation: Kevin G. Anderson Melissa Miller/KGS

Sampler(s) Signature(s): [signature] Melissa A Miller

Laboratory: Test America - Savannah
Address:
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Spring 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Total Metals (HNO3)	Remarks	Lab. No.
66M-97-05B SPR17		5/17	1450	P	GW	13	X	X	X	X	X	X	X	X			
66M-13-01X SPR17		5/18	930	P	GW	13	X	X	X	X	X	X	X	X			
66M-13-04X-SPR17		5/18	1110	P	GW	13	X	X	X	X	X	X	X	X			
66M-04-09X-SPR17		5/18	1320	P	GW	13	X	X	X	X	X	X	X	X			
66M-04-10X-SPR17		5/18	1430	P	GW	13	X	X	X	X	X	X	X	X			
66M-04-10X-SPR17		5/18	1555	P	GW	13	X	X	X	X	X	X	X	X			
66M-13-06X-SPR17		5/19	805	P	GW	37	X	X	X	X	X	X	X	X		MS/MSD collected	
66M-02-01X-SPR17		5/19	1120	P	GW	13	X	X	X	X	X	X	X	X		~~MS/MSD collected~~	
66M-RB1-SPR17		5/19	1240	P	GW	13	X	X	X	X	X	X	X		X		
	Trip Blank			O	O	2	X										
66M-03-01X-SPR17		5/18	1042	P	GW	13	X	X	X	X	X	X	X	X			
66M-02-08X SPR17		5/18	1232	P	GW	13	X	X	X	X	X	X	X	X			
66M-13-05X-SPR17		5/18	1502	P	GW	13	X	X	X	X	X	X	X	X			

680-138990 Chain of Custody

Shipping Details: courier pick up 0 ← Total Number of Containers

Date Out: Via:
Returned: Via:

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010), As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[signature]	5/19/17	1520	[signature]	5/19/17	1320
	Melissa Miller	5/19/17	1428	[signature]	5/20/17	14:30
	[signature]	5/19/17	1515	[signature]	5/20/17	0815

email logins and results to:
lekes@komangs.com

Lab Comments
Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info
☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

1.8, 0.2, 1.1, 0.1, 13.9 + 0.0 JS #7 JS 5/20/17

360325-Boston

360325-Boston

Chain of Custody Record

PO # 17-636 | Devens - AOC50 1024-011 | Page: 2 of: 2

Company: KOMAN GS, LLC

Address: 160 East Main Street, Suite 2F
Westborough, MA

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation: [illegible] / Melissa Miller / KGS

Sampler(s) Signature(s): [illegible] / Melissa A. Miller

Laboratory: Test America - Savannah
Address:
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Spring 2017 LTM
Sampling QAP No.:
Approval Date:
TAT: Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Remarks	Lab. No.
GGM-DUP-1		5/18	1507	P	GW	13	X	X	X	X	X	X	X	X		
IW-17D-Spr17		5/19	1002	P	GW	13	X	X	X	X	X	X	X	X		
IW-18D-Spr17		5/19	1147	P	GW	13	X	X	X	X	X	X	X	X		
				P	GW											
				P	GW											
				P	GW											
				P	GW											
				P	GW											
				P	GW											
	~~Trip B~~lank			O	~~W~~		~~X~~									

Shipping Details: courier pick up | 0 ← Total Number of Containers

Date Out: Via:
Returned: Via:
Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
	[illegible]	5/19/17	1320		[illegible]	5/19/17	[illegible]
	Melissa Miller	5/19/17	1428		[illegible]	5/19/17	14:3[illegible]
	[illegible]	5/19/17	15:15		[illegible]	5/20/17	0845

email logins and results to:
lekes@komangs.com

Lab Comments
Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info
☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-138990-1

Login Number: 138990

List Source: TestAmerica Savannah

List Number: 1

Creator: Flanagan, Naomi V

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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	

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-138990-1

Login Number: 138990
List Number: 2
Creator: True, Joshua A

List Source: TestAmerica Denver
List Creation: 05/22/17 09:56 AM

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.	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.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers received broken. No volume could be salvaged for analysis.
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-17 *
Alaska (UST)	State Program	10	UST-104	11-05-17
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-17 *
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-17 *
Florida	NELAP	4	E87052	06-30-17 *
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	N/A	06-30-17 *
Georgia	State Program	4	803	06-30-17 *
Guam	State Program	9	15-005r	04-16-17 *
Hawaii	State Program	9	N/A	06-30-17 *
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-17 *
Iowa	State Program	7	353	06-30-17 *
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-17 *
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
Louisiana	NELAP	6	30690	06-30-17 *
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-17 *
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-17 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-17 *
New Jersey	NELAP	2	GA769	06-30-17 *
New Mexico	State Program	6	N/A	06-30-17 *
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-17 *
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-17
Pennsylvania	NELAP	3	68-00474	06-30-17 *
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-17 *
Texas	NELAP	6	T104704185-16-9	11-30-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		SAV 3-04	06-11-17 *
Virginia	NELAP	3	460161	06-14-17 *
Washington	State Program	10	C805	06-10-17 *
West Virginia (DW)	State Program	3	9950C	12-31-17
Wisconsin	State Program	5	999819810	08-31-17
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Denver

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

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-138990-1

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

B.2

Fall 2017 LTM Event

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144039-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
293 Boston Post Road
Suite 100
Marlborough, Massachusetts 01752

Attn: Laurie Ekes

Authorized for release by:
10/25/2017 8:30:45 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 6
Method Summary 7
Definitions/Glossary 8
Detection Summary 10
Client Sample Results 13
Surrogate Summary 36
QC Sample Results 37
QC Association Summary 72
Lab Chronicle 76
Chain of Custody 81
Receipt Checklists 83
Certification Summary 84

Job ID: 680-144039-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-144039-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 10/07/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was0.2º C and 2.2º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-95-19X-Fall17 (680-144039-4), G6M-95-20X-Fall17 (680-144039-5), G6M-03-08X-Fall17 (680-144039-6), G6M-04-14X-Fall17 (680-144039-7), G6M-04-13X-Fall17 (680-144039-8), Dup-02--Fall17 (680-144039-9) and Trip Blank (680-144039-10) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/18/2017, 10/19/2017, 10/20/2017 and 10/23/2017.

The following sample was analyzed outside of analytical holding time due to laboratory error: : G6M-03-08X-Fall17 (680-144039-6).

The initial calibration verification (ICV) for analytical batch 680-499231 recovered outside control limits for the following analyte: Bromomethane. Bromomethane has been identified as a poor performing analyte when analyzed using this method. These results have been reported and qualified.

The continuing calibration verification (CCV) associated with batch 680-499333 recovered above the upper control limit for bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Carbon disulfide was detected in method blank MB 680-499333/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

The surrogate recovery for the blank associated with analytical batch 680-499084 was outside control limits. The associated sample surrogates met acceptance criteria; therefore the data has been qualified and reported.

Surrogate recovery for the following samples were outside control limits: G6M-95-19X-Fall17 (680-144039-4), G6M-95-20X-Fall17 (680-144039-5). The sample(s) was reanalyzed outside holding time with acceptable results. Both sets of data have been reported.

Bromomethane failed the recovery criteria high for LCS 680-499333/3. Bromomethane exceeded the RPD limit for LCSD 680-498907/4. Bromomethane failed the recovery criteria high for LCSD 680-499333/4. Note that this analyte is a known poor performer when analyzed using this method. Refer to the QC report for details.

Naphthalene exceeded the RPD limit for the MSD of sample G6M-13-06X-Fall17MSD (680-144039-1) in batch 680-499084.

Job ID: 680-144039-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Sample G6M-13-05X-Fall17 (680-144039-3)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-499430, and 680-499108.

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

DISSOLVED GASES

Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-03-08X-Fall17 (680-144039-6), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 10/10/2017 and 10/11/2017.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 497904 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) and another set of matrix spike / matrix spike duplicate (MS/MSD) were within acceptance limits.

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

METALS (ICP) - DISSOLVED

Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-95-19X-Fall17 (680-144039-4), G6M-95-20X-Fall17 (680-144039-5), G6M-03-08X-Fall17 (680-144039-6), G6M-04-14X-Fall17 (680-144039-7), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for Metals (ICP) - Dissolved in accordance with EPA SW-846 Method 6010C. The samples were prepared on 10/09/2017 and analyzed on 10/11/2017.

Iron and Manganese failed the recovery criteria low for the MS/MSD of sample G6M-13-06X-Fall17 (680-144039-1) in batch 680-498134.

Refer to the QC report for details.

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

METALS (ICPMS) - DISSOLVED

Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-95-19X-Fall17 (680-144039-4), G6M-95-20X-Fall17 (680-144039-5), G6M-03-08X-Fall17 (680-144039-6), G6M-04-14X-Fall17 (680-144039-7), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/09/2017 and analyzed on 10/11/2017.

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

ALKALINITY

Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-03-08X-Fall17 (680-144039-6), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 10/15/2017.

Alkalinity was detected in method blank MB 280-391354/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN

Job ID: 680-144039-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-03-08X-Fall17 (680-144039-6), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 10/09/2017.

Nitrate/Nitrite-N failed the recovery criteria low for the MS/MSD of sample G6M-13-06X-Fall17 (680-144039-1) in batch 280-390642.

Refer to the QC report for details.

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

SULFIDE
Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-03-08X-Fall17 (680-144039-6), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 10/09/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-03-08X-Fall17 (680-144039-6), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 10/10/2017.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 680-497761 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Refer to the QC report for details.

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

TOTAL ORGANIC CARBON
Samples G6M-13-06X-Fall17 (680-144039-1), Dup-1--Fall17 (680-144039-2), G6M-13-05X-Fall17 (680-144039-3), G6M-03-08X-Fall17 (680-144039-6), G6M-04-13X-Fall17 (680-144039-8) and Dup-02--Fall17 (680-144039-9) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 10/10/2017.

Samples G6M-13-06X-Fall17 (680-144039-1)[2X] and Dup-1--Fall17 (680-144039-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144039-1	G6M-13-06X-Fall17	Water	10/05/17 08:10	10/07/17 09:15
680-144039-2	Dup-1--Fall17	Water	10/05/17 08:15	10/07/17 09:15
680-144039-3	G6M-13-05X-Fall17	Water	10/05/17 10:50	10/07/17 09:15
680-144039-4	G6M-95-19X-Fall17	Water	10/05/17 12:35	10/07/17 09:15
680-144039-5	G6M-95-20X-Fall17	Water	10/05/17 13:25	10/07/17 09:15
680-144039-6	G6M-03-08X-Fall17	Water	10/04/17 14:30	10/07/17 09:15
680-144039-7	G6M-04-14X-Fall17	Water	10/06/17 09:10	10/07/17 09:15
680-144039-8	G6M-04-13X-Fall17	Water	10/06/17 12:05	10/07/17 09:15
680-144039-9	Dup-02--Fall17	Water	10/06/17 12:10	10/07/17 09:15
680-144039-10	Trip Blank	Water	10/06/17 00:00	10/07/17 09:15

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
D	The reported value is from a dilution.
H	Sample was prepped or analyzed beyond the specified holding time
M	Manual integrated compound.

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

HPLC/IC

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
M	Manual integrated compound.

Metals

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-13-06X-Fall17 — Lab Sample ID: 680-144039-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	36		10	10	7.0	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	36		10	10	3.4	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.3		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	2.6		2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Ethylbenzene	13		1.0	0.50	0.33	ug/L	1		8260B	Total/NA
Toluene	3.7		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	0.53	J	1.0	1.0	0.47	ug/L	1		8260B	Total/NA
Vinyl chloride	1.1		1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Ethane	6.0		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	6.3		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	6000		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	220000	J	50	50	17	ug/L	1		6010C	Dissolved
Manganese	7500	J	10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	490		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.17	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	72		2.0	1.0	0.31	mg/L	2		9060A	Total/NA
Alkalinity	440	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-1--Fall17 — Lab Sample ID: 680-144039-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	26		10	10	7.0	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	45		10	10	3.4	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Dichloroethene, Total	1.5	J	2.0	1.0	0.74	ug/L	1		8260B	Total/NA
Ethylbenzene	12		1.0	0.50	0.33	ug/L	1		8260B	Total/NA
Toluene	3.3		1.0	1.0	0.48	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.54	J	1.0	0.50	0.31	ug/L	1		8260B	Total/NA
Vinyl chloride	0.98	J	1.0	1.0	0.50	ug/L	1		8260B	Total/NA
Ethane	6.9		1.1	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	6.9		1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane (TCD)	6500		390	77	39	ug/L	1		RSK-175	Total/NA
Iron	230000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	7700		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	480		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.16		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	70		2.0	1.0	0.31	mg/L	2		9060A	Total/NA
Alkalinity	500	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-13-05X-Fall17 — Lab Sample ID: 680-144039-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	91	J D	100	100	34	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	750	D	10	10	4.1	ug/L	10		8260B	Total/NA
1,2-Dichloroethene, Total	750	D	20	10	7.4	ug/L	10		8260B	Total/NA
Tetrachloroethene	280	D	10	10	7.4	ug/L	10		8260B	Total/NA
1,1,2-Trichloroethane	7.4	J D	10	5.0	3.3	ug/L	10		8260B	Total/NA
Trichloroethene	69	D	10	10	4.8	ug/L	10		8260B	Total/NA
Methane	32		0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-13-05X-Fall17 (Continued) — Lab Sample ID: 680-144039-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	12000		50	50	17	ug/L	1		6010C	Dissolved
Manganese	1700		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	35		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Nitrate/Nitrite-N	0.035	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	28		1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	49	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-95-19X-Fall17 — Lab Sample ID: 680-144039-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.9		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene - RA	2.0	H	1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Manganese	1400		10	3.0	1.0	ug/L	1		6010C	Dissolved

Client Sample ID: G6M-95-20X-Fall17 — Lab Sample ID: 680-144039-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene - RA	0.55	J H	1.0	1.0	0.48	ug/L	1		8260B	Total/NA
Iron	6300		50	50	17	ug/L	1		6010C	Dissolved
Manganese	410		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	18		3.0	3.0	1.5	ug/L	1		6020A	Dissolved

Client Sample ID: G6M-03-08X-Fall17 — Lab Sample ID: 680-144039-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.50	J H	1.0	1.0	0.41	ug/L	1		8260B	Total/NA
Ethylene	0.90	J	1.0	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	91		0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	9.5	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Iron	230		50	50	17	ug/L	1		6010C	Dissolved
Manganese	6900		10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	6.6		3.0	3.0	1.5	ug/L	1		6020A	Dissolved
Total Organic Carbon - Duplicates	0.84	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	110	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G6M-04-14X-Fall17 — Lab Sample ID: 680-144039-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.0		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Iron	17	J	50	50	17	ug/L	1		6010C	Dissolved
Manganese	3.2	J	10	3.0	1.0	ug/L	1		6010C	Dissolved
Arsenic	7.1		3.0	3.0	1.5	ug/L	1		6020A	Dissolved

Client Sample ID: G6M-04-13X-Fall17 — Lab Sample ID: 680-144039-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.3		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Methane	0.33	J	0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	4.6	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-04-13X-Fall17 (Continued) — Lab Sample ID: 680-144039-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite-N	0.84		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.45	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	8.7	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Dup-02--Fall17 — Lab Sample ID: 680-144039-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.3		1.0	1.0	0.74	ug/L	1		8260B	Total/NA
Methane	0.43	J	0.58	0.58	0.29	ug/L	1		RSK-175	Total/NA
Sulfate	4.4	M	1.0	1.0	0.40	mg/L	1		9056A	Total/NA
Manganese	1.0	J	10	3.0	1.0	ug/L	1		6010C	Dissolved
Nitrate/Nitrite-N	0.89		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Organic Carbon - Duplicates	0.49	J	1.0	0.50	0.16	mg/L	1		9060A	Total/NA
Alkalinity	8.9	B	5.0	3.2	1.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 680-144039-10

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-13-06X-Fall17

Lab Sample ID: 680-144039-1

Date Collected: 10/05/17 08:10

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**36**		10	10	7.0	ug/L		10/18/17 16:11	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/18/17 16:11	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 16:11	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/18/17 16:11	1
Bromomethane	5.0	U Q	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
2-Butanone (MEK)	**36**		10	10	3.4	ug/L		10/18/17 16:11	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/18/17 16:11	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/18/17 16:11	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/18/17 16:11	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/18/17 16:11	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/18/17 16:11	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 16:11	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/18/17 16:11	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/18/17 16:11	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/18/17 16:11	1
cis-1,2-Dichloroethene	**2.3**		1.0	1.0	0.41	ug/L		10/18/17 16:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/18/17 16:11	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/18/17 16:11	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/18/17 16:11	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 16:11	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/18/17 16:11	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/18/17 16:11	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/18/17 16:11	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/18/17 16:11	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/18/17 16:11	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 16:11	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/18/17 16:11	1
1,2-Dichloroethene, Total	**2.6**		2.0	1.0	0.74	ug/L		10/18/17 16:11	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/18/17 16:11	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/18/17 16:11	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 16:11	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/18/17 16:11	1
Ethylbenzene	**13**		1.0	0.50	0.33	ug/L		10/18/17 16:11	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/18/17 16:11	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/18/17 16:11	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/18/17 16:11	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/18/17 16:11	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/18/17 16:11	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/18/17 16:11	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/18/17 16:11	1
Naphthalene	5.0	U J	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/18/17 16:11	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/18/17 16:11	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/18/17 16:11	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/18/17 16:11	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/18/17 16:11	1

Client Sample ID: G6M-13-06X-Fall17

Lab Sample ID: 680-144039-1

Date Collected: 10/05/17 08:10

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/18/17 16:11	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 16:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/18/17 16:11	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/18/17 16:11	1
Toluene	**3.7**		1.0	1.0	0.48	ug/L		10/18/17 16:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 16:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/18/17 16:11	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 16:11	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 16:11	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/18/17 16:11	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/18/17 16:11	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/18/17 16:11	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/18/17 16:11	1
1,2,4-Trimethylbenzene	**0.53**	**J**	1.0	1.0	0.47	ug/L		10/18/17 16:11	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/18/17 16:11	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/18/17 16:11	1
Vinyl chloride	**1.1**		1.0	1.0	0.50	ug/L		10/18/17 16:11	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/18/17 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*10/18/17 16:11*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*10/18/17 16:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*		*10/18/17 16:11*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*10/18/17 16:11*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**6.0**		1.1	1.1	0.55	ug/L		10/11/17 16:14	1
Ethylene	**6.3**		1.0	1.0	0.50	ug/L		10/11/17 16:14	1
Methane (TCD)	**6000**		390	77	39	ug/L		10/11/17 16:14	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U J	1.0	1.0	0.40	mg/L		10/10/17 03:25	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**220000**	**J**	50	50	17	ug/L		10/11/17 09:35	1
Manganese	**7500**	**J**	10	3.0	1.0	ug/L		10/11/17 09:35	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**490**		3.0	3.0	1.5	ug/L		10/11/17 18:02	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.17**	**J**	0.10	0.050	0.019	mg/L		10/09/17 21:14	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 06:30	1
Total Organic Carbon - Duplicates	**72**		2.0	1.0	0.31	mg/L		10/10/17 19:59	2
Alkalinity	**440**	**B**	5.0	3.2	1.1	mg/L		10/15/17 13:35	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: Dup-1--Fall17

Lab Sample ID: 680-144039-2

Date Collected: 10/05/17 08:15

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**26**		10	10	7.0	ug/L		10/19/17 11:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 11:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 11:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 11:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
2-Butanone (MEK)	**45**		10	10	3.4	ug/L		10/19/17 11:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 11:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 11:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 11:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 11:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 11:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 11:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 11:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 11:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 11:39	1
cis-1,2-Dichloroethene	**1.2**		1.0	1.0	0.41	ug/L		10/19/17 11:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 11:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 11:39	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 11:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 11:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 11:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 11:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 11:39	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 11:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 11:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 11:39	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 11:39	1
1,2-Dichloroethene, Total	**1.5**	**J**	2.0	1.0	0.74	ug/L		10/19/17 11:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 11:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 11:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 11:39	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 11:39	1
Ethylbenzene	**12**		1.0	0.50	0.33	ug/L		10/19/17 11:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 11:39	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 11:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 11:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 11:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 11:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 11:39	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 11:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 11:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 11:39	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 11:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 11:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 11:39	1

Client Sample ID: Dup-1--Fall17

Lab Sample ID: 680-144039-2

Date Collected: 10/05/17 08:15

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 11:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 11:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 11:39	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/19/17 11:39	1
Toluene	**3.3**		1.0	1.0	0.48	ug/L		10/19/17 11:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 11:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 11:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 11:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 11:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 11:39	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 11:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 11:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 11:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 11:39	1
1,3,5-Trimethylbenzene	**0.54**	**J**	1.0	0.50	0.31	ug/L		10/19/17 11:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 11:39	1
Vinyl chloride	**0.98**	**J**	1.0	1.0	0.50	ug/L		10/19/17 11:39	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/19/17 11:39*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*10/19/17 11:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*10/19/17 11:39*	*1*
Toluene-d8 (Surr)	*90*		*89 - 112*		*10/19/17 11:39*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**6.9**		1.1	1.1	0.55	ug/L		10/11/17 16:53	1
Ethylene	**6.9**		1.0	1.0	0.50	ug/L		10/11/17 16:53	1
Methane (TCD)	**6500**		390	77	39	ug/L		10/11/17 16:53	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/10/17 05:13	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**230000**		50	50	17	ug/L		10/11/17 10:48	1
Manganese	**7700**		10	3.0	1.0	ug/L		10/11/17 10:48	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**480**		3.0	3.0	1.5	ug/L		10/11/17 19:02	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.16**		0.10	0.050	0.019	mg/L		10/09/17 20:48	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 06:30	1
Total Organic Carbon - Duplicates	**70**		2.0	1.0	0.31	mg/L		10/10/17 21:14	2
Alkalinity	**500**	**B**	5.0	3.2	1.1	mg/L		10/15/17 13:51	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-13-05X-Fall17

Lab Sample ID: 680-144039-3

Date Collected: 10/05/17 10:50

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	100	U	100	100	70	ug/L		10/19/17 12:02	10
Benzene	10	U	10	10	4.3	ug/L		10/19/17 12:02	10
Bromobenzene	10	U	10	10	5.0	ug/L		10/19/17 12:02	10
Bromoform	10	U	10	10	4.3	ug/L		10/19/17 12:02	10
Bromomethane	50	U	50	50	25	ug/L		10/19/17 12:02	10
2-Butanone (MEK)	**91**	**J D**	100	100	34	ug/L		10/19/17 12:02	10
Carbon disulfide	20	U	20	20	4.3	ug/L		10/19/17 12:02	10
Carbon tetrachloride	5.0	U	10	5.0	3.3	ug/L		10/19/17 12:02	10
Chlorobenzene	5.0	U	10	5.0	2.6	ug/L		10/19/17 12:02	10
Chlorobromomethane	10	U	10	10	4.5	ug/L		10/19/17 12:02	10
Chlorodibromomethane	5.0	U	10	5.0	3.2	ug/L		10/19/17 12:02	10
Chloroethane	50	U	50	50	25	ug/L		10/19/17 12:02	10
Chloroform	10	U	10	10	5.0	ug/L		10/19/17 12:02	10
Chloromethane	10	U	10	10	4.0	ug/L		10/19/17 12:02	10
2-Chlorotoluene	5.0	U	10	5.0	2.7	ug/L		10/19/17 12:02	10
4-Chlorotoluene	10	U	10	10	4.5	ug/L		10/19/17 12:02	10
cis-1,2-Dichloroethene	**750**	**D**	10	10	4.1	ug/L		10/19/17 12:02	10
cis-1,3-Dichloropropene	10	U	10	10	4.0	ug/L		10/19/17 12:02	10
1,2-Dibromo-3-Chloropropane	20	U	50	20	11	ug/L		10/19/17 12:02	10
Dibromomethane	10	U	10	10	3.5	ug/L		10/19/17 12:02	10
1,2-Dichlorobenzene	10	U	10	10	3.7	ug/L		10/19/17 12:02	10
1,3-Dichlorobenzene	10	U	10	10	4.3	ug/L		10/19/17 12:02	10
1,4-Dichlorobenzene	10	U	10	10	4.6	ug/L		10/19/17 12:02	10
Dichlorobromomethane	10	U	10	10	4.4	ug/L		10/19/17 12:02	10
Dichlorodifluoromethane	10	U	10	10	6.0	ug/L		10/19/17 12:02	10
1,1-Dichloroethane	10	U	10	10	3.8	ug/L		10/19/17 12:02	10
1,2-Dichloroethane	10	U	10	10	5.0	ug/L		10/19/17 12:02	10
1,1-Dichloroethene	10	U	10	10	3.6	ug/L		10/19/17 12:02	10
1,2-Dichloroethene, Total	**750**	**D**	20	10	7.4	ug/L		10/19/17 12:02	10
1,2-Dichloropropane	10	U	10	10	6.7	ug/L		10/19/17 12:02	10
1,3-Dichloropropane	10	U	10	10	3.4	ug/L		10/19/17 12:02	10
2,2-Dichloropropane	10	U	10	10	3.7	ug/L		10/19/17 12:02	10
1,1-Dichloropropene	10	U	10	10	3.4	ug/L		10/19/17 12:02	10
Ethylbenzene	5.0	U	10	5.0	3.3	ug/L		10/19/17 12:02	10
Ethylene Dibromide	10	U	10	10	4.4	ug/L		10/19/17 12:02	10
Hexachlorobutadiene	50	U	50	50	25	ug/L		10/19/17 12:02	10
2-Hexanone	50	U	100	50	20	ug/L		10/19/17 12:02	10
Isopropylbenzene	10	U	10	10	3.5	ug/L		10/19/17 12:02	10
4-Isopropyltoluene	10	U	10	10	4.8	ug/L		10/19/17 12:02	10
Methylene Chloride	50	U	50	50	25	ug/L		10/19/17 12:02	10
4-Methyl-2-pentanone (MIBK)	50	U	100	50	21	ug/L		10/19/17 12:02	10
Methyl tert-butyl ether	5.0	U	100	5.0	3.0	ug/L		10/19/17 12:02	10
m-Xylene & p-Xylene	10	U	10	10	3.5	ug/L		10/19/17 12:02	10
Naphthalene	50	U	50	50	25	ug/L		10/19/17 12:02	10
n-Butylbenzene	10	U	10	10	4.7	ug/L		10/19/17 12:02	10
N-Propylbenzene	10	U	10	10	3.8	ug/L		10/19/17 12:02	10
o-Xylene	5.0	U	10	5.0	2.3	ug/L		10/19/17 12:02	10
sec-Butylbenzene	10	U	10	10	4.2	ug/L		10/19/17 12:02	10
Styrene	5.0	U	10	5.0	2.7	ug/L		10/19/17 12:02	10

Client Sample ID: G6M-13-05X-Fall17

Lab Sample ID: 680-144039-3

Date Collected: 10/05/17 10:50

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	10	U	10	10	4.5	ug/L		10/19/17 12:02	10
1,1,1,2-Tetrachloroethane	10	U	10	10	3.7	ug/L		10/19/17 12:02	10
1,1,2,2-Tetrachloroethane	10	U	10	10	6.2	ug/L		10/19/17 12:02	10
Tetrachloroethene	**280**	**D**	10	10	7.4	ug/L		10/19/17 12:02	10
Toluene	10	U	10	10	4.8	ug/L		10/19/17 12:02	10
trans-1,2-Dichloroethene	10	U	10	10	3.7	ug/L		10/19/17 12:02	10
trans-1,3-Dichloropropene	10	U	10	10	4.2	ug/L		10/19/17 12:02	10
1,2,3-Trichlorobenzene	50	U	50	50	25	ug/L		10/19/17 12:02	10
1,2,4-Trichlorobenzene	50	U	50	50	25	ug/L		10/19/17 12:02	10
1,1,1-Trichloroethane	10	U	10	10	3.7	ug/L		10/19/17 12:02	10
1,1,2-Trichloroethane	**7.4**	**J D**	10	5.0	3.3	ug/L		10/19/17 12:02	10
Trichloroethene	**69**	**D**	10	10	4.8	ug/L		10/19/17 12:02	10
Trichlorofluoromethane	10	U	10	10	4.2	ug/L		10/19/17 12:02	10
1,2,3-Trichloropropane	10	U	10	10	3.9	ug/L		10/19/17 12:02	10
1,2,4-Trimethylbenzene	10	U	10	10	4.7	ug/L		10/19/17 12:02	10
1,3,5-Trimethylbenzene	5.0	U	10	5.0	3.1	ug/L		10/19/17 12:02	10
Vinyl acetate	20	U	20	20	8.1	ug/L		10/19/17 12:02	10
Vinyl chloride	10	U	10	10	5.0	ug/L		10/19/17 12:02	10
Xylenes, Total	5.0	U	20	5.0	2.3	ug/L		10/19/17 12:02	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*10/19/17 12:02*	*10*
Dibromofluoromethane (Surr)	*110*		*80 - 119*		*10/19/17 12:02*	*10*
1,2-Dichloroethane-d4 (Surr)	*111*		*81 - 118*		*10/19/17 12:02*	*10*
Toluene-d8 (Surr)	*90*		*89 - 112*		*10/19/17 12:02*	*10*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/11/17 17:05	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/11/17 17:05	1
Methane	**32**		0.58	0.58	0.29	ug/L		10/11/17 17:05	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/10/17 05:31	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**12000**		50	50	17	ug/L		10/11/17 10:27	1
Manganese	**1700**		10	3.0	1.0	ug/L		10/11/17 10:27	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**35**		3.0	3.0	1.5	ug/L		10/11/17 18:45	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.035**	**J**	0.10	0.050	0.019	mg/L		10/09/17 20:50	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 06:30	1
Total Organic Carbon - Duplicates	**28**		1.0	0.50	0.16	mg/L		10/10/17 21:32	1
Alkalinity	**49**	**B**	5.0	3.2	1.1	mg/L		10/15/17 13:41	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-95-19X-Fall17

Lab Sample ID: 680-144039-4

Date Collected: 10/05/17 12:35
Matrix: Water
Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 12:24	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:24	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:24	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:24	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 12:24	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 12:24	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:24	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 12:24	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:24	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 12:24	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:24	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 12:24	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 12:24	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 12:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 12:24	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 12:24	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:24	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:24	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:24	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 12:24	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 12:24	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 12:24	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 12:24	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:24	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 12:24	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 12:24	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 12:24	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 12:24	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:24	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 12:24	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:24	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 12:24	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 12:24	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:24	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:24	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 12:24	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 12:24	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:24	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 12:24	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 12:24	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 12:24	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:24	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 12:24	1

Client Sample ID: G6M-95-19X-Fall17

Lab Sample ID: 680-144039-4

Date Collected: 10/05/17 12:35

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:24	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 12:24	1
Tetrachloroethene	**1.9**		1.0	1.0	0.74	ug/L		10/19/17 12:24	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:24	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:24	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:24	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:24	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:24	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:24	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 12:24	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 12:24	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 12:24	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 12:24	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:24	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*10/19/17 12:24*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/19/17 12:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*81 - 118*		*10/19/17 12:24*	*1*
Toluene-d8 (Surr)	*88*	*Q*	*89 - 112*		*10/19/17 12:24*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U H	10	10	7.0	ug/L		10/23/17 15:36	1
Benzene	1.0	U H	1.0	1.0	0.43	ug/L		10/23/17 15:36	1
Bromobenzene	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 15:36	1
Bromoform	1.0	U H	1.0	1.0	0.43	ug/L		10/23/17 15:36	1
Bromomethane	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
2-Butanone (MEK)	10	U H	10	10	3.4	ug/L		10/23/17 15:36	1
Carbon disulfide	2.0	U H	2.0	2.0	0.43	ug/L		10/23/17 15:36	1
Carbon tetrachloride	0.50	U H	1.0	0.50	0.33	ug/L		10/23/17 15:36	1
Chlorobenzene	0.50	U H	1.0	0.50	0.26	ug/L		10/23/17 15:36	1
Chlorobromomethane	1.0	U H	1.0	1.0	0.45	ug/L		10/23/17 15:36	1
Chlorodibromomethane	0.50	U H	1.0	0.50	0.32	ug/L		10/23/17 15:36	1
Chloroethane	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
Chloroform	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 15:36	1
Chloromethane	1.0	U H	1.0	1.0	0.40	ug/L		10/23/17 15:36	1
2-Chlorotoluene	0.50	U H	1.0	0.50	0.27	ug/L		10/23/17 15:36	1
4-Chlorotoluene	1.0	U H	1.0	1.0	0.45	ug/L		10/23/17 15:36	1
cis-1,2-Dichloroethene	1.0	U H	1.0	1.0	0.41	ug/L		10/23/17 15:36	1
cis-1,3-Dichloropropene	1.0	U H	1.0	1.0	0.40	ug/L		10/23/17 15:36	1
1,2-Dibromo-3-Chloropropane	2.0	U H	5.0	2.0	1.1	ug/L		10/23/17 15:36	1
Dibromomethane	1.0	U H	1.0	1.0	0.35	ug/L		10/23/17 15:36	1
1,2-Dichlorobenzene	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 15:36	1
1,3-Dichlorobenzene	1.0	U H	1.0	1.0	0.43	ug/L		10/23/17 15:36	1

Client Sample ID: G6M-95-19X-Fall17
Date Collected: 10/05/17 12:35
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U H	1.0	1.0	0.46	ug/L		10/23/17 15:36	1
Dichlorobromomethane	1.0	U H	1.0	1.0	0.44	ug/L		10/23/17 15:36	1
Dichlorodifluoromethane	1.0	U H	1.0	1.0	0.60	ug/L		10/23/17 15:36	1
1,1-Dichloroethane	1.0	U H	1.0	1.0	0.38	ug/L		10/23/17 15:36	1
1,2-Dichloroethane	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 15:36	1
1,1-Dichloroethene	1.0	U H	1.0	1.0	0.36	ug/L		10/23/17 15:36	1
1,2-Dichloroethene, Total	1.0	U H	2.0	1.0	0.74	ug/L		10/23/17 15:36	1
1,2-Dichloropropane	1.0	U H	1.0	1.0	0.67	ug/L		10/23/17 15:36	1
1,3-Dichloropropane	1.0	U H	1.0	1.0	0.34	ug/L		10/23/17 15:36	1
2,2-Dichloropropane	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 15:36	1
1,1-Dichloropropene	1.0	U H	1.0	1.0	0.34	ug/L		10/23/17 15:36	1
Ethylbenzene	0.50	U H	1.0	0.50	0.33	ug/L		10/23/17 15:36	1
Ethylene Dibromide	1.0	U H	1.0	1.0	0.44	ug/L		10/23/17 15:36	1
Hexachlorobutadiene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
2-Hexanone	5.0	U H	10	5.0	2.0	ug/L		10/23/17 15:36	1
Isopropylbenzene	1.0	U H	1.0	1.0	0.35	ug/L		10/23/17 15:36	1
4-Isopropyltoluene	1.0	U H	1.0	1.0	0.48	ug/L		10/23/17 15:36	1
Methylene Chloride	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U H	10	5.0	2.1	ug/L		10/23/17 15:36	1
Methyl tert-butyl ether	0.50	U H	10	0.50	0.30	ug/L		10/23/17 15:36	1
m-Xylene & p-Xylene	1.0	U H	1.0	1.0	0.35	ug/L		10/23/17 15:36	1
Naphthalene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
n-Butylbenzene	1.0	U H	1.0	1.0	0.47	ug/L		10/23/17 15:36	1
N-Propylbenzene	1.0	U H	1.0	1.0	0.38	ug/L		10/23/17 15:36	1
o-Xylene	0.50	U H	1.0	0.50	0.23	ug/L		10/23/17 15:36	1
sec-Butylbenzene	1.0	U H	1.0	1.0	0.42	ug/L		10/23/17 15:36	1
Styrene	0.50	U H	1.0	0.50	0.27	ug/L		10/23/17 15:36	1
tert-Butylbenzene	1.0	U H	1.0	1.0	0.45	ug/L		10/23/17 15:36	1
1,1,1,2-Tetrachloroethane	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 15:36	1
1,1,2,2-Tetrachloroethane	1.0	U H	1.0	1.0	0.62	ug/L		10/23/17 15:36	1
Tetrachloroethene	**2.0**	**H**	1.0	1.0	0.74	ug/L		10/23/17 15:36	1
Toluene	1.0	U H	1.0	1.0	0.48	ug/L		10/23/17 15:36	1
trans-1,2-Dichloroethene	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 15:36	1
trans-1,3-Dichloropropene	1.0	U H	1.0	1.0	0.42	ug/L		10/23/17 15:36	1
1,2,3-Trichlorobenzene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
1,2,4-Trichlorobenzene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 15:36	1
1,1,1-Trichloroethane	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 15:36	1
1,1,2-Trichloroethane	0.50	U H	1.0	0.50	0.33	ug/L		10/23/17 15:36	1
Trichloroethene	1.0	U H	1.0	1.0	0.48	ug/L		10/23/17 15:36	1
Trichlorofluoromethane	1.0	U H	1.0	1.0	0.42	ug/L		10/23/17 15:36	1
1,2,3-Trichloropropane	1.0	U H	1.0	1.0	0.39	ug/L		10/23/17 15:36	1
1,2,4-Trimethylbenzene	1.0	U H	1.0	1.0	0.47	ug/L		10/23/17 15:36	1
1,3,5-Trimethylbenzene	0.50	U H	1.0	0.50	0.31	ug/L		10/23/17 15:36	1
Vinyl acetate	2.0	U H	2.0	2.0	0.81	ug/L		10/23/17 15:36	1
Vinyl chloride	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 15:36	1
Xylenes, Total	0.50	U H	2.0	0.50	0.23	ug/L		10/23/17 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/23/17 15:36*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 119*		*10/23/17 15:36*	*1*

Client Sample ID: G6M-95-19X-Fall17

Lab Sample ID: 680-144039-4

Date Collected: 10/05/17 12:35

Matrix: Water

Date Received: 10/07/17 09:15

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/23/17 15:36*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/23/17 15:36*	*1*

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		10/11/17 10:43	1
Manganese	**1400**		10	3.0	1.0	ug/L		10/11/17 10:43	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/11/17 18:58	1

Client Sample ID: G6M-95-20X-Fall17

Lab Sample ID: 680-144039-5

Date Collected: 10/05/17 13:25

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 12:47	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:47	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:47	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:47	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 12:47	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 12:47	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:47	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 12:47	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:47	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 12:47	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:47	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 12:47	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 12:47	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 12:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 12:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 12:47	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:47	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:47	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:47	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 12:47	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 12:47	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 12:47	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 12:47	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:47	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 12:47	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 12:47	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 12:47	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 12:47	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:47	1

Client Sample ID: G6M-95-20X-Fall17

Lab Sample ID: 680-144039-5

Date Collected: 10/05/17 13:25

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 12:47	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:47	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 12:47	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 12:47	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:47	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:47	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 12:47	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 12:47	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:47	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 12:47	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 12:47	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 12:47	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:47	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 12:47	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:47	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 12:47	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/19/17 12:47	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:47	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:47	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:47	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:47	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:47	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:47	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 12:47	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 12:47	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 12:47	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 12:47	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:47	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*		*10/19/17 12:47*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*10/19/17 12:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*81 - 118*		*10/19/17 12:47*	*1*
Toluene-d8 (Surr)	*88*	*Q*	*89 - 112*		*10/19/17 12:47*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U H	10	10	7.0	ug/L		10/20/17 22:11	1
Benzene	1.0	U H	1.0	1.0	0.43	ug/L		10/20/17 22:11	1
Bromobenzene	1.0	U H	1.0	1.0	0.50	ug/L		10/20/17 22:11	1
Bromoform	1.0	U H	1.0	1.0	0.43	ug/L		10/20/17 22:11	1
Bromomethane	5.0	U H Q	5.0	5.0	2.5	ug/L		10/20/17 22:11	1

Client Sample ID: G6M-95-20X-Fall17
Date Collected: 10/05/17 13:25
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Butanone (MEK)	10	U H	10	10	3.4	ug/L		10/20/17 22:11	1
Carbon disulfide	2.0	U H	2.0	2.0	0.43	ug/L		10/20/17 22:11	1
Carbon tetrachloride	0.50	U H	1.0	0.50	0.33	ug/L		10/20/17 22:11	1
Chlorobenzene	0.50	U H	1.0	0.50	0.26	ug/L		10/20/17 22:11	1
Chlorobromomethane	1.0	U H	1.0	1.0	0.45	ug/L		10/20/17 22:11	1
Chlorodibromomethane	0.50	U H	1.0	0.50	0.32	ug/L		10/20/17 22:11	1
Chloroethane	5.0	U H	5.0	5.0	2.5	ug/L		10/20/17 22:11	1
Chloroform	1.0	U H	1.0	1.0	0.50	ug/L		10/20/17 22:11	1
Chloromethane	1.0	U H	1.0	1.0	0.40	ug/L		10/20/17 22:11	1
2-Chlorotoluene	0.50	U H	1.0	0.50	0.27	ug/L		10/20/17 22:11	1
4-Chlorotoluene	1.0	U H	1.0	1.0	0.45	ug/L		10/20/17 22:11	1
cis-1,2-Dichloroethene	1.0	U H	1.0	1.0	0.41	ug/L		10/20/17 22:11	1
cis-1,3-Dichloropropene	1.0	U H	1.0	1.0	0.40	ug/L		10/20/17 22:11	1
1,2-Dibromo-3-Chloropropane	2.0	U H	5.0	2.0	1.1	ug/L		10/20/17 22:11	1
Dibromomethane	1.0	U H	1.0	1.0	0.35	ug/L		10/20/17 22:11	1
1,2-Dichlorobenzene	1.0	U H	1.0	1.0	0.37	ug/L		10/20/17 22:11	1
1,3-Dichlorobenzene	1.0	U H	1.0	1.0	0.43	ug/L		10/20/17 22:11	1
1,4-Dichlorobenzene	1.0	U H	1.0	1.0	0.46	ug/L		10/20/17 22:11	1
Dichlorobromomethane	1.0	U H	1.0	1.0	0.44	ug/L		10/20/17 22:11	1
Dichlorodifluoromethane	1.0	U H	1.0	1.0	0.60	ug/L		10/20/17 22:11	1
1,1-Dichloroethane	1.0	U H	1.0	1.0	0.38	ug/L		10/20/17 22:11	1
1,2-Dichloroethane	1.0	U H	1.0	1.0	0.50	ug/L		10/20/17 22:11	1
1,1-Dichloroethene	1.0	U H	1.0	1.0	0.36	ug/L		10/20/17 22:11	1
1,2-Dichloroethene, Total	1.0	U H	2.0	1.0	0.74	ug/L		10/20/17 22:11	1
1,2-Dichloropropane	1.0	U H	1.0	1.0	0.67	ug/L		10/20/17 22:11	1
1,3-Dichloropropane	1.0	U H	1.0	1.0	0.34	ug/L		10/20/17 22:11	1
2,2-Dichloropropane	1.0	U H	1.0	1.0	0.37	ug/L		10/20/17 22:11	1
1,1-Dichloropropene	1.0	U H	1.0	1.0	0.34	ug/L		10/20/17 22:11	1
Ethylbenzene	0.50	U H	1.0	0.50	0.33	ug/L		10/20/17 22:11	1
Ethylene Dibromide	1.0	U H	1.0	1.0	0.44	ug/L		10/20/17 22:11	1
Hexachlorobutadiene	5.0	U H	5.0	5.0	2.5	ug/L		10/20/17 22:11	1
2-Hexanone	5.0	U H	10	5.0	2.0	ug/L		10/20/17 22:11	1
Isopropylbenzene	1.0	U H	1.0	1.0	0.35	ug/L		10/20/17 22:11	1
4-Isopropyltoluene	1.0	U H	1.0	1.0	0.48	ug/L		10/20/17 22:11	1
Methylene Chloride	5.0	U H	5.0	5.0	2.5	ug/L		10/20/17 22:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U H	10	5.0	2.1	ug/L		10/20/17 22:11	1
Methyl tert-butyl ether	0.50	U H	10	0.50	0.30	ug/L		10/20/17 22:11	1
m-Xylene & p-Xylene	1.0	U H	1.0	1.0	0.35	ug/L		10/20/17 22:11	1
Naphthalene	5.0	U H	5.0	5.0	2.5	ug/L		10/20/17 22:11	1
n-Butylbenzene	1.0	U H	1.0	1.0	0.47	ug/L		10/20/17 22:11	1
N-Propylbenzene	1.0	U H	1.0	1.0	0.38	ug/L		10/20/17 22:11	1
o-Xylene	0.50	U H	1.0	0.50	0.23	ug/L		10/20/17 22:11	1
sec-Butylbenzene	1.0	U H	1.0	1.0	0.42	ug/L		10/20/17 22:11	1
Styrene	0.50	U H	1.0	0.50	0.27	ug/L		10/20/17 22:11	1
tert-Butylbenzene	1.0	U H	1.0	1.0	0.45	ug/L		10/20/17 22:11	1
1,1,1,2-Tetrachloroethane	1.0	U H	1.0	1.0	0.37	ug/L		10/20/17 22:11	1
1,1,2,2-Tetrachloroethane	1.0	U H	1.0	1.0	0.62	ug/L		10/20/17 22:11	1
Tetrachloroethene	1.0	U H	1.0	1.0	0.74	ug/L		10/20/17 22:11	1
Toluene	1.0	U H	1.0	1.0	0.48	ug/L		10/20/17 22:11	1

Client Sample ID: G6M-95-20X-Fall17

Lab Sample ID: 680-144039-5

Date Collected: 10/05/17 13:25

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U H	1.0	1.0	0.37	ug/L		10/20/17 22:11	1
trans-1,3-Dichloropropene	1.0	U H	1.0	1.0	0.42	ug/L		10/20/17 22:11	1
1,2,3-Trichlorobenzene	5.0	U H	5.0	5.0	2.5	ug/L		10/20/17 22:11	1
1,2,4-Trichlorobenzene	5.0	U H	5.0	5.0	2.5	ug/L		10/20/17 22:11	1
1,1,1-Trichloroethane	1.0	U H	1.0	1.0	0.37	ug/L		10/20/17 22:11	1
1,1,2-Trichloroethane	0.50	U H	1.0	0.50	0.33	ug/L		10/20/17 22:11	1
Trichloroethene	**0.55**	**J H**	1.0	1.0	0.48	ug/L		10/20/17 22:11	1
Trichlorofluoromethane	1.0	U H	1.0	1.0	0.42	ug/L		10/20/17 22:11	1
1,2,3-Trichloropropane	1.0	U H	1.0	1.0	0.39	ug/L		10/20/17 22:11	1
1,2,4-Trimethylbenzene	1.0	U H	1.0	1.0	0.47	ug/L		10/20/17 22:11	1
1,3,5-Trimethylbenzene	0.50	U H	1.0	0.50	0.31	ug/L		10/20/17 22:11	1
Vinyl acetate	2.0	U H	2.0	2.0	0.81	ug/L		10/20/17 22:11	1
Vinyl chloride	1.0	U H	1.0	1.0	0.50	ug/L		10/20/17 22:11	1
Xylenes, Total	0.50	U H	2.0	0.50	0.23	ug/L		10/20/17 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*		*10/20/17 22:11*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*10/20/17 22:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/20/17 22:11*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*10/20/17 22:11*	*1*

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**6300**		50	50	17	ug/L		10/11/17 10:01	1
Manganese	**410**		10	3.0	1.0	ug/L		10/11/17 10:01	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**18**		3.0	3.0	1.5	ug/L		10/11/17 18:24	1

Client Sample ID: G6M-03-08X-Fall17

Lab Sample ID: 680-144039-6

Date Collected: 10/04/17 14:30

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U H	10	10	7.0	ug/L		10/23/17 16:01	1
Benzene	1.0	U H	1.0	1.0	0.43	ug/L		10/23/17 16:01	1
Bromobenzene	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 16:01	1
Bromoform	1.0	U H	1.0	1.0	0.43	ug/L		10/23/17 16:01	1
Bromomethane	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
2-Butanone (MEK)	10	U H	10	10	3.4	ug/L		10/23/17 16:01	1
Carbon disulfide	2.0	U H	2.0	2.0	0.43	ug/L		10/23/17 16:01	1
Carbon tetrachloride	0.50	U H	1.0	0.50	0.33	ug/L		10/23/17 16:01	1
Chlorobenzene	0.50	U H	1.0	0.50	0.26	ug/L		10/23/17 16:01	1
Chlorobromomethane	1.0	U H	1.0	1.0	0.45	ug/L		10/23/17 16:01	1
Chlorodibromomethane	0.50	U H	1.0	0.50	0.32	ug/L		10/23/17 16:01	1
Chloroethane	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
Chloroform	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 16:01	1
Chloromethane	1.0	U H	1.0	1.0	0.40	ug/L		10/23/17 16:01	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-03-08X-Fall17
Date Collected: 10/04/17 14:30
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Chlorotoluene	0.50	U H	1.0	0.50	0.27	ug/L		10/23/17 16:01	1
4-Chlorotoluene	1.0	U H	1.0	1.0	0.45	ug/L		10/23/17 16:01	1
cis-1,2-Dichloroethene	**0.50**	**J H**	1.0	1.0	0.41	ug/L		10/23/17 16:01	1
cis-1,3-Dichloropropene	1.0	U H	1.0	1.0	0.40	ug/L		10/23/17 16:01	1
1,2-Dibromo-3-Chloropropane	2.0	U H	5.0	2.0	1.1	ug/L		10/23/17 16:01	1
Dibromomethane	1.0	U H	1.0	1.0	0.35	ug/L		10/23/17 16:01	1
1,2-Dichlorobenzene	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 16:01	1
1,3-Dichlorobenzene	1.0	U H	1.0	1.0	0.43	ug/L		10/23/17 16:01	1
1,4-Dichlorobenzene	1.0	U H	1.0	1.0	0.46	ug/L		10/23/17 16:01	1
Dichlorobromomethane	1.0	U H	1.0	1.0	0.44	ug/L		10/23/17 16:01	1
Dichlorodifluoromethane	1.0	U H	1.0	1.0	0.60	ug/L		10/23/17 16:01	1
1,1-Dichloroethane	1.0	U H	1.0	1.0	0.38	ug/L		10/23/17 16:01	1
1,2-Dichloroethane	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 16:01	1
1,1-Dichloroethene	1.0	U H	1.0	1.0	0.36	ug/L		10/23/17 16:01	1
1,2-Dichloroethene, Total	1.0	U H	2.0	1.0	0.74	ug/L		10/23/17 16:01	1
1,2-Dichloropropane	1.0	U H	1.0	1.0	0.67	ug/L		10/23/17 16:01	1
1,3-Dichloropropane	1.0	U H	1.0	1.0	0.34	ug/L		10/23/17 16:01	1
2,2-Dichloropropane	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 16:01	1
1,1-Dichloropropene	1.0	U H	1.0	1.0	0.34	ug/L		10/23/17 16:01	1
Ethylbenzene	0.50	U H	1.0	0.50	0.33	ug/L		10/23/17 16:01	1
Ethylene Dibromide	1.0	U H	1.0	1.0	0.44	ug/L		10/23/17 16:01	1
Hexachlorobutadiene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
2-Hexanone	5.0	U H	10	5.0	2.0	ug/L		10/23/17 16:01	1
Isopropylbenzene	1.0	U H	1.0	1.0	0.35	ug/L		10/23/17 16:01	1
4-Isopropyltoluene	1.0	U H	1.0	1.0	0.48	ug/L		10/23/17 16:01	1
Methylene Chloride	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U H	10	5.0	2.1	ug/L		10/23/17 16:01	1
Methyl tert-butyl ether	0.50	U H	10	0.50	0.30	ug/L		10/23/17 16:01	1
m-Xylene & p-Xylene	1.0	U H	1.0	1.0	0.35	ug/L		10/23/17 16:01	1
Naphthalene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
n-Butylbenzene	1.0	U H	1.0	1.0	0.47	ug/L		10/23/17 16:01	1
N-Propylbenzene	1.0	U H	1.0	1.0	0.38	ug/L		10/23/17 16:01	1
o-Xylene	0.50	U H	1.0	0.50	0.23	ug/L		10/23/17 16:01	1
sec-Butylbenzene	1.0	U H	1.0	1.0	0.42	ug/L		10/23/17 16:01	1
Styrene	0.50	U H	1.0	0.50	0.27	ug/L		10/23/17 16:01	1
tert-Butylbenzene	1.0	U H	1.0	1.0	0.45	ug/L		10/23/17 16:01	1
1,1,1,2-Tetrachloroethane	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 16:01	1
1,1,2,2-Tetrachloroethane	1.0	U H	1.0	1.0	0.62	ug/L		10/23/17 16:01	1
Tetrachloroethene	1.0	U H	1.0	1.0	0.74	ug/L		10/23/17 16:01	1
Toluene	1.0	U H	1.0	1.0	0.48	ug/L		10/23/17 16:01	1
trans-1,2-Dichloroethene	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 16:01	1
trans-1,3-Dichloropropene	1.0	U H	1.0	1.0	0.42	ug/L		10/23/17 16:01	1
1,2,3-Trichlorobenzene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
1,2,4-Trichlorobenzene	5.0	U H	5.0	5.0	2.5	ug/L		10/23/17 16:01	1
1,1,1-Trichloroethane	1.0	U H	1.0	1.0	0.37	ug/L		10/23/17 16:01	1
1,1,2-Trichloroethane	0.50	U H	1.0	0.50	0.33	ug/L		10/23/17 16:01	1
Trichloroethene	1.0	U H	1.0	1.0	0.48	ug/L		10/23/17 16:01	1
Trichlorofluoromethane	1.0	U H	1.0	1.0	0.42	ug/L		10/23/17 16:01	1
1,2,3-Trichloropropane	1.0	U H	1.0	1.0	0.39	ug/L		10/23/17 16:01	1

Client Sample ID: G6M-03-08X-Fall17

Lab Sample ID: 680-144039-6

Date Collected: 10/04/17 14:30

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.0	U H	1.0	1.0	0.47	ug/L		10/23/17 16:01	1
1,3,5-Trimethylbenzene	0.50	U H	1.0	0.50	0.31	ug/L		10/23/17 16:01	1
Vinyl acetate	2.0	U H	2.0	2.0	0.81	ug/L		10/23/17 16:01	1
Vinyl chloride	1.0	U H	1.0	1.0	0.50	ug/L		10/23/17 16:01	1
Xylenes, Total	0.50	U H	2.0	0.50	0.23	ug/L		10/23/17 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/23/17 16:01*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 119*		*10/23/17 16:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*81 - 118*		*10/23/17 16:01*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/23/17 16:01*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/10/17 17:05	1
Ethylene	**0.90**	**J**	1.0	1.0	0.50	ug/L		10/10/17 17:05	1
Methane	**91**		0.58	0.58	0.29	ug/L		10/10/17 17:05	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**9.5**	**M**	1.0	1.0	0.40	mg/L		10/10/17 05:51	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**230**		50	50	17	ug/L		10/11/17 10:38	1
Manganese	**6900**		10	3.0	1.0	ug/L		10/11/17 10:38	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**6.6**		3.0	3.0	1.5	ug/L		10/11/17 18:54	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/09/17 20:52	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 06:30	1
Total Organic Carbon - Duplicates	**0.84**	**J**	1.0	0.50	0.16	mg/L		10/10/17 21:47	1
Alkalinity	**110**	**B**	5.0	3.2	1.1	mg/L		10/15/17 13:58	1

Client Sample ID: G6M-04-14X-Fall17

Lab Sample ID: 680-144039-7

Date Collected: 10/06/17 09:10

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 15:25	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 15:25	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:25	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 15:25	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 15:25	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 15:25	1

Client Sample ID: G6M-04-14X-Fall17
Date Collected: 10/06/17 09:10
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 15:25	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 15:25	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 15:25	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 15:25	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:25	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 15:25	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 15:25	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 15:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 15:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 15:25	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 15:25	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 15:25	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:25	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 15:25	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 15:25	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 15:25	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 15:25	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 15:25	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:25	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 15:25	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 15:25	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 15:25	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 15:25	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:25	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 15:25	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 15:25	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 15:25	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 15:25	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 15:25	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 15:25	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 15:25	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 15:25	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 15:25	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 15:25	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 15:25	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 15:25	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 15:25	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 15:25	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 15:25	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 15:25	1
Tetrachloroethene	**1.0**		1.0	1.0	0.74	ug/L		10/19/17 15:25	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 15:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 15:25	1

Client Sample ID: G6M-04-14X-Fall17

Lab Sample ID: 680-144039-7

Date Collected: 10/06/17 09:10

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:25	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:25	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 15:25	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 15:25	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 15:25	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 15:25	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 15:25	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 15:25	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 15:25	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:25	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*10/19/17 15:25*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/19/17 15:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*81 - 118*		*10/19/17 15:25*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*10/19/17 15:25*	*1*

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	**17**	**J**	50	50	17	ug/L		10/11/17 10:32	1
Manganese	**3.2**	**J**	10	3.0	1.0	ug/L		10/11/17 10:32	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**7.1**		3.0	3.0	1.5	ug/L		10/11/17 18:49	1

Client Sample ID: G6M-04-13X-Fall17

Lab Sample ID: 680-144039-8

Date Collected: 10/06/17 12:05

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 15:47	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 15:47	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:47	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 15:47	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 15:47	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 15:47	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 15:47	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 15:47	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 15:47	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 15:47	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:47	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 15:47	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 15:47	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 15:47	1

Client Sample ID: G6M-04-13X-Fall17
Date Collected: 10/06/17 12:05
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-8
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 15:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 15:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 15:47	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 15:47	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:47	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 15:47	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 15:47	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 15:47	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 15:47	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 15:47	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:47	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 15:47	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 15:47	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 15:47	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 15:47	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:47	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 15:47	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 15:47	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 15:47	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 15:47	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 15:47	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 15:47	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 15:47	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 15:47	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 15:47	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 15:47	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 15:47	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 15:47	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 15:47	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 15:47	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 15:47	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 15:47	1
Tetrachloroethene	**1.3**		1.0	1.0	0.74	ug/L		10/19/17 15:47	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 15:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 15:47	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 15:47	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 15:47	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 15:47	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 15:47	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 15:47	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 15:47	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 15:47	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 15:47	1

Client Sample ID: G6M-04-13X-Fall17

Lab Sample ID: 680-144039-8

Date Collected: 10/06/17 12:05

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 15:47	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 15:47	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*10/19/17 15:47*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/19/17 15:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*10/19/17 15:47*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*10/19/17 15:47*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/11/17 17:18	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/11/17 17:18	1
Methane	**0.33**	**J**	0.58	0.58	0.29	ug/L		10/11/17 17:18	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**4.6**	**M**	1.0	1.0	0.40	mg/L		10/10/17 06:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		10/11/17 10:06	1
Manganese	3.0	U	10	3.0	1.0	ug/L		10/11/17 10:06	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/11/17 18:28	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.84**		0.10	0.050	0.019	mg/L		10/09/17 20:56	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 06:30	1
Total Organic Carbon - Duplicates	**0.45**	**J**	1.0	0.50	0.16	mg/L		10/10/17 22:01	1
Alkalinity	**8.7**	**B**	5.0	3.2	1.1	mg/L		10/15/17 13:27	1

Client Sample ID: Dup-02--Fall17

Lab Sample ID: 680-144039-9

Date Collected: 10/06/17 12:10

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 16:09	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 16:09	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 16:09	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 16:09	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 16:09	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 16:09	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 16:09	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 16:09	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: Dup-02--Fall17
Date Collected: 10/06/17 12:10
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-9
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 16:09	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 16:09	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 16:09	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 16:09	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 16:09	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 16:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 16:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 16:09	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 16:09	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 16:09	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 16:09	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 16:09	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 16:09	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 16:09	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 16:09	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 16:09	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 16:09	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 16:09	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 16:09	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 16:09	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 16:09	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 16:09	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 16:09	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 16:09	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 16:09	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 16:09	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 16:09	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 16:09	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 16:09	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 16:09	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 16:09	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 16:09	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 16:09	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 16:09	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 16:09	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 16:09	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 16:09	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 16:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 16:09	1
Tetrachloroethene	**1.3**		1.0	1.0	0.74	ug/L		10/19/17 16:09	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 16:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 16:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 16:09	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 16:09	1

Client Sample ID: Dup-02--Fall17

Lab Sample ID: 680-144039-9

Date Collected: 10/06/17 12:10

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 16:09	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 16:09	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 16:09	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 16:09	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 16:09	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 16:09	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 16:09	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 16:09	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 16:09	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*10/19/17 16:09*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/19/17 16:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*81 - 118*		*10/19/17 16:09*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*10/19/17 16:09*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/11/17 17:31	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/11/17 17:31	1
Methane	**0.43**	**J**	0.58	0.58	0.29	ug/L		10/11/17 17:31	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**4.4**	**M**	1.0	1.0	0.40	mg/L		10/10/17 06:27	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		10/11/17 10:12	1
Manganese	**1.0**	**J**	10	3.0	1.0	ug/L		10/11/17 10:12	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/11/17 18:32	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.89**		0.10	0.050	0.019	mg/L		10/09/17 20:54	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 09:39	1
Total Organic Carbon - Duplicates	**0.49**	**J**	1.0	0.50	0.16	mg/L		10/10/17 22:16	1
Alkalinity	**8.9**	**B**	5.0	3.2	1.1	mg/L		10/15/17 13:21	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144039-10

Date Collected: 10/06/17 00:00

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 14:41	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 14:41	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: Trip Blank
Date Collected: 10/06/17 00:00
Date Received: 10/07/17 09:15

Lab Sample ID: 680-144039-10
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 14:41	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 14:41	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 14:41	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 14:41	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 14:41	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 14:41	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 14:41	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 14:41	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 14:41	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 14:41	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 14:41	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 14:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 14:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 14:41	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 14:41	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 14:41	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 14:41	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 14:41	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 14:41	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 14:41	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 14:41	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 14:41	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 14:41	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 14:41	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 14:41	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 14:41	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 14:41	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 14:41	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 14:41	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 14:41	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 14:41	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 14:41	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 14:41	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 14:41	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 14:41	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 14:41	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 14:41	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 14:41	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 14:41	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 14:41	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 14:41	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 14:41	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 14:41	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 14:41	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144039-10

Date Collected: 10/06/17 00:00

Matrix: Water

Date Received: 10/07/17 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 14:41	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/19/17 14:41	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 14:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 14:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 14:41	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 14:41	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 14:41	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 14:41	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 14:41	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 14:41	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 14:41	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 14:41	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 14:41	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 14:41	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 14:41	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*10/19/17 14:41*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/19/17 14:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*81 - 118*		*10/19/17 14:41*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*10/19/17 14:41*	*1*

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-144039-1	G6M-13-06X-Fall17	95	100	95	96
680-144039-1 MS	G6M-13-06X-Fall17	96	99	87	98
680-144039-1 MSD	G6M-13-06X-Fall17	91	98	88	92
680-144039-2	Dup-1--Fall17	94	100	93	90
680-144039-3	G6M-13-05X-Fall17	97	110	111	90
680-144039-4	G6M-95-19X-Fall17	98	99	94	88 Q
680-144039-4 - RA	G6M-95-19X-Fall17	92	91	84	107
680-144039-5	G6M-95-20X-Fall17	96	100	94	88 Q
680-144039-5 - RA	G6M-95-20X-Fall17	96	97	92	96
680-144039-6	G6M-03-08X-Fall17	93	91	82	107
680-144039-7	G6M-04-14X-Fall17	98	99	102	102
680-144039-8	G6M-04-13X-Fall17	98	99	101	101
680-144039-9	Dup-02--Fall17	99	99	102	101
680-144039-10	Trip Blank	97	99	102	102
LCS 680-498907/3	Lab Control Sample	93	100	95	96
LCS 680-499084/4	Lab Control Sample	92	99	92	94
LCS 680-499108/3	Lab Control Sample	95	102	101	100
LCS 680-499333/3	Lab Control Sample	99	103	95	96
LCS 680-499430/3	Lab Control Sample	88	92	84	98
LCSD 680-498907/4	Lab Control Sample Dup	102	107	101	101
LCSD 680-499084/5	Lab Control Sample Dup	93	103	95	100
LCSD 680-499108/4	Lab Control Sample Dup	95	104	103	100
LCSD 680-499333/4	Lab Control Sample Dup	95	100	93	98
LCSD 680-499430/4	Lab Control Sample Dup	92	93	87	99
MB 680-498907/8	Method Blank	94	98	93	91
MB 680-499084/10	Method Blank	96	98	92	86 Q
MB 680-499108/8	Method Blank	97	98	100	102
MB 680-499333/8	Method Blank	99	94	92	98
MB 680-499430/9	Method Blank	93	91	83	108

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-498907/8
Matrix: Water
Analysis Batch: 498907

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/18/17 09:48	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/18/17 09:48	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 09:48	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/18/17 09:48	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/18/17 09:48	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/18/17 09:48	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/18/17 09:48	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/18/17 09:48	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/18/17 09:48	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/18/17 09:48	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 09:48	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/18/17 09:48	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/18/17 09:48	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/18/17 09:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/18/17 09:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/18/17 09:48	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/18/17 09:48	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/18/17 09:48	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 09:48	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/18/17 09:48	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/18/17 09:48	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/18/17 09:48	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/18/17 09:48	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/18/17 09:48	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 09:48	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/18/17 09:48	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/18/17 09:48	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/18/17 09:48	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/18/17 09:48	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 09:48	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/18/17 09:48	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/18/17 09:48	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/18/17 09:48	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/18/17 09:48	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/18/17 09:48	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/18/17 09:48	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/18/17 09:48	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/18/17 09:48	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/18/17 09:48	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/18/17 09:48	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/18/17 09:48	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/18/17 09:48	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/18/17 09:48	1

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

Lab Sample ID: MB 680-498907/8
Matrix: Water
Analysis Batch: 498907

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/18/17 09:48	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/18/17 09:48	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 09:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/18/17 09:48	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/18/17 09:48	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/18/17 09:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 09:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/18/17 09:48	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/18/17 09:48	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/18/17 09:48	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/18/17 09:48	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/18/17 09:48	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/18/17 09:48	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/18/17 09:48	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/18/17 09:48	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/18/17 09:48	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/18/17 09:48	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 09:48	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/18/17 09:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/18/17 09:48*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*10/18/17 09:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*10/18/17 09:48*	*1*
Toluene-d8 (Surr)	*91*		*89 - 112*		*10/18/17 09:48*	*1*

Lab Sample ID: LCS 680-498907/3
Matrix: Water
Analysis Batch: 498907

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	257		ug/L		103	39 - 160
Benzene	50.0	48.3		ug/L		97	79 - 120
Bromobenzene	50.0	50.2		ug/L		100	80 - 120
Bromoform	50.0	46.4		ug/L		93	66 - 130
Bromomethane	50.0	61.8		ug/L		124	53 - 141
2-Butanone (MEK)	250	233		ug/L		93	56 - 143
Carbon disulfide	50.0	48.8		ug/L		98	64 - 133
Carbon tetrachloride	50.0	51.3		ug/L		103	72 - 136
Chlorobenzene	50.0	49.0		ug/L		98	82 - 118
Chlorobromomethane	50.0	48.0		ug/L		96	78 - 123
Chlorodibromomethane	50.0	46.4		ug/L		93	74 - 126
Chloroethane	50.0	51.8		ug/L		104	60 - 138
Chloroform	50.0	48.9		ug/L		98	79 - 124
Chloromethane	50.0	42.0		ug/L		84	50 - 139
2-Chlorotoluene	50.0	48.0		ug/L		96	79 - 122
4-Chlorotoluene	50.0	49.3		ug/L		99	78 - 122

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

Lab Sample ID: LCS 680-498907/3
Matrix: Water
Analysis Batch: 498907

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	50.0	48.1		ug/L		96	78 - 123
cis-1,3-Dichloropropene	50.0	53.3		ug/L		107	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	57.2		ug/L		114	62 - 128
Dibromomethane	50.0	50.2		ug/L		100	79 - 123
1,2-Dichlorobenzene	50.0	49.6		ug/L		99	80 - 119
1,3-Dichlorobenzene	50.0	48.3		ug/L		97	80 - 119
1,4-Dichlorobenzene	50.0	48.1		ug/L		96	79 - 118
Dichlorobromomethane	50.0	52.5		ug/L		105	79 - 125
Dichlorodifluoromethane	50.0	45.3		ug/L		91	32 - 152
1,1-Dichloroethane	50.0	48.9		ug/L		98	77 - 125
1,2-Dichloroethane	50.0	47.8		ug/L		96	73 - 128
1,1-Dichloroethene	50.0	47.5		ug/L		95	71 - 131
1,2-Dichloroethene, Total	100	97.3		ug/L		97	79 - 121
1,2-Dichloropropane	50.0	49.8		ug/L		100	78 - 122
1,3-Dichloropropane	50.0	48.0		ug/L		96	80 - 119
2,2-Dichloropropane	50.0	54.2		ug/L		108	60 - 139
1,1-Dichloropropene	50.0	48.9		ug/L		98	79 - 125
Ethylbenzene	50.0	48.9		ug/L		98	79 - 121
Ethylene Dibromide	50.0	50.0		ug/L		100	75 - 127
Hexachlorobutadiene	50.0	50.7		ug/L		101	66 - 134
2-Hexanone	250	237		ug/L		95	57 - 139
Isopropylbenzene	50.0	49.6		ug/L		99	72 - 131
4-Isopropyltoluene	50.0	49.8		ug/L		100	77 - 127
Methylene Chloride	50.0	50.6		ug/L		101	74 - 124
4-Methyl-2-pentanone (MIBK)	250	239		ug/L		96	67 - 130
Methyl tert-butyl ether	50.0	49.2		ug/L		98	71 - 124
m-Xylene & p-Xylene	50.0	49.0		ug/L		98	80 - 121
Naphthalene	50.0	51.8		ug/L		104	61 - 128
n-Butylbenzene	50.0	50.2		ug/L		100	75 - 128
N-Propylbenzene	50.0	49.2		ug/L		98	76 - 126
o-Xylene	50.0	49.8		ug/L		100	78 - 122
sec-Butylbenzene	50.0	49.2		ug/L		98	77 - 126
Styrene	50.0	50.0		ug/L		100	78 - 123
tert-Butylbenzene	50.0	48.9		ug/L		98	78 - 124
1,1,1,2-Tetrachloroethane	50.0	52.9		ug/L		106	78 - 124
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/L		99	71 - 121
Tetrachloroethene	50.0	50.1		ug/L		100	74 - 129
Toluene	50.0	48.0		ug/L		96	80 - 121
trans-1,2-Dichloroethene	50.0	49.2		ug/L		98	75 - 124
trans-1,3-Dichloropropene	50.0	47.8		ug/L		96	73 - 127
1,2,3-Trichlorobenzene	50.0	51.4		ug/L		103	69 - 129
1,2,4-Trichlorobenzene	50.0	51.5		ug/L		103	69 - 130
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	74 - 131
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	80 - 119
Trichloroethene	50.0	49.5		ug/L		99	79 - 123
Trichlorofluoromethane	50.0	50.6		ug/L		101	65 - 141
1,2,3-Trichloropropane	50.0	50.9		ug/L		102	73 - 122
1,2,4-Trimethylbenzene	50.0	50.7		ug/L		101	76 - 124

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

Lab Sample ID: LCS 680-498907/3
Matrix: Water
Analysis Batch: 498907

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	49.5		ug/L		99	75 - 124
Vinyl acetate	100	101		ug/L		101	54 - 146
Vinyl chloride	50.0	46.8		ug/L		94	58 - 137
Xylenes, Total	100	98.8		ug/L		99	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
Toluene-d8 (Surr)	*96*		*89 - 112*

Lab Sample ID: LCSD 680-498907/4
Matrix: Water
Analysis Batch: 498907

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	250	275		ug/L		110	39 - 160	7	20
Benzene	50.0	50.6		ug/L		101	79 - 120	5	20
Bromobenzene	50.0	53.2		ug/L		106	80 - 120	6	20
Bromoform	50.0	54.0		ug/L		108	66 - 130	15	20
Bromomethane	50.0	46.3	Q	ug/L		93	53 - 141	29	20
2-Butanone (MEK)	250	251		ug/L		100	56 - 143	7	20
Carbon disulfide	50.0	51.3		ug/L		103	64 - 133	5	20
Carbon tetrachloride	50.0	55.0		ug/L		110	72 - 136	7	20
Chlorobenzene	50.0	50.6		ug/L		101	82 - 118	3	20
Chlorobromomethane	50.0	50.8		ug/L		102	78 - 123	6	20
Chlorodibromomethane	50.0	52.6		ug/L		105	74 - 126	13	20
Chloroethane	50.0	47.9		ug/L		96	60 - 138	8	20
Chloroform	50.0	51.8		ug/L		104	79 - 124	6	20
Chloromethane	50.0	43.7		ug/L		87	50 - 139	4	20
2-Chlorotoluene	50.0	50.7		ug/L		101	79 - 122	6	20
4-Chlorotoluene	50.0	51.1		ug/L		102	78 - 122	4	20
cis-1,2-Dichloroethene	50.0	50.9		ug/L		102	78 - 123	6	20
cis-1,3-Dichloropropene	50.0	58.6		ug/L		117	75 - 124	10	20
1,2-Dibromo-3-Chloropropane	50.0	61.7		ug/L		123	62 - 128	7	20
Dibromomethane	50.0	54.5		ug/L		109	79 - 123	8	20
1,2-Dichlorobenzene	50.0	53.0		ug/L		106	80 - 119	7	20
1,3-Dichlorobenzene	50.0	51.8		ug/L		104	80 - 119	7	20
1,4-Dichlorobenzene	50.0	52.2		ug/L		104	79 - 118	8	20
Dichlorobromomethane	50.0	56.8		ug/L		114	79 - 125	8	20
Dichlorodifluoromethane	50.0	48.2		ug/L		96	32 - 152	6	20
1,1-Dichloroethane	50.0	51.4		ug/L		103	77 - 125	5	20
1,2-Dichloroethane	50.0	51.2		ug/L		102	73 - 128	7	20
1,1-Dichloroethene	50.0	53.0		ug/L		106	71 - 131	11	20
1,2-Dichloroethene, Total	100	103		ug/L		103	79 - 121	6	20
1,2-Dichloropropane	50.0	53.0		ug/L		106	78 - 122	6	20
1,3-Dichloropropane	50.0	52.0		ug/L		104	80 - 119	8	20
2,2-Dichloropropane	50.0	58.1		ug/L		116	60 - 139	7	20

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

Lab Sample ID: LCSD 680-498907/4
Matrix: Water
Analysis Batch: 498907

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-Dichloropropene	50.0	52.3		ug/L		105	79 - 125	7	20
Ethylbenzene	50.0	50.9		ug/L		102	79 - 121	4	20
Ethylene Dibromide	50.0	54.0		ug/L		108	75 - 127	8	20
Hexachlorobutadiene	50.0	52.8		ug/L		106	66 - 134	4	20
2-Hexanone	250	274		ug/L		110	57 - 139	14	20
Isopropylbenzene	50.0	51.5		ug/L		103	72 - 131	4	20
4-Isopropyltoluene	50.0	52.0		ug/L		104	77 - 127	4	20
Methylene Chloride	50.0	53.4		ug/L		107	74 - 124	5	20
4-Methyl-2-pentanone (MIBK)	250	267		ug/L		107	67 - 130	11	20
Methyl tert-butyl ether	50.0	52.8		ug/L		106	71 - 124	7	20
m-Xylene & p-Xylene	50.0	50.9		ug/L		102	80 - 121	4	20
Naphthalene	50.0	53.5		ug/L		107	61 - 128	3	20
n-Butylbenzene	50.0	54.0		ug/L		108	75 - 128	7	20
N-Propylbenzene	50.0	50.8		ug/L		102	76 - 126	3	20
o-Xylene	50.0	51.8		ug/L		104	78 - 122	4	20
sec-Butylbenzene	50.0	51.5		ug/L		103	77 - 126	5	20
Styrene	50.0	52.1		ug/L		104	78 - 123	4	20
tert-Butylbenzene	50.0	51.0		ug/L		102	78 - 124	4	20
1,1,1,2-Tetrachloroethane	50.0	56.3		ug/L		113	78 - 124	6	20
1,1,2,2-Tetrachloroethane	50.0	54.7		ug/L		109	71 - 121	10	20
Tetrachloroethene	50.0	52.5		ug/L		105	74 - 129	5	20
Toluene	50.0	51.8		ug/L		104	80 - 121	8	20
trans-1,2-Dichloroethene	50.0	52.3		ug/L		105	75 - 124	6	20
trans-1,3-Dichloropropene	50.0	53.2		ug/L		106	73 - 127	11	20
1,2,3-Trichlorobenzene	50.0	52.0		ug/L		104	69 - 129	1	20
1,2,4-Trichlorobenzene	50.0	54.7		ug/L		109	69 - 130	6	20
1,1,1-Trichloroethane	50.0	53.4		ug/L		107	74 - 131	5	20
1,1,2-Trichloroethane	50.0	52.6		ug/L		105	80 - 119	8	20
Trichloroethene	50.0	52.9		ug/L		106	79 - 123	7	20
Trichlorofluoromethane	50.0	54.6		ug/L		109	65 - 141	8	20
1,2,3-Trichloropropane	50.0	57.2		ug/L		114	73 - 122	12	20
1,2,4-Trimethylbenzene	50.0	52.3		ug/L		105	76 - 124	3	20
1,3,5-Trimethylbenzene	50.0	51.6		ug/L		103	75 - 124	4	20
Vinyl acetate	100	108		ug/L		108	54 - 146	7	20
Vinyl chloride	50.0	50.1		ug/L		100	58 - 137	7	20
Xylenes, Total	100	103		ug/L		103	79 - 121	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*
Dibromofluoromethane (Surr)	*107*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
Toluene-d8 (Surr)	*101*		*89 - 112*

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

Lab Sample ID: MB 680-499084/10
Matrix: Water
Analysis Batch: 499084

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 10:32	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 10:32	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 10:32	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 10:32	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 10:32	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 10:32	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 10:32	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 10:32	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 10:32	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 10:32	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 10:32	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 10:32	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 10:32	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 10:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 10:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 10:32	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 10:32	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 10:32	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 10:32	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 10:32	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 10:32	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 10:32	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 10:32	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 10:32	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 10:32	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 10:32	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 10:32	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 10:32	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 10:32	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 10:32	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 10:32	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 10:32	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 10:32	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 10:32	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 10:32	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 10:32	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 10:32	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 10:32	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 10:32	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 10:32	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 10:32	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 10:32	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 10:32	1

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

Lab Sample ID: MB 680-499084/10
Matrix: Water
Analysis Batch: 499084

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 10:32	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 10:32	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 10:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 10:32	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/19/17 10:32	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 10:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 10:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 10:32	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 10:32	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 10:32	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 10:32	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 10:32	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 10:32	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 10:32	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 10:32	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 10:32	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 10:32	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 10:32	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 10:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*		*10/19/17 10:32*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*10/19/17 10:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/19/17 10:32*	*1*
Toluene-d8 (Surr)	*86*	*Q*	*89 - 112*		*10/19/17 10:32*	*1*

Lab Sample ID: LCS 680-499084/4
Matrix: Water
Analysis Batch: 499084

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	235		ug/L		94	39 - 160
Benzene	50.0	47.6		ug/L		95	79 - 120
Bromobenzene	50.0	49.1		ug/L		98	80 - 120
Bromoform	50.0	45.8		ug/L		92	66 - 130
Bromomethane	50.0	62.6		ug/L		125	53 - 141
2-Butanone (MEK)	250	221		ug/L		89	56 - 143
Carbon disulfide	50.0	49.4		ug/L		99	64 - 133
Carbon tetrachloride	50.0	51.7		ug/L		103	72 - 136
Chlorobenzene	50.0	48.2		ug/L		96	82 - 118
Chlorobromomethane	50.0	46.3		ug/L		93	78 - 123
Chlorodibromomethane	50.0	45.9		ug/L		92	74 - 126
Chloroethane	50.0	50.0		ug/L		100	60 - 138
Chloroform	50.0	48.6		ug/L		97	79 - 124
Chloromethane	50.0	45.9		ug/L		92	50 - 139
2-Chlorotoluene	50.0	47.9		ug/L		96	79 - 122
4-Chlorotoluene	50.0	47.9		ug/L		96	78 - 122

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

Lab Sample ID: LCS 680-499084/4
Matrix: Water
Analysis Batch: 499084

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	50.0	47.2		ug/L		94	78 - 123
cis-1,3-Dichloropropene	50.0	52.0		ug/L		104	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	52.6		ug/L		105	62 - 128
Dibromomethane	50.0	49.3		ug/L		99	79 - 123
1,2-Dichlorobenzene	50.0	48.5		ug/L		97	80 - 119
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	80 - 119
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	79 - 118
Dichlorobromomethane	50.0	51.4		ug/L		103	79 - 125
Dichlorodifluoromethane	50.0	44.3		ug/L		89	32 - 152
1,1-Dichloroethane	50.0	48.5		ug/L		97	77 - 125
1,2-Dichloroethane	50.0	47.1		ug/L		94	73 - 128
1,1-Dichloroethene	50.0	49.4		ug/L		99	71 - 131
1,2-Dichloroethene, Total	100	96.6		ug/L		97	79 - 121
1,2-Dichloropropane	50.0	48.5		ug/L		97	78 - 122
1,3-Dichloropropane	50.0	46.1		ug/L		92	80 - 119
2,2-Dichloropropane	50.0	55.2		ug/L		110	60 - 139
1,1-Dichloropropene	50.0	49.8		ug/L		100	79 - 125
Ethylbenzene	50.0	48.7		ug/L		97	79 - 121
Ethylene Dibromide	50.0	48.2		ug/L		96	75 - 127
Hexachlorobutadiene	50.0	52.0		ug/L		104	66 - 134
2-Hexanone	250	226		ug/L		90	57 - 139
Isopropylbenzene	50.0	49.7		ug/L		99	72 - 131
4-Isopropyltoluene	50.0	50.0		ug/L		100	77 - 127
Methylene Chloride	50.0	48.6		ug/L		97	74 - 124
4-Methyl-2-pentanone (MIBK)	250	229		ug/L		92	67 - 130
Methyl tert-butyl ether	50.0	48.4		ug/L		97	71 - 124
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	80 - 121
Naphthalene	50.0	45.9		ug/L		92	61 - 128
n-Butylbenzene	50.0	51.1		ug/L		102	75 - 128
N-Propylbenzene	50.0	48.5		ug/L		97	76 - 126
o-Xylene	50.0	49.2		ug/L		98	78 - 122
sec-Butylbenzene	50.0	50.1		ug/L		100	77 - 126
Styrene	50.0	49.0		ug/L		98	78 - 123
tert-Butylbenzene	50.0	49.1		ug/L		98	78 - 124
1,1,1,2-Tetrachloroethane	50.0	51.9		ug/L		104	78 - 124
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/L		97	71 - 121
Tetrachloroethene	50.0	50.3		ug/L		101	74 - 129
Toluene	50.0	47.4		ug/L		95	80 - 121
trans-1,2-Dichloroethene	50.0	49.4		ug/L		99	75 - 124
trans-1,3-Dichloropropene	50.0	47.0		ug/L		94	73 - 127
1,2,3-Trichlorobenzene	50.0	46.4		ug/L		93	69 - 129
1,2,4-Trichlorobenzene	50.0	47.8		ug/L		96	69 - 130
1,1,1-Trichloroethane	50.0	51.1		ug/L		102	74 - 131
1,1,2-Trichloroethane	50.0	47.0		ug/L		94	80 - 119
Trichloroethene	50.0	49.2		ug/L		98	79 - 123
Trichlorofluoromethane	50.0	53.8		ug/L		108	65 - 141
1,2,3-Trichloropropane	50.0	49.9		ug/L		100	73 - 122
1,2,4-Trimethylbenzene	50.0	49.4		ug/L		99	76 - 124

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

Lab Sample ID: LCS 680-499084/4
Matrix: Water
Analysis Batch: 499084

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	49.1		ug/L		98	75 - 124
Vinyl acetate	100	98.7		ug/L		99	54 - 146
Vinyl chloride	50.0	46.7		ug/L		93	58 - 137
Xylenes, Total	100	97.4		ug/L		97	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*
Toluene-d8 (Surr)	*94*		*89 - 112*

Lab Sample ID: LCSD 680-499084/5
Matrix: Water
Analysis Batch: 499084

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	250	229		ug/L		92	39 - 160	3	20
Benzene	50.0	49.8		ug/L		100	79 - 120	4	20
Bromobenzene	50.0	50.1		ug/L		100	80 - 120	2	20
Bromoform	50.0	48.0		ug/L		96	66 - 130	5	20
Bromomethane	50.0	64.4		ug/L		129	53 - 141	3	20
2-Butanone (MEK)	250	213		ug/L		85	56 - 143	4	20
Carbon disulfide	50.0	50.7		ug/L		101	64 - 133	3	20
Carbon tetrachloride	50.0	52.2		ug/L		104	72 - 136	1	20
Chlorobenzene	50.0	49.0		ug/L		98	82 - 118	2	20
Chlorobromomethane	50.0	47.6		ug/L		95	78 - 123	3	20
Chlorodibromomethane	50.0	47.0		ug/L		94	74 - 126	2	20
Chloroethane	50.0	50.7		ug/L		101	60 - 138	1	20
Chloroform	50.0	50.4		ug/L		101	79 - 124	4	20
Chloromethane	50.0	47.4		ug/L		95	50 - 139	3	20
2-Chlorotoluene	50.0	48.6		ug/L		97	79 - 122	1	20
4-Chlorotoluene	50.0	49.7		ug/L		99	78 - 122	4	20
cis-1,2-Dichloroethene	50.0	49.2		ug/L		98	78 - 123	4	20
cis-1,3-Dichloropropene	50.0	54.4		ug/L		109	75 - 124	4	20
1,2-Dibromo-3-Chloropropane	50.0	53.1		ug/L		106	62 - 128	1	20
Dibromomethane	50.0	50.3		ug/L		101	79 - 123	2	20
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	80 - 119	4	20
1,3-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 119	3	20
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	79 - 118	5	20
Dichlorobromomethane	50.0	53.6		ug/L		107	79 - 125	4	20
Dichlorodifluoromethane	50.0	42.5		ug/L		85	32 - 152	4	20
1,1-Dichloroethane	50.0	50.2		ug/L		100	77 - 125	4	20
1,2-Dichloroethane	50.0	47.6		ug/L		95	73 - 128	1	20
1,1-Dichloroethene	50.0	50.8		ug/L		102	71 - 131	3	20
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121	4	20
1,2-Dichloropropane	50.0	51.0		ug/L		102	78 - 122	5	20
1,3-Dichloropropane	50.0	48.6		ug/L		97	80 - 119	5	20
2,2-Dichloropropane	50.0	56.6		ug/L		113	60 - 139	3	20

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

Lab Sample ID: LCSD 680-499084/5
Matrix: Water
Analysis Batch: 499084

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-Dichloropropene	50.0	50.7		ug/L		101	79 - 125	2	20
Ethylbenzene	50.0	48.7		ug/L		97	79 - 121	0	20
Ethylene Dibromide	50.0	50.6		ug/L		101	75 - 127	5	20
Hexachlorobutadiene	50.0	51.8		ug/L		104	66 - 134	0	20
2-Hexanone	250	231		ug/L		92	57 - 139	2	20
Isopropylbenzene	50.0	49.3		ug/L		99	72 - 131	1	20
4-Isopropyltoluene	50.0	51.4		ug/L		103	77 - 127	3	20
Methylene Chloride	50.0	49.9		ug/L		100	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	250	234		ug/L		94	67 - 130	2	20
Methyl tert-butyl ether	50.0	49.8		ug/L		100	71 - 124	3	20
m-Xylene & p-Xylene	50.0	48.1		ug/L		96	80 - 121	0	20
Naphthalene	50.0	47.2		ug/L		94	61 - 128	3	20
n-Butylbenzene	50.0	51.6		ug/L		103	75 - 128	1	20
N-Propylbenzene	50.0	49.6		ug/L		99	76 - 126	2	20
o-Xylene	50.0	49.5		ug/L		99	78 - 122	1	20
sec-Butylbenzene	50.0	51.1		ug/L		102	77 - 126	2	20
Styrene	50.0	49.7		ug/L		99	78 - 123	1	20
tert-Butylbenzene	50.0	50.4		ug/L		101	78 - 124	3	20
1,1,1,2-Tetrachloroethane	50.0	55.3		ug/L		111	78 - 124	6	20
1,1,2,2-Tetrachloroethane	50.0	49.2		ug/L		98	71 - 121	2	20
Tetrachloroethene	50.0	52.1		ug/L		104	74 - 129	3	20
Toluene	50.0	49.2		ug/L		98	80 - 121	4	20
trans-1,2-Dichloroethene	50.0	51.7		ug/L		103	75 - 124	5	20
trans-1,3-Dichloropropene	50.0	48.1		ug/L		96	73 - 127	2	20
1,2,3-Trichlorobenzene	50.0	48.4		ug/L		97	69 - 129	4	20
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	69 - 130	3	20
1,1,1-Trichloroethane	50.0	51.8		ug/L		104	74 - 131	1	20
1,1,2-Trichloroethane	50.0	49.1		ug/L		98	80 - 119	4	20
Trichloroethene	50.0	51.9		ug/L		104	79 - 123	5	20
Trichlorofluoromethane	50.0	52.7		ug/L		105	65 - 141	2	20
1,2,3-Trichloropropane	50.0	50.7		ug/L		101	73 - 122	2	20
1,2,4-Trimethylbenzene	50.0	51.6		ug/L		103	76 - 124	4	20
1,3,5-Trimethylbenzene	50.0	51.0		ug/L		102	75 - 124	4	20
Vinyl acetate	100	99.4		ug/L		99	54 - 146	1	20
Vinyl chloride	50.0	44.2		ug/L		88	58 - 137	5	20
Xylenes, Total	100	97.6		ug/L		98	79 - 121	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*
Dibromofluoromethane (Surr)	*103*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
Toluene-d8 (Surr)	*100*		*89 - 112*

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

Lab Sample ID: 680-144039-1 MS
Matrix: Water
Analysis Batch: 499084

Client Sample ID: G6M-13-06X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25		250	232		ug/L		83	39 - 160
Benzene	1.0	U	50.0	49.0		ug/L		98	79 - 120
Bromobenzene	1.0	U	50.0	49.8		ug/L		100	80 - 120
Bromoform	1.0	U	50.0	43.9		ug/L		88	66 - 130
Bromomethane	5.0	U	50.0	56.1		ug/L		112	53 - 141
2-Butanone (MEK)	35		250	228		ug/L		77	56 - 143
Carbon disulfide	2.0	U	50.0	53.3		ug/L		107	64 - 133
Carbon tetrachloride	0.50	U	50.0	54.4		ug/L		109	72 - 136
Chlorobenzene	0.50	U	50.0	50.0		ug/L		100	82 - 118
Chlorobromomethane	1.0	U	50.0	45.4		ug/L		91	78 - 123
Chlorodibromomethane	0.50	U	50.0	43.3		ug/L		87	74 - 126
Chloroethane	5.0	U	50.0	51.3		ug/L		103	60 - 138
Chloroform	1.0	U	50.0	48.7		ug/L		97	79 - 124
Chloromethane	1.0	U	50.0	48.3		ug/L		97	50 - 139
2-Chlorotoluene	0.50	U	50.0	49.1		ug/L		98	79 - 122
4-Chlorotoluene	1.0	U	50.0	47.7		ug/L		95	78 - 122
cis-1,2-Dichloroethene	1.2		50.0	48.9		ug/L		95	78 - 123
cis-1,3-Dichloropropene	1.0	U	50.0	47.1		ug/L		94	75 - 124
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	46.3		ug/L		93	62 - 128
Dibromomethane	1.0	U	50.0	44.7		ug/L		89	79 - 123
1,2-Dichlorobenzene	1.0	U	50.0	49.8		ug/L		100	80 - 119
1,3-Dichlorobenzene	1.0	U	50.0	49.1		ug/L		98	80 - 119
1,4-Dichlorobenzene	1.0	U	50.0	48.5		ug/L		97	79 - 118
Dichlorobromomethane	1.0	U	50.0	50.5		ug/L		101	79 - 125
Dichlorodifluoromethane	1.0	U	50.0	39.7		ug/L		79	32 - 152
1,1-Dichloroethane	1.0	U	50.0	49.5		ug/L		99	77 - 125
1,2-Dichloroethane	1.0	U	50.0	43.9		ug/L		88	73 - 128
1,1-Dichloroethene	1.0	U	50.0	52.9		ug/L		106	71 - 131
1,2-Dichloroethene, Total	1.5	J	100	100		ug/L		99	79 - 121
1,2-Dichloropropane	1.0	U	50.0	49.4		ug/L		99	78 - 122
1,3-Dichloropropane	1.0	U	50.0	43.3		ug/L		87	80 - 119
2,2-Dichloropropane	1.0	U	50.0	36.2		ug/L		72	60 - 139
1,1-Dichloropropene	1.0	U	50.0	51.1		ug/L		102	79 - 125
Ethylbenzene	13		50.0	62.7		ug/L		100	79 - 121
Ethylene Dibromide	1.0	U	50.0	45.7		ug/L		91	75 - 127
Hexachlorobutadiene	5.0	U	50.0	51.6		ug/L		103	66 - 134
2-Hexanone	5.0	U	250	203		ug/L		81	57 - 139
Isopropylbenzene	1.0	U	50.0	50.8		ug/L		102	72 - 131
4-Isopropyltoluene	1.0	U	50.0	52.0		ug/L		104	77 - 127
Methylene Chloride	5.0	U	50.0	48.0		ug/L		96	74 - 124
4-Methyl-2-pentanone (MIBK)	5.0	U	250	216		ug/L		87	67 - 130
Methyl tert-butyl ether	0.50	U	50.0	45.5		ug/L		91	71 - 124
m-Xylene & p-Xylene	1.0	U	50.0	49.6		ug/L		99	80 - 121
Naphthalene	5.0	U J	50.0	35.4		ug/L		71	61 - 128
n-Butylbenzene	1.0	U	50.0	50.5		ug/L		101	75 - 128
N-Propylbenzene	1.0	U	50.0	50.3		ug/L		101	76 - 126
o-Xylene	0.50	U	50.0	49.9		ug/L		100	78 - 122
sec-Butylbenzene	1.0	U	50.0	51.2		ug/L		102	77 - 126

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

Lab Sample ID: 680-144039-1 MS
Matrix: Water
Analysis Batch: 499084

Client Sample ID: G6M-13-06X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.50	U	50.0	48.6		ug/L		97	78 - 123
tert-Butylbenzene	1.0	U	50.0	50.9		ug/L		102	78 - 124
1,1,1,2-Tetrachloroethane	1.0	U	50.0	53.0		ug/L		106	78 - 124
1,1,2,2-Tetrachloroethane	1.0	U	50.0	46.7		ug/L		93	71 - 121
Tetrachloroethene	1.0	U	50.0	50.4		ug/L		101	74 - 129
Toluene	3.2		50.0	51.7		ug/L		97	80 - 121
trans-1,2-Dichloroethene	1.0	U	50.0	51.3		ug/L		103	75 - 124
trans-1,3-Dichloropropene	1.0	U	50.0	40.1		ug/L		80	73 - 127
1,2,3-Trichlorobenzene	5.0	U	50.0	38.4		ug/L		77	69 - 129
1,2,4-Trichlorobenzene	5.0	U	50.0	43.4		ug/L		87	69 - 130
1,1,1-Trichloroethane	1.0	U	50.0	52.4		ug/L		105	74 - 131
1,1,2-Trichloroethane	0.50	U	50.0	44.9		ug/L		90	80 - 119
Trichloroethene	1.0	U	50.0	51.1		ug/L		102	79 - 123
Trichlorofluoromethane	1.0	U	50.0	53.6		ug/L		107	65 - 141
1,2,3-Trichloropropane	1.0	U	50.0	44.9		ug/L		90	73 - 122
1,2,4-Trimethylbenzene	0.48	J	50.0	50.7		ug/L		100	76 - 124
1,3,5-Trimethylbenzene	0.50	U	50.0	50.2		ug/L		100	75 - 124
Vinyl acetate	2.0	U	100	75.7		ug/L		76	54 - 146
Vinyl chloride	0.95	J	50.0	47.0		ug/L		92	58 - 137
Xylenes, Total	0.50	U	100	99.5		ug/L		100	79 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*87*		*81 - 118*
Toluene-d8 (Surr)	*98*		*89 - 112*

Lab Sample ID: 680-144039-1 MSD
Matrix: Water
Analysis Batch: 499084

Client Sample ID: G6M-13-06X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	25		250	237		ug/L		85	39 - 160	2	20
Benzene	1.0	U	50.0	47.7		ug/L		95	79 - 120	3	20
Bromobenzene	1.0	U	50.0	49.8		ug/L		100	80 - 120	0	20
Bromoform	1.0	U	50.0	46.3		ug/L		93	66 - 130	5	20
Bromomethane	5.0	U	50.0	55.1		ug/L		110	53 - 141	2	20
2-Butanone (MEK)	35		250	228		ug/L		77	56 - 143	0	20
Carbon disulfide	2.0	U	50.0	51.5		ug/L		103	64 - 133	3	20
Carbon tetrachloride	0.50	U	50.0	52.8		ug/L		106	72 - 136	3	20
Chlorobenzene	0.50	U	50.0	48.2		ug/L		96	82 - 118	4	20
Chlorobromomethane	1.0	U	50.0	44.0		ug/L		88	78 - 123	3	20
Chlorodibromomethane	0.50	U	50.0	42.2		ug/L		84	74 - 126	2	20
Chloroethane	5.0	U	50.0	50.3		ug/L		101	60 - 138	2	20
Chloroform	1.0	U	50.0	47.6		ug/L		95	79 - 124	2	20
Chloromethane	1.0	U	50.0	46.3		ug/L		93	50 - 139	4	20
2-Chlorotoluene	0.50	U	50.0	51.0		ug/L		102	79 - 122	4	20
4-Chlorotoluene	1.0	U	50.0	51.3		ug/L		103	78 - 122	7	20

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

Lab Sample ID: 680-144039-1 MSD
Matrix: Water
Analysis Batch: 499084

Client Sample ID: G6M-13-06X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	1.2		50.0	48.4		ug/L		94	78 - 123	1	20
cis-1,3-Dichloropropene	1.0	U	50.0	46.1		ug/L		92	75 - 124	2	20
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	52.2		ug/L		104	62 - 128	12	20
Dibromomethane	1.0	U	50.0	44.7		ug/L		89	79 - 123	0	20
1,2-Dichlorobenzene	1.0	U	50.0	48.7		ug/L		97	80 - 119	2	20
1,3-Dichlorobenzene	1.0	U	50.0	48.3		ug/L		97	80 - 119	2	20
1,4-Dichlorobenzene	1.0	U	50.0	47.8		ug/L		96	79 - 118	2	20
Dichlorobromomethane	1.0	U	50.0	49.4		ug/L		99	79 - 125	2	20
Dichlorodifluoromethane	1.0	U	50.0	40.1		ug/L		80	32 - 152	1	20
1,1-Dichloroethane	1.0	U	50.0	48.1		ug/L		96	77 - 125	3	20
1,2-Dichloroethane	1.0	U	50.0	43.2		ug/L		86	73 - 128	2	20
1,1-Dichloroethene	1.0	U	50.0	50.6		ug/L		101	71 - 131	4	20
1,2-Dichloroethene, Total	1.5	J	100	99.1		ug/L		98	79 - 121	1	20
1,2-Dichloropropane	1.0	U	50.0	47.6		ug/L		95	78 - 122	4	20
1,3-Dichloropropane	1.0	U	50.0	42.9		ug/L		86	80 - 119	1	20
2,2-Dichloropropane	1.0	U	50.0	35.5		ug/L		71	60 - 139	2	20
1,1-Dichloropropene	1.0	U	50.0	49.9		ug/L		100	79 - 125	2	20
Ethylbenzene	13		50.0	61.7		ug/L		98	79 - 121	2	20
Ethylene Dibromide	1.0	U	50.0	43.9		ug/L		88	75 - 127	4	20
Hexachlorobutadiene	5.0	U	50.0	52.0		ug/L		104	66 - 134	1	20
2-Hexanone	5.0	U	250	196		ug/L		78	57 - 139	4	20
Isopropylbenzene	1.0	U	50.0	52.3		ug/L		105	72 - 131	3	20
4-Isopropyltoluene	1.0	U	50.0	51.1		ug/L		102	77 - 127	2	20
Methylene Chloride	5.0	U	50.0	46.4		ug/L		93	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	5.0	U	250	209		ug/L		84	67 - 130	3	20
Methyl tert-butyl ether	0.50	U	50.0	45.0		ug/L		90	71 - 124	1	20
m-Xylene & p-Xylene	1.0	U	50.0	51.2		ug/L		102	80 - 121	3	20
Naphthalene	5.0	U J	50.0	44.0	J	ug/L		88	61 - 128	22	20
n-Butylbenzene	1.0	U	50.0	49.8		ug/L		100	75 - 128	1	20
N-Propylbenzene	1.0	U	50.0	52.8		ug/L		106	76 - 126	5	20
o-Xylene	0.50	U	50.0	52.1		ug/L		104	78 - 122	4	20
sec-Butylbenzene	1.0	U	50.0	54.3		ug/L		109	77 - 126	6	20
Styrene	0.50	U	50.0	50.4		ug/L		101	78 - 123	4	20
tert-Butylbenzene	1.0	U	50.0	54.3		ug/L		109	78 - 124	6	20
1,1,1,2-Tetrachloroethane	1.0	U	50.0	55.1		ug/L		110	78 - 124	4	20
1,1,2,2-Tetrachloroethane	1.0	U	50.0	46.1		ug/L		92	71 - 121	1	20
Tetrachloroethene	1.0	U	50.0	47.9		ug/L		96	74 - 129	5	20
Toluene	3.2		50.0	48.8		ug/L		91	80 - 121	6	20
trans-1,2-Dichloroethene	1.0	U	50.0	50.8		ug/L		102	75 - 124	1	20
trans-1,3-Dichloropropene	1.0	U	50.0	39.4		ug/L		79	73 - 127	2	20
1,2,3-Trichlorobenzene	5.0	U	50.0	44.8		ug/L		90	69 - 129	15	20
1,2,4-Trichlorobenzene	5.0	U	50.0	45.0		ug/L		90	69 - 130	4	20
1,1,1-Trichloroethane	1.0	U	50.0	51.4		ug/L		103	74 - 131	2	20
1,1,2-Trichloroethane	0.50	U	50.0	44.1		ug/L		88	80 - 119	2	20
Trichloroethene	1.0	U	50.0	49.6		ug/L		99	79 - 123	3	20
Trichlorofluoromethane	1.0	U	50.0	53.8		ug/L		108	65 - 141	0	20
1,2,3-Trichloropropane	1.0	U	50.0	45.3		ug/L		91	73 - 122	1	20
1,2,4-Trimethylbenzene	0.48	J	50.0	53.7		ug/L		106	76 - 124	6	20

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

Lab Sample ID: 680-144039-1 MSD
Matrix: Water
Analysis Batch: 499084

Client Sample ID: G6M-13-06X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	0.50	U	50.0	53.4		ug/L		107	75 - 124	6	20
Vinyl acetate	2.0	U	100	76.9		ug/L		77	54 - 146	2	20
Vinyl chloride	0.95	J	50.0	44.9		ug/L		88	58 - 137	5	20
Xylenes, Total	0.50	U	100	103		ug/L		103	79 - 121	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*
Dibromofluoromethane (Surr)	*98*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*88*		*81 - 118*
Toluene-d8 (Surr)	*92*		*89 - 112*

Lab Sample ID: MB 680-499108/8
Matrix: Water
Analysis Batch: 499108

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/19/17 12:06	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:06	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:06	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:06	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/19/17 12:06	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/19/17 12:06	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:06	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/19/17 12:06	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:06	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/19/17 12:06	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:06	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 12:06	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 12:06	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/19/17 12:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/19/17 12:06	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/19/17 12:06	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:06	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:06	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/19/17 12:06	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/19/17 12:06	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 12:06	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/19/17 12:06	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 12:06	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:06	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/19/17 12:06	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/19/17 12:06	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/19/17 12:06	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 12:06	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:06	1

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

Lab Sample ID: MB 680-499108/8
Matrix: Water
Analysis Batch: 499108

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/19/17 12:06	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:06	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/19/17 12:06	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/19/17 12:06	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:06	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:06	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/19/17 12:06	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/19/17 12:06	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/19/17 12:06	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 12:06	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/19/17 12:06	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/19/17 12:06	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:06	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/19/17 12:06	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/19/17 12:06	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/19/17 12:06	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/19/17 12:06	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:06	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/19/17 12:06	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/19/17 12:06	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/19/17 12:06	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/19/17 12:06	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/19/17 12:06	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/19/17 12:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/19/17 12:06	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/19/17 12:06	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/19/17 12:06	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/19/17 12:06	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/19/17 12:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*10/19/17 12:06*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*10/19/17 12:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*		*10/19/17 12:06*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*10/19/17 12:06*	*1*

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

Lab Sample ID: LCS 680-499108/3
Matrix: Water
Analysis Batch: 499108

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	237		ug/L		95	39 - 160
Benzene	50.0	49.6		ug/L		99	79 - 120
Bromobenzene	50.0	52.0		ug/L		104	80 - 120
Bromoform	50.0	41.1		ug/L		82	66 - 130
Bromomethane	50.0	50.2		ug/L		100	53 - 141
2-Butanone (MEK)	250	225		ug/L		90	56 - 143
Carbon disulfide	50.0	54.0		ug/L		108	64 - 133
Carbon tetrachloride	50.0	52.2		ug/L		104	72 - 136
Chlorobenzene	50.0	51.0		ug/L		102	82 - 118
Chlorobromomethane	50.0	52.0		ug/L		104	78 - 123
Chlorodibromomethane	50.0	45.7		ug/L		91	74 - 126
Chloroethane	50.0	60.8		ug/L		122	60 - 138
Chloroform	50.0	51.2		ug/L		102	79 - 124
Chloromethane	50.0	62.3	M	ug/L		125	50 - 139
2-Chlorotoluene	50.0	49.7		ug/L		99	79 - 122
4-Chlorotoluene	50.0	50.1		ug/L		100	78 - 122
cis-1,2-Dichloroethene	50.0	53.5		ug/L		107	78 - 123
cis-1,3-Dichloropropene	50.0	48.2		ug/L		96	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	36.2		ug/L		72	62 - 128
Dibromomethane	50.0	51.6		ug/L		103	79 - 123
1,2-Dichlorobenzene	50.0	48.8		ug/L		98	80 - 119
1,3-Dichlorobenzene	50.0	49.8		ug/L		100	80 - 119
1,4-Dichlorobenzene	50.0	48.9		ug/L		98	79 - 118
Dichlorobromomethane	50.0	47.1		ug/L		94	79 - 125
Dichlorodifluoromethane	50.0	55.9		ug/L		112	32 - 152
1,1-Dichloroethane	50.0	52.4		ug/L		105	77 - 125
1,2-Dichloroethane	50.0	53.1		ug/L		106	73 - 128
1,1-Dichloroethene	50.0	55.1		ug/L		110	71 - 131
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121
1,2-Dichloropropane	50.0	49.7		ug/L		99	78 - 122
1,3-Dichloropropane	50.0	48.6		ug/L		97	80 - 119
2,2-Dichloropropane	50.0	55.2		ug/L		110	60 - 139
1,1-Dichloropropene	50.0	51.7		ug/L		103	79 - 125
Ethylbenzene	50.0	51.2		ug/L		102	79 - 121
Ethylene Dibromide	50.0	47.3		ug/L		95	75 - 127
Hexachlorobutadiene	50.0	56.0		ug/L		112	66 - 134
2-Hexanone	250	241		ug/L		96	57 - 139
Isopropylbenzene	50.0	51.3		ug/L		103	72 - 131
4-Isopropyltoluene	50.0	52.1		ug/L		104	77 - 127
Methylene Chloride	50.0	56.6		ug/L		113	74 - 124
4-Methyl-2-pentanone (MIBK)	250	243		ug/L		97	67 - 130
Methyl tert-butyl ether	50.0	47.5		ug/L		95	71 - 124
m-Xylene & p-Xylene	50.0	50.7		ug/L		101	80 - 121
Naphthalene	50.0	43.7		ug/L		87	61 - 128
n-Butylbenzene	50.0	52.6		ug/L		105	75 - 128
N-Propylbenzene	50.0	51.4		ug/L		103	76 - 126
o-Xylene	50.0	50.1		ug/L		100	78 - 122
sec-Butylbenzene	50.0	53.3		ug/L		107	77 - 126

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

Lab Sample ID: LCS 680-499108/3
Matrix: Water
Analysis Batch: 499108

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	51.2		ug/L		102	78 - 123
tert-Butylbenzene	50.0	52.3		ug/L		105	78 - 124
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	78 - 124
1,1,2,2-Tetrachloroethane	50.0	43.4		ug/L		87	71 - 121
Tetrachloroethene	50.0	53.8		ug/L		108	74 - 129
Toluene	50.0	49.9		ug/L		100	80 - 121
trans-1,2-Dichloroethene	50.0	50.9		ug/L		102	75 - 124
trans-1,3-Dichloropropene	50.0	48.1		ug/L		96	73 - 127
1,2,3-Trichlorobenzene	50.0	47.7		ug/L		95	69 - 129
1,2,4-Trichlorobenzene	50.0	50.8		ug/L		102	69 - 130
1,1,1-Trichloroethane	50.0	52.4		ug/L		105	74 - 131
1,1,2-Trichloroethane	50.0	47.2		ug/L		94	80 - 119
Trichloroethene	50.0	52.6		ug/L		105	79 - 123
Trichlorofluoromethane	50.0	58.3		ug/L		117	65 - 141
1,2,3-Trichloropropane	50.0	42.5		ug/L		85	73 - 122
1,2,4-Trimethylbenzene	50.0	51.8		ug/L		104	76 - 124
1,3,5-Trimethylbenzene	50.0	51.2		ug/L		102	75 - 124
Vinyl acetate	100	110		ug/L		110	54 - 146
Vinyl chloride	50.0	56.7		ug/L		113	58 - 137
Xylenes, Total	100	101		ug/L		101	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*
Dibromofluoromethane (Surr)	*102*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
Toluene-d8 (Surr)	*100*		*89 - 112*

Lab Sample ID: LCSD 680-499108/4
Matrix: Water
Analysis Batch: 499108

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	250	247		ug/L		99	39 - 160	4	20
Benzene	50.0	49.2		ug/L		98	79 - 120	1	20
Bromobenzene	50.0	52.1		ug/L		104	80 - 120	0	20
Bromoform	50.0	42.6		ug/L		85	66 - 130	4	20
Bromomethane	50.0	51.6		ug/L		103	53 - 141	3	20
2-Butanone (MEK)	250	239		ug/L		95	56 - 143	6	20
Carbon disulfide	50.0	54.5		ug/L		109	64 - 133	1	20
Carbon tetrachloride	50.0	51.7		ug/L		103	72 - 136	1	20
Chlorobenzene	50.0	50.6		ug/L		101	82 - 118	1	20
Chlorobromomethane	50.0	52.4		ug/L		105	78 - 123	1	20
Chlorodibromomethane	50.0	46.7		ug/L		93	74 - 126	2	20
Chloroethane	50.0	61.6		ug/L		123	60 - 138	1	20
Chloroform	50.0	51.5		ug/L		103	79 - 124	1	20
Chloromethane	50.0	62.0	M	ug/L		124	50 - 139	0	20
2-Chlorotoluene	50.0	48.8		ug/L		98	79 - 122	2	20
4-Chlorotoluene	50.0	49.2		ug/L		98	78 - 122	2	20

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

Lab Sample ID: LCSD 680-499108/4
Matrix: Water
Analysis Batch: 499108

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	50.0	53.2		ug/L		106	78 - 123	0	20
cis-1,3-Dichloropropene	50.0	48.4		ug/L		97	75 - 124	0	20
1,2-Dibromo-3-Chloropropane	50.0	38.0		ug/L		76	62 - 128	5	20
Dibromomethane	50.0	52.7		ug/L		105	79 - 123	2	20
1,2-Dichlorobenzene	50.0	48.7		ug/L		97	80 - 119	0	20
1,3-Dichlorobenzene	50.0	49.6		ug/L		99	80 - 119	0	20
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	79 - 118	1	20
Dichlorobromomethane	50.0	47.0		ug/L		94	79 - 125	0	20
Dichlorodifluoromethane	50.0	55.8		ug/L		112	32 - 152	0	20
1,1-Dichloroethane	50.0	52.2		ug/L		104	77 - 125	0	20
1,2-Dichloroethane	50.0	54.0		ug/L		108	73 - 128	2	20
1,1-Dichloroethene	50.0	55.1		ug/L		110	71 - 131	0	20
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121	0	20
1,2-Dichloropropane	50.0	50.5		ug/L		101	78 - 122	2	20
1,3-Dichloropropane	50.0	49.4		ug/L		99	80 - 119	2	20
2,2-Dichloropropane	50.0	54.2		ug/L		108	60 - 139	2	20
1,1-Dichloropropene	50.0	51.5		ug/L		103	79 - 125	0	20
Ethylbenzene	50.0	50.2		ug/L		100	79 - 121	2	20
Ethylene Dibromide	50.0	49.2		ug/L		98	75 - 127	4	20
Hexachlorobutadiene	50.0	55.8		ug/L		112	66 - 134	0	20
2-Hexanone	250	246		ug/L		99	57 - 139	2	20
Isopropylbenzene	50.0	50.7		ug/L		101	72 - 131	1	20
4-Isopropyltoluene	50.0	51.3		ug/L		103	77 - 127	2	20
Methylene Chloride	50.0	56.9		ug/L		114	74 - 124	0	20
4-Methyl-2-pentanone (MIBK)	250	250		ug/L		100	67 - 130	3	20
Methyl tert-butyl ether	50.0	49.1		ug/L		98	71 - 124	3	20
m-Xylene & p-Xylene	50.0	50.5		ug/L		101	80 - 121	0	20
Naphthalene	50.0	44.8		ug/L		90	61 - 128	2	20
n-Butylbenzene	50.0	51.7		ug/L		103	75 - 128	2	20
N-Propylbenzene	50.0	50.4		ug/L		101	76 - 126	2	20
o-Xylene	50.0	49.3		ug/L		99	78 - 122	2	20
sec-Butylbenzene	50.0	51.9		ug/L		104	77 - 126	2	20
Styrene	50.0	51.0		ug/L		102	78 - 123	0	20
tert-Butylbenzene	50.0	51.4		ug/L		103	78 - 124	2	20
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	78 - 124	0	20
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/L		89	71 - 121	3	20
Tetrachloroethene	50.0	53.6		ug/L		107	74 - 129	0	20
Toluene	50.0	50.0		ug/L		100	80 - 121	0	20
trans-1,2-Dichloroethene	50.0	51.6		ug/L		103	75 - 124	1	20
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	73 - 127	3	20
1,2,3-Trichlorobenzene	50.0	47.7		ug/L		95	69 - 129	0	20
1,2,4-Trichlorobenzene	50.0	50.9		ug/L		102	69 - 130	0	20
1,1,1-Trichloroethane	50.0	52.4		ug/L		105	74 - 131	0	20
1,1,2-Trichloroethane	50.0	47.7		ug/L		95	80 - 119	1	20
Trichloroethene	50.0	52.8		ug/L		106	79 - 123	0	20
Trichlorofluoromethane	50.0	58.3		ug/L		117	65 - 141	0	20
1,2,3-Trichloropropane	50.0	43.6		ug/L		87	73 - 122	2	20
1,2,4-Trimethylbenzene	50.0	50.8		ug/L		102	76 - 124	2	20

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

Lab Sample ID: LCSD 680-499108/4
Matrix: Water
Analysis Batch: 499108

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
1,3,5-Trimethylbenzene			50.0	50.2		ug/L		100	75 - 124	2	20
Vinyl acetate			100	112		ug/L		112	54 - 146	2	20
Vinyl chloride			50.0	56.2		ug/L		112	58 - 137	1	20
Xylenes, Total			100	99.8		ug/L		100	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*
Dibromofluoromethane (Surr)	*104*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*103*		*81 - 118*
Toluene-d8 (Surr)	*100*		*89 - 112*

Lab Sample ID: MB 680-499333/8
Matrix: Water
Analysis Batch: 499333

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/20/17 19:15	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 19:15	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:15	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 19:15	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/20/17 19:15	1
Carbon disulfide	1.13	J	2.0	2.0	0.43	ug/L		10/20/17 19:15	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 19:15	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/20/17 19:15	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 19:15	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/20/17 19:15	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:15	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/20/17 19:15	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/20/17 19:15	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 19:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/20/17 19:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/20/17 19:15	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/20/17 19:15	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 19:15	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:15	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 19:15	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/20/17 19:15	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/20/17 19:15	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/20/17 19:15	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/20/17 19:15	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:15	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/20/17 19:15	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/20/17 19:15	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/20/17 19:15	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/20/17 19:15	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:15	1

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

Lab Sample ID: MB 680-499333/8
Matrix: Water
Analysis Batch: 499333

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/20/17 19:15	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 19:15	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/20/17 19:15	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/20/17 19:15	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 19:15	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 19:15	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/20/17 19:15	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/20/17 19:15	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 19:15	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/20/17 19:15	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/20/17 19:15	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/20/17 19:15	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 19:15	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/20/17 19:15	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 19:15	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/20/17 19:15	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/20/17 19:15	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 19:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 19:15	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:15	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:15	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 19:15	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 19:15	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 19:15	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/20/17 19:15	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/20/17 19:15	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/20/17 19:15	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/20/17 19:15	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:15	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/20/17 19:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*10/20/17 19:15*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 119*		*10/20/17 19:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/20/17 19:15*	*1*
Toluene-d8 (Surr)	*98*		*89 - 112*		*10/20/17 19:15*	*1*

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

Lab Sample ID: LCS 680-499333/3
Matrix: Water
Analysis Batch: 499333

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	243		ug/L		97	39 - 160
Benzene	50.0	50.3		ug/L		101	79 - 120
Bromobenzene	50.0	50.0		ug/L		100	80 - 120
Bromoform	50.0	55.0		ug/L		110	66 - 130
Bromomethane	50.0	73.0	Q	ug/L		146	53 - 141
2-Butanone (MEK)	250	250		ug/L		100	56 - 143
Carbon disulfide	50.0	55.3		ug/L		111	64 - 133
Carbon tetrachloride	50.0	55.6		ug/L		111	72 - 136
Chlorobenzene	50.0	49.8		ug/L		100	82 - 118
Chlorobromomethane	50.0	52.6		ug/L		105	78 - 123
Chlorodibromomethane	50.0	51.9		ug/L		104	74 - 126
Chloroethane	50.0	55.7		ug/L		111	60 - 138
Chloroform	50.0	50.9		ug/L		102	79 - 124
Chloromethane	50.0	58.1		ug/L		116	50 - 139
2-Chlorotoluene	50.0	49.7		ug/L		99	79 - 122
4-Chlorotoluene	50.0	49.7		ug/L		99	78 - 122
cis-1,2-Dichloroethene	50.0	51.6		ug/L		103	78 - 123
cis-1,3-Dichloropropene	50.0	54.7		ug/L		109	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	51.3		ug/L		103	62 - 128
Dibromomethane	50.0	51.7		ug/L		103	79 - 123
1,2-Dichlorobenzene	50.0	48.0		ug/L		96	80 - 119
1,3-Dichlorobenzene	50.0	48.7		ug/L		97	80 - 119
1,4-Dichlorobenzene	50.0	48.2		ug/L		96	79 - 118
Dichlorobromomethane	50.0	54.4		ug/L		109	79 - 125
Dichlorodifluoromethane	50.0	64.2		ug/L		128	32 - 152
1,1-Dichloroethane	50.0	52.0		ug/L		104	77 - 125
1,2-Dichloroethane	50.0	51.1		ug/L		102	73 - 128
1,1-Dichloroethene	50.0	53.5		ug/L		107	71 - 131
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121
1,2-Dichloropropane	50.0	50.7		ug/L		101	78 - 122
1,3-Dichloropropane	50.0	50.8		ug/L		102	80 - 119
2,2-Dichloropropane	50.0	53.2		ug/L		106	60 - 139
1,1-Dichloropropene	50.0	53.0		ug/L		106	79 - 125
Ethylbenzene	50.0	49.7		ug/L		99	79 - 121
Ethylene Dibromide	50.0	52.3		ug/L		105	75 - 127
Hexachlorobutadiene	50.0	45.8		ug/L		92	66 - 134
2-Hexanone	250	252		ug/L		101	57 - 139
Isopropylbenzene	50.0	49.6		ug/L		99	72 - 131
4-Isopropyltoluene	50.0	47.6		ug/L		95	77 - 127
Methylene Chloride	50.0	53.6		ug/L		107	74 - 124
4-Methyl-2-pentanone (MIBK)	250	252		ug/L		101	67 - 130
Methyl tert-butyl ether	50.0	50.7		ug/L		101	71 - 124
m-Xylene & p-Xylene	50.0	49.9		ug/L		100	80 - 121
Naphthalene	50.0	45.3		ug/L		91	61 - 128
n-Butylbenzene	50.0	47.2		ug/L		94	75 - 128
N-Propylbenzene	50.0	50.3		ug/L		101	76 - 126
o-Xylene	50.0	49.9		ug/L		100	78 - 122
sec-Butylbenzene	50.0	48.0		ug/L		96	77 - 126

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

Lab Sample ID: LCS 680-499333/3
Matrix: Water
Analysis Batch: 499333

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	51.0		ug/L		102	78 - 123
tert-Butylbenzene	50.0	47.8		ug/L		96	78 - 124
1,1,1,2-Tetrachloroethane	50.0	58.1		ug/L		116	78 - 124
1,1,2,2-Tetrachloroethane	50.0	50.3		ug/L		101	71 - 121
Tetrachloroethene	50.0	51.2		ug/L		102	74 - 129
Toluene	50.0	50.3		ug/L		101	80 - 121
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	75 - 124
trans-1,3-Dichloropropene	50.0	55.5		ug/L		111	73 - 127
1,2,3-Trichlorobenzene	50.0	41.7		ug/L		83	69 - 129
1,2,4-Trichlorobenzene	50.0	44.4		ug/L		89	69 - 130
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	51.2		ug/L		102	80 - 119
Trichloroethene	50.0	52.2		ug/L		104	79 - 123
Trichlorofluoromethane	50.0	56.0		ug/L		112	65 - 141
1,2,3-Trichloropropane	50.0	53.6		ug/L		107	73 - 122
1,2,4-Trimethylbenzene	50.0	49.3		ug/L		99	76 - 124
1,3,5-Trimethylbenzene	50.0	49.4		ug/L		99	75 - 124
Vinyl acetate	100	109		ug/L		109	54 - 146
Vinyl chloride	50.0	57.8		ug/L		116	58 - 137
Xylenes, Total	100	99.8		ug/L		100	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*103*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
Toluene-d8 (Surr)	*96*		*89 - 112*

Lab Sample ID: LCSD 680-499333/4
Matrix: Water
Analysis Batch: 499333

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	250	229		ug/L		92	39 - 160	6	20
Benzene	50.0	49.9		ug/L		100	79 - 120	1	20
Bromobenzene	50.0	50.5		ug/L		101	80 - 120	1	20
Bromoform	50.0	53.8		ug/L		108	66 - 130	2	20
Bromomethane	50.0	73.1	Q	ug/L		146	53 - 141	0	20
2-Butanone (MEK)	250	241		ug/L		96	56 - 143	4	20
Carbon disulfide	50.0	53.0		ug/L		106	64 - 133	4	20
Carbon tetrachloride	50.0	54.5		ug/L		109	72 - 136	2	20
Chlorobenzene	50.0	49.8		ug/L		100	82 - 118	0	20
Chlorobromomethane	50.0	50.7		ug/L		101	78 - 123	4	20
Chlorodibromomethane	50.0	48.8		ug/L		98	74 - 126	6	20
Chloroethane	50.0	55.2		ug/L		110	60 - 138	1	20
Chloroform	50.0	50.7		ug/L		101	79 - 124	0	20
Chloromethane	50.0	55.4		ug/L		111	50 - 139	5	20
2-Chlorotoluene	50.0	50.7		ug/L		101	79 - 122	2	20
4-Chlorotoluene	50.0	50.4		ug/L		101	78 - 122	1	20

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

Lab Sample ID: LCSD 680-499333/4
Matrix: Water
Analysis Batch: 499333

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	50.0	50.2		ug/L		100	78 - 123	3	20
cis-1,3-Dichloropropene	50.0	53.2		ug/L		106	75 - 124	3	20
1,2-Dibromo-3-Chloropropane	50.0	51.2		ug/L		102	62 - 128	0	20
Dibromomethane	50.0	50.6		ug/L		101	79 - 123	2	20
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	80 - 119	1	20
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	80 - 119	1	20
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	79 - 118	1	20
Dichlorobromomethane	50.0	53.6		ug/L		107	79 - 125	1	20
Dichlorodifluoromethane	50.0	63.2		ug/L		126	32 - 152	2	20
1,1-Dichloroethane	50.0	51.2		ug/L		102	77 - 125	1	20
1,2-Dichloroethane	50.0	50.0		ug/L		100	73 - 128	2	20
1,1-Dichloroethene	50.0	52.2		ug/L		104	71 - 131	3	20
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121	3	20
1,2-Dichloropropane	50.0	51.0		ug/L		102	78 - 122	0	20
1,3-Dichloropropane	50.0	48.9		ug/L		98	80 - 119	4	20
2,2-Dichloropropane	50.0	52.4		ug/L		105	60 - 139	1	20
1,1-Dichloropropene	50.0	50.9		ug/L		102	79 - 125	4	20
Ethylbenzene	50.0	50.1		ug/L		100	79 - 121	1	20
Ethylene Dibromide	50.0	48.6		ug/L		97	75 - 127	7	20
Hexachlorobutadiene	50.0	55.6		ug/L		111	66 - 134	19	20
2-Hexanone	250	238		ug/L		95	57 - 139	6	20
Isopropylbenzene	50.0	51.0		ug/L		102	72 - 131	3	20
4-Isopropyltoluene	50.0	52.1		ug/L		104	77 - 127	9	20
Methylene Chloride	50.0	51.7		ug/L		103	74 - 124	4	20
4-Methyl-2-pentanone (MIBK)	250	244		ug/L		98	67 - 130	3	20
Methyl tert-butyl ether	50.0	49.5		ug/L		99	71 - 124	3	20
m-Xylene & p-Xylene	50.0	50.7		ug/L		101	80 - 121	1	20
Naphthalene	50.0	47.2		ug/L		94	61 - 128	4	20
n-Butylbenzene	50.0	53.1		ug/L		106	75 - 128	12	20
N-Propylbenzene	50.0	51.9		ug/L		104	76 - 126	3	20
o-Xylene	50.0	50.2		ug/L		100	78 - 122	1	20
sec-Butylbenzene	50.0	52.0		ug/L		104	77 - 126	8	20
Styrene	50.0	50.7		ug/L		101	78 - 123	1	20
tert-Butylbenzene	50.0	51.4		ug/L		103	78 - 124	7	20
1,1,1,2-Tetrachloroethane	50.0	57.2		ug/L		114	78 - 124	2	20
1,1,2,2-Tetrachloroethane	50.0	50.8		ug/L		102	71 - 121	1	20
Tetrachloroethene	50.0	50.0		ug/L		100	74 - 129	2	20
Toluene	50.0	49.2		ug/L		98	80 - 121	2	20
trans-1,2-Dichloroethene	50.0	50.5		ug/L		101	75 - 124	4	20
trans-1,3-Dichloropropene	50.0	52.2		ug/L		104	73 - 127	6	20
1,2,3-Trichlorobenzene	50.0	45.7		ug/L		91	69 - 129	9	20
1,2,4-Trichlorobenzene	50.0	48.7		ug/L		97	69 - 130	9	20
1,1,1-Trichloroethane	50.0	52.7		ug/L		105	74 - 131	2	20
1,1,2-Trichloroethane	50.0	48.8		ug/L		98	80 - 119	5	20
Trichloroethene	50.0	50.8		ug/L		102	79 - 123	3	20
Trichlorofluoromethane	50.0	56.4		ug/L		113	65 - 141	1	20
1,2,3-Trichloropropane	50.0	53.8		ug/L		108	73 - 122	0	20
1,2,4-Trimethylbenzene	50.0	51.3		ug/L		103	76 - 124	4	20

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

Lab Sample ID: LCSD 680-499333/4
Matrix: Water
Analysis Batch: 499333

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
1,3,5-Trimethylbenzene			50.0	51.3		ug/L		103	75 - 124	4	20
Vinyl acetate			100	106		ug/L		106	54 - 146	2	20
Vinyl chloride			50.0	55.2		ug/L		110	58 - 137	5	20
Xylenes, Total			100	101		ug/L		101	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*
Toluene-d8 (Surr)	*98*		*89 - 112*

Lab Sample ID: MB 680-499430/9
Matrix: Water
Analysis Batch: 499430

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/23/17 10:49	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/23/17 10:49	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/23/17 10:49	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/23/17 10:49	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/23/17 10:49	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/23/17 10:49	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/23/17 10:49	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/23/17 10:49	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/23/17 10:49	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/23/17 10:49	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/23/17 10:49	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/23/17 10:49	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/23/17 10:49	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/23/17 10:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/23/17 10:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/23/17 10:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/23/17 10:49	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/23/17 10:49	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/23/17 10:49	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/23/17 10:49	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/23/17 10:49	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/23/17 10:49	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/23/17 10:49	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/23/17 10:49	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/23/17 10:49	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/23/17 10:49	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/23/17 10:49	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/23/17 10:49	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/23/17 10:49	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/23/17 10:49	1

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

Lab Sample ID: MB 680-499430/9
Matrix: Water
Analysis Batch: 499430

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/23/17 10:49	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/23/17 10:49	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/23/17 10:49	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/23/17 10:49	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/23/17 10:49	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/23/17 10:49	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/23/17 10:49	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/23/17 10:49	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/23/17 10:49	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/23/17 10:49	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/23/17 10:49	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/23/17 10:49	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/23/17 10:49	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/23/17 10:49	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/23/17 10:49	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/23/17 10:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/23/17 10:49	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/23/17 10:49	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/23/17 10:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/23/17 10:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/23/17 10:49	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/23/17 10:49	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/23/17 10:49	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/23/17 10:49	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/23/17 10:49	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/23/17 10:49	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/23/17 10:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/23/17 10:49	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/23/17 10:49	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/23/17 10:49	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/23/17 10:49	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/23/17 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/23/17 10:49*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 119*		*10/23/17 10:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*81 - 118*		*10/23/17 10:49*	*1*
Toluene-d8 (Surr)	*108*		*89 - 112*		*10/23/17 10:49*	*1*

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

Lab Sample ID: LCS 680-499430/3
Matrix: Water
Analysis Batch: 499430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	232		ug/L		93	39 - 160
Benzene	50.0	48.2		ug/L		96	79 - 120
Bromobenzene	50.0	47.7		ug/L		95	80 - 120
Bromoform	50.0	46.7		ug/L		93	66 - 130
Bromomethane	50.0	52.4		ug/L		105	53 - 141
2-Butanone (MEK)	250	232		ug/L		93	56 - 143
Carbon disulfide	50.0	46.7		ug/L		93	64 - 133
Carbon tetrachloride	50.0	47.9		ug/L		96	72 - 136
Chlorobenzene	50.0	47.4		ug/L		95	82 - 118
Chlorobromomethane	50.0	46.3		ug/L		93	78 - 123
Chlorodibromomethane	50.0	45.4		ug/L		91	74 - 126
Chloroethane	50.0	47.7		ug/L		95	60 - 138
Chloroform	50.0	46.6		ug/L		93	79 - 124
Chloromethane	50.0	44.5		ug/L		89	50 - 139
2-Chlorotoluene	50.0	48.3		ug/L		97	79 - 122
4-Chlorotoluene	50.0	46.5		ug/L		93	78 - 122
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	78 - 123
cis-1,3-Dichloropropene	50.0	47.2		ug/L		94	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	47.0		ug/L		94	62 - 128
Dibromomethane	50.0	45.8		ug/L		92	79 - 123
1,2-Dichlorobenzene	50.0	46.8		ug/L		94	80 - 119
1,3-Dichlorobenzene	50.0	45.7		ug/L		91	80 - 119
1,4-Dichlorobenzene	50.0	46.0		ug/L		92	79 - 118
Dichlorobromomethane	50.0	45.8		ug/L		92	79 - 125
Dichlorodifluoromethane	50.0	57.5		ug/L		115	32 - 152
1,1-Dichloroethane	50.0	47.5		ug/L		95	77 - 125
1,2-Dichloroethane	50.0	43.7		ug/L		87	73 - 128
1,1-Dichloroethene	50.0	51.6		ug/L		103	71 - 131
1,2-Dichloroethene, Total	100	96.8		ug/L		97	79 - 121
1,2-Dichloropropane	50.0	47.5		ug/L		95	78 - 122
1,3-Dichloropropane	50.0	46.4		ug/L		93	80 - 119
2,2-Dichloropropane	50.0	50.6		ug/L		101	60 - 139
1,1-Dichloropropene	50.0	49.3		ug/L		99	79 - 125
Ethylbenzene	50.0	48.1		ug/L		96	79 - 121
Ethylene Dibromide	50.0	45.1		ug/L		90	75 - 127
Hexachlorobutadiene	50.0	59.8		ug/L		120	66 - 134
2-Hexanone	250	211		ug/L		84	57 - 139
Isopropylbenzene	50.0	49.1		ug/L		98	72 - 131
4-Isopropyltoluene	50.0	51.0		ug/L		102	77 - 127
Methylene Chloride	50.0	48.6		ug/L		97	74 - 124
4-Methyl-2-pentanone (MIBK)	250	210		ug/L		84	67 - 130
Methyl tert-butyl ether	50.0	46.2		ug/L		92	71 - 124
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	80 - 121
Naphthalene	50.0	43.7		ug/L		87	61 - 128
n-Butylbenzene	50.0	52.3		ug/L		105	75 - 128
N-Propylbenzene	50.0	48.1		ug/L		96	76 - 126
o-Xylene	50.0	48.2		ug/L		96	78 - 122
sec-Butylbenzene	50.0	52.1		ug/L		104	77 - 126

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

Lab Sample ID: LCS 680-499430/3
Matrix: Water
Analysis Batch: 499430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	48.6		ug/L		97	78 - 123
tert-Butylbenzene	50.0	50.4		ug/L		101	78 - 124
1,1,1,2-Tetrachloroethane	50.0	48.5		ug/L		97	78 - 124
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/L		95	71 - 121
Tetrachloroethene	50.0	50.3		ug/L		101	74 - 129
Toluene	50.0	47.2		ug/L		94	80 - 121
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	75 - 124
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	73 - 127
1,2,3-Trichlorobenzene	50.0	47.2		ug/L		94	69 - 129
1,2,4-Trichlorobenzene	50.0	47.5		ug/L		95	69 - 130
1,1,1-Trichloroethane	50.0	47.2		ug/L		94	74 - 131
1,1,2-Trichloroethane	50.0	47.0		ug/L		94	80 - 119
Trichloroethene	50.0	47.4		ug/L		95	79 - 123
Trichlorofluoromethane	50.0	51.4		ug/L		103	65 - 141
1,2,3-Trichloropropane	50.0	47.6		ug/L		95	73 - 122
1,2,4-Trimethylbenzene	50.0	48.0		ug/L		96	76 - 124
1,3,5-Trimethylbenzene	50.0	47.8		ug/L		96	75 - 124
Vinyl acetate	100	86.6		ug/L		87	54 - 146
Vinyl chloride	50.0	49.9		ug/L		100	58 - 137
Xylenes, Total	100	96.4		ug/L		96	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*85 - 114*
Dibromofluoromethane (Surr)	*92*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*
Toluene-d8 (Surr)	*98*		*89 - 112*

Lab Sample ID: LCSD 680-499430/4
Matrix: Water
Analysis Batch: 499430

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	250	243		ug/L		97	39 - 160	5	20
Benzene	50.0	48.5		ug/L		97	79 - 120	1	20
Bromobenzene	50.0	49.8		ug/L		100	80 - 120	4	20
Bromoform	50.0	48.9		ug/L		98	66 - 130	5	20
Bromomethane	50.0	53.0		ug/L		106	53 - 141	1	20
2-Butanone (MEK)	250	248		ug/L		99	56 - 143	7	20
Carbon disulfide	50.0	46.8		ug/L		94	64 - 133	0	20
Carbon tetrachloride	50.0	47.8		ug/L		96	72 - 136	0	20
Chlorobenzene	50.0	48.6		ug/L		97	82 - 118	2	20
Chlorobromomethane	50.0	46.5		ug/L		93	78 - 123	1	20
Chlorodibromomethane	50.0	46.8		ug/L		94	74 - 126	3	20
Chloroethane	50.0	49.2		ug/L		98	60 - 138	3	20
Chloroform	50.0	47.1		ug/L		94	79 - 124	1	20
Chloromethane	50.0	45.0		ug/L		90	50 - 139	1	20
2-Chlorotoluene	50.0	48.2		ug/L		96	79 - 122	0	20
4-Chlorotoluene	50.0	47.9		ug/L		96	78 - 122	3	20

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

Lab Sample ID: LCSD 680-499430/4
Matrix: Water
Analysis Batch: 499430

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	50.0	47.1		ug/L		94	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	48.5		ug/L		97	75 - 124	3	20
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	62 - 128	6	20
Dibromomethane	50.0	46.7		ug/L		93	79 - 123	2	20
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	80 - 119	3	20
1,3-Dichlorobenzene	50.0	48.0		ug/L		96	80 - 119	5	20
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	79 - 118	3	20
Dichlorobromomethane	50.0	47.7		ug/L		95	79 - 125	4	20
Dichlorodifluoromethane	50.0	56.9		ug/L		114	32 - 152	1	20
1,1-Dichloroethane	50.0	46.9		ug/L		94	77 - 125	1	20
1,2-Dichloroethane	50.0	45.4		ug/L		91	73 - 128	4	20
1,1-Dichloroethene	50.0	50.6		ug/L		101	71 - 131	2	20
1,2-Dichloroethene, Total	100	96.2		ug/L		96	79 - 121	1	20
1,2-Dichloropropane	50.0	49.0		ug/L		98	78 - 122	3	20
1,3-Dichloropropane	50.0	48.6		ug/L		97	80 - 119	5	20
2,2-Dichloropropane	50.0	50.0		ug/L		100	60 - 139	1	20
1,1-Dichloropropene	50.0	48.7		ug/L		97	79 - 125	1	20
Ethylbenzene	50.0	48.7		ug/L		97	79 - 121	1	20
Ethylene Dibromide	50.0	46.8		ug/L		94	75 - 127	4	20
Hexachlorobutadiene	50.0	60.8		ug/L		122	66 - 134	2	20
2-Hexanone	250	218		ug/L		87	57 - 139	3	20
Isopropylbenzene	50.0	49.4		ug/L		99	72 - 131	1	20
4-Isopropyltoluene	50.0	51.3		ug/L		103	77 - 127	1	20
Methylene Chloride	50.0	50.2		ug/L		100	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	250	219		ug/L		88	67 - 130	4	20
Methyl tert-butyl ether	50.0	48.0		ug/L		96	71 - 124	4	20
m-Xylene & p-Xylene	50.0	48.9		ug/L		98	80 - 121	1	20
Naphthalene	50.0	46.1		ug/L		92	61 - 128	5	20
n-Butylbenzene	50.0	53.6		ug/L		107	75 - 128	3	20
N-Propylbenzene	50.0	48.2		ug/L		96	76 - 126	0	20
o-Xylene	50.0	48.9		ug/L		98	78 - 122	2	20
sec-Butylbenzene	50.0	52.3		ug/L		105	77 - 126	0	20
Styrene	50.0	49.6		ug/L		99	78 - 123	2	20
tert-Butylbenzene	50.0	49.5		ug/L		99	78 - 124	2	20
1,1,1,2-Tetrachloroethane	50.0	49.5		ug/L		99	78 - 124	2	20
1,1,2,2-Tetrachloroethane	50.0	49.1		ug/L		98	71 - 121	4	20
Tetrachloroethene	50.0	48.6		ug/L		97	74 - 129	3	20
Toluene	50.0	47.9		ug/L		96	80 - 121	1	20
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	47.5		ug/L		95	73 - 127	4	20
1,2,3-Trichlorobenzene	50.0	49.8		ug/L		100	69 - 129	5	20
1,2,4-Trichlorobenzene	50.0	50.8		ug/L		102	69 - 130	7	20
1,1,1-Trichloroethane	50.0	46.5		ug/L		93	74 - 131	2	20
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	80 - 119	3	20
Trichloroethene	50.0	48.0		ug/L		96	79 - 123	1	20
Trichlorofluoromethane	50.0	49.4		ug/L		99	65 - 141	4	20
1,2,3-Trichloropropane	50.0	49.7		ug/L		99	73 - 122	4	20
1,2,4-Trimethylbenzene	50.0	49.4		ug/L		99	76 - 124	3	20

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

Lab Sample ID: LCSD 680-499430/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499430

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	50.0	48.6		ug/L		97	75 - 124	2	20
Vinyl acetate	100	87.7		ug/L		88	54 - 146	1	20
Vinyl chloride	50.0	49.6		ug/L		99	58 - 137	1	20
Xylenes, Total	100	97.8		ug/L		98	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*
Dibromofluoromethane (Surr)	*93*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*87*		*81 - 118*
Toluene-d8 (Surr)	*99*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-497904/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497904

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/10/17 11:59	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/10/17 11:59	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/10/17 11:59	1

Lab Sample ID: LCS 680-497904/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497904

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	314		ug/L		109	75 - 125
Ethylene	269	285		ug/L		106	75 - 125
Methane	154	160		ug/L		104	75 - 125

Lab Sample ID: LCSD 680-497904/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497904

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	319		ug/L		111	75 - 125	2	30
Ethylene	269	288		ug/L		107	75 - 125	1	30
Methane	154	163		ug/L		106	75 - 125	2	30

Lab Sample ID: MB 680-498054/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/11/17 12:32	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/11/17 12:32	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/11/17 12:32	1

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

Lab Sample ID: MB 680-498054/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane (TCD)	77	U	390	77	39	ug/L		10/11/17 12:32	1

Lab Sample ID: LCS 680-498054/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1800		ug/L		94	75 - 125

Lab Sample ID: LCS 680-498054/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	307		ug/L		107	75 - 125
Ethylene	269	279		ug/L		103	75 - 125
Methane	154	155		ug/L		101	75 - 125

Lab Sample ID: LCSD 680-498054/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1790		ug/L		93	75 - 125	1	30

Lab Sample ID: LCSD 680-498054/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	297		ug/L		103	75 - 125	3	30
Ethylene	269	270		ug/L		100	75 - 125	3	30
Methane	154	152		ug/L		99	75 - 125	2	30

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	6.0		288	244		ug/L		83	75 - 125
Ethylene	6.3		269	217		ug/L		78	75 - 125

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498054

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	6.0		288	240		ug/L		81	75 - 125	2	30
Ethylene	6.3		269	213		ug/L		77	75 - 125	2	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-497761/37 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497761

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/09/17 20:49	1

Lab Sample ID: LCS 680-497761/38 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.82		mg/L		98	87 - 112

Lab Sample ID: LCSD 680-497761/39 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	9.90		mg/L		99	87 - 112	1	15

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.0	U J	10.0	8.50	M J	mg/L		85	87 - 112

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497761

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.0	U J	10.0	8.56	M J	mg/L		86	87 - 112	1	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-497778/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 498134 — **Prep Batch: 497778**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	50	U	50	50	17	ug/L		10/11/17 09:24	1
Manganese	3.0	U	10	3.0	1.0	ug/L		10/11/17 09:24	1

Lab Sample ID: LCS 680-497778/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 498134 — **Prep Batch: 497778**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	4800		ug/L		96	87 - 115
Manganese	500	500		ug/L		100	90 - 114

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

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498134 — **Prep Batch: 497778**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	220000	J	5000	224000	4	ug/L		25	87 - 115
Manganese	7500	J	500	7840	4	ug/L		70	90 - 114

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498134 — **Prep Batch: 497778**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	220000	J	5000	226000	4	ug/L		60	87 - 115	1	20
Manganese	7500	J	500	7940	4	ug/L		89	90 - 114	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-497777/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 498265 — **Prep Batch: 497777**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/11/17 17:54	1

Lab Sample ID: LCS 680-497777/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 498265 — **Prep Batch: 497777**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	99.7		ug/L		100	84 - 116

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498265 — **Prep Batch: 497777**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	490		100	588	4	ug/L		102	84 - 116

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498265 — **Prep Batch: 497777**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	490		100	572	4	ug/L		86	84 - 116	3	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-390642/110 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390642

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/09/17 21:12	1

Lab Sample ID: MB 280-390642/66 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390642

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/09/17 19:44	1

Lab Sample ID: LCS 280-390642/109 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	5.02		mg/L		100	90 - 110

Lab Sample ID: LCS 280-390642/65 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	5.01		mg/L		100	90 - 110

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	0.17	J	4.00	1.99	J	mg/L		45	90 - 110

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390642

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite-N	0.17	J	4.00	2.13	J	mg/L		49	90 - 110	7	10

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-497666/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497666

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/09/17 06:30	1

Lab Sample ID: LCS 680-497666/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	8.72		mg/L		87	75 - 125

Lab Sample ID: LCSD 680-497666/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	7.90		mg/L		79	75 - 125	10	30

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497666

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.0	U	10.0	9.09		mg/L		91	75 - 125		

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497666

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.0	U	10.0	8.72		mg/L		87	75 - 125	4	30

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

Lab Sample ID: MB 280-390842/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390842

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.50	U	1.0	0.50	0.16	mg/L		10/10/17 15:01	1

Lab Sample ID: LCS 280-390842/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390842

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates			25.0	24.2		mg/L		97	88 - 112		

Lab Sample ID: LCSD 280-390842/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390842

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates			25.0	24.2		mg/L		97	88 - 112	0	15

Lab Sample ID: 680-144039-1 MS — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates	72		50.0	121		mg/L		97	88 - 112		

Lab Sample ID: 680-144039-1 MSD — **Client Sample ID: G6M-13-06X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 390842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	72		50.0	120		mg/L		96	88 - 112	0	15

QC Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-391354/6
Matrix: Water
Analysis Batch: 391354

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.22	J	5.0	3.2	1.1	mg/L		10/15/17 12:46	1

Lab Sample ID: LCS 280-391354/4
Matrix: Water
Analysis Batch: 391354

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			200	191		mg/L		95	90 - 110		

Lab Sample ID: LCSD 280-391354/5
Matrix: Water
Analysis Batch: 391354

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
Alkalinity			200	195		mg/L		97	90 - 110	2	10

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

GC/MS VOA

Analysis Batch: 498907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	8260B	
MB 680-498907/8	Method Blank	Total/NA	Water	8260B	
LCS 680-498907/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-498907/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 499084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-2	Dup-1--Fall17	Total/NA	Water	8260B	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	8260B	
680-144039-4	G6M-95-19X-Fall17	Total/NA	Water	8260B	
680-144039-5	G6M-95-20X-Fall17	Total/NA	Water	8260B	
MB 680-499084/10	Method Blank	Total/NA	Water	8260B	
LCS 680-499084/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-499084/5	Lab Control Sample Dup	Total/NA	Water	8260B	
680-144039-1 MS	G6M-13-06X-Fall17	Total/NA	Water	8260B	
680-144039-1 MSD	G6M-13-06X-Fall17	Total/NA	Water	8260B	

Analysis Batch: 499108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-7	G6M-04-14X-Fall17	Total/NA	Water	8260B	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	8260B	
680-144039-9	Dup-02--Fall17	Total/NA	Water	8260B	
680-144039-10	Trip Blank	Total/NA	Water	8260B	
MB 680-499108/8	Method Blank	Total/NA	Water	8260B	
LCS 680-499108/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-499108/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 499333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-5 - RA	G6M-95-20X-Fall17	Total/NA	Water	8260B	
MB 680-499333/8	Method Blank	Total/NA	Water	8260B	
LCS 680-499333/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-499333/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 499430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-4 - RA	G6M-95-19X-Fall17	Total/NA	Water	8260B	
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	8260B	
MB 680-499430/9	Method Blank	Total/NA	Water	8260B	
LCS 680-499430/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-499430/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 497904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	RSK-175	
MB 680-497904/10	Method Blank	Total/NA	Water	RSK-175	
LCS 680-497904/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-497904/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 498054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	RSK-175	
680-144039-2	Dup-1--Fall17	Total/NA	Water	RSK-175	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	RSK-175	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	RSK-175	
680-144039-9	Dup-02--Fall17	Total/NA	Water	RSK-175	
MB 680-498054/10	Method Blank	Total/NA	Water	RSK-175	
LCS 680-498054/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-498054/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-498054/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-498054/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	
680-144039-1 MS	G6M-13-06X-Fall17	Total/NA	Water	RSK-175	
680-144039-1 MSD	G6M-13-06X-Fall17	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 497761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	9056A	
680-144039-2	Dup-1--Fall17	Total/NA	Water	9056A	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	9056A	
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	9056A	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	9056A	
680-144039-9	Dup-02--Fall17	Total/NA	Water	9056A	
MB 680-497761/37	Method Blank	Total/NA	Water	9056A	
LCS 680-497761/38	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-497761/39	Lab Control Sample Dup	Total/NA	Water	9056A	
680-144039-1 MS	G6M-13-06X-Fall17	Total/NA	Water	9056A	
680-144039-1 MSD	G6M-13-06X-Fall17	Total/NA	Water	9056A	

Metals

Prep Batch: 497777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Dissolved	Water	3005A	
680-144039-2	Dup-1--Fall17	Dissolved	Water	3005A	
680-144039-3	G6M-13-05X-Fall17	Dissolved	Water	3005A	
680-144039-4	G6M-95-19X-Fall17	Dissolved	Water	3005A	
680-144039-5	G6M-95-20X-Fall17	Dissolved	Water	3005A	
680-144039-6	G6M-03-08X-Fall17	Dissolved	Water	3005A	
680-144039-7	G6M-04-14X-Fall17	Dissolved	Water	3005A	
680-144039-8	G6M-04-13X-Fall17	Dissolved	Water	3005A	
680-144039-9	Dup-02--Fall17	Dissolved	Water	3005A	
MB 680-497777/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-497777/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-144039-1 MS	G6M-13-06X-Fall17	Dissolved	Water	3005A	
680-144039-1 MSD	G6M-13-06X-Fall17	Dissolved	Water	3005A	

Prep Batch: 497778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 497778 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-2	Dup-1--Fall17	Dissolved	Water	3005A	
680-144039-3	G6M-13-05X-Fall17	Dissolved	Water	3005A	
680-144039-4	G6M-95-19X-Fall17	Dissolved	Water	3005A	
680-144039-5	G6M-95-20X-Fall17	Dissolved	Water	3005A	
680-144039-6	G6M-03-08X-Fall17	Dissolved	Water	3005A	
680-144039-7	G6M-04-14X-Fall17	Dissolved	Water	3005A	
680-144039-8	G6M-04-13X-Fall17	Dissolved	Water	3005A	
680-144039-9	Dup-02--Fall17	Dissolved	Water	3005A	
MB 680-497778/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-497778/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-144039-1 MS	G6M-13-06X-Fall17	Dissolved	Water	3005A	
680-144039-1 MSD	G6M-13-06X-Fall17	Dissolved	Water	3005A	

Analysis Batch: 498134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Dissolved	Water	6010C	497778
680-144039-2	Dup-1--Fall17	Dissolved	Water	6010C	497778
680-144039-3	G6M-13-05X-Fall17	Dissolved	Water	6010C	497778
680-144039-4	G6M-95-19X-Fall17	Dissolved	Water	6010C	497778
680-144039-5	G6M-95-20X-Fall17	Dissolved	Water	6010C	497778
680-144039-6	G6M-03-08X-Fall17	Dissolved	Water	6010C	497778
680-144039-7	G6M-04-14X-Fall17	Dissolved	Water	6010C	497778
680-144039-8	G6M-04-13X-Fall17	Dissolved	Water	6010C	497778
680-144039-9	Dup-02--Fall17	Dissolved	Water	6010C	497778
MB 680-497778/1-A	Method Blank	Total Recoverable	Water	6010C	497778
LCS 680-497778/2-A	Lab Control Sample	Total Recoverable	Water	6010C	497778
680-144039-1 MS	G6M-13-06X-Fall17	Dissolved	Water	6010C	497778
680-144039-1 MSD	G6M-13-06X-Fall17	Dissolved	Water	6010C	497778

Analysis Batch: 498265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Dissolved	Water	6020A	497777
680-144039-2	Dup-1--Fall17	Dissolved	Water	6020A	497777
680-144039-3	G6M-13-05X-Fall17	Dissolved	Water	6020A	497777
680-144039-4	G6M-95-19X-Fall17	Dissolved	Water	6020A	497777
680-144039-5	G6M-95-20X-Fall17	Dissolved	Water	6020A	497777
680-144039-6	G6M-03-08X-Fall17	Dissolved	Water	6020A	497777
680-144039-7	G6M-04-14X-Fall17	Dissolved	Water	6020A	497777
680-144039-8	G6M-04-13X-Fall17	Dissolved	Water	6020A	497777
680-144039-9	Dup-02--Fall17	Dissolved	Water	6020A	497777
MB 680-497777/1-A	Method Blank	Total Recoverable	Water	6020A	497777
LCS 680-497777/2-A	Lab Control Sample	Total Recoverable	Water	6020A	497777
680-144039-1 MS	G6M-13-06X-Fall17	Dissolved	Water	6020A	497777
680-144039-1 MSD	G6M-13-06X-Fall17	Dissolved	Water	6020A	497777

General Chemistry

Analysis Batch: 390642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 390642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-2	Dup-1--Fall17	Total/NA	Water	353.2	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	353.2	
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	353.2	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	353.2	
680-144039-9	Dup-02--Fall17	Total/NA	Water	353.2	
MB 280-390642/110	Method Blank	Total/NA	Water	353.2	
MB 280-390642/66	Method Blank	Total/NA	Water	353.2	
LCS 280-390642/109	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-390642/65	Lab Control Sample	Total/NA	Water	353.2	
680-144039-1 MS	G6M-13-06X-Fall17	Total/NA	Water	353.2	
680-144039-1 MSD	G6M-13-06X-Fall17	Total/NA	Water	353.2	

Analysis Batch: 390842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	9060A	
680-144039-2	Dup-1--Fall17	Total/NA	Water	9060A	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	9060A	
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	9060A	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	9060A	
680-144039-9	Dup-02--Fall17	Total/NA	Water	9060A	
MB 280-390842/5	Method Blank	Total/NA	Water	9060A	
LCS 280-390842/3	Lab Control Sample	Total/NA	Water	9060A	
LCSD 280-390842/4	Lab Control Sample Dup	Total/NA	Water	9060A	
680-144039-1 MS	G6M-13-06X-Fall17	Total/NA	Water	9060A	
680-144039-1 MSD	G6M-13-06X-Fall17	Total/NA	Water	9060A	

Analysis Batch: 391354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	SM 2320B	
680-144039-2	Dup-1--Fall17	Total/NA	Water	SM 2320B	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	SM 2320B	
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	SM 2320B	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	SM 2320B	
680-144039-9	Dup-02--Fall17	Total/NA	Water	SM 2320B	
MB 280-391354/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-391354/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-391354/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 497666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144039-1	G6M-13-06X-Fall17	Total/NA	Water	9034	
680-144039-2	Dup-1--Fall17	Total/NA	Water	9034	
680-144039-3	G6M-13-05X-Fall17	Total/NA	Water	9034	
680-144039-6	G6M-03-08X-Fall17	Total/NA	Water	9034	
680-144039-8	G6M-04-13X-Fall17	Total/NA	Water	9034	
680-144039-9	Dup-02--Fall17	Total/NA	Water	9034	
MB 680-497666/1	Method Blank	Total/NA	Water	9034	
LCS 680-497666/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-497666/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-144039-1 MS	G6M-13-06X-Fall17	Total/NA	Water	9034	
680-144039-1 MSD	G6M-13-06X-Fall17	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-13-06X-Fall17

Lab Sample ID: 680-144039-1

Date Collected: 10/05/17 08:10

Matrix: Water

Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	498907	10/18/17 16:11	CMB	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498054	10/11/17 16:14	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	497761	10/10/17 03:25	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 09:35	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:02	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	390642	10/09/17 21:14	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	497666	10/09/17 06:30	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		2			390842	10/10/17 19:59	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391354	10/15/17 13:35	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: Dup-1--Fall17

Lab Sample ID: 680-144039-2

Date Collected: 10/05/17 08:15

Matrix: Water

Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499084	10/19/17 11:39	CMB	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498054	10/11/17 16:53	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	497761	10/10/17 05:13	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:48	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 19:02	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	390642	10/09/17 20:48	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	497666	10/09/17 06:30	DAM	TAL SAV
	Instrument ID:	NOEQUIP								

Client Sample ID: Dup-1--Fall17 — Lab Sample ID: 680-144039-2

Date Collected: 10/05/17 08:15 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		2			390842	10/10/17 21:14	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391354	10/15/17 13:51	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-13-05X-Fall17 — Lab Sample ID: 680-144039-3

Date Collected: 10/05/17 10:50 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	499084	10/19/17 12:02	CMB	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498054	10/11/17 17:05	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	497761	10/10/17 05:31	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:27	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:45	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	390642	10/09/17 20:50	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	497666	10/09/17 06:30	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			390842	10/10/17 21:32	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391354	10/15/17 13:41	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-95-19X-Fall17 — Lab Sample ID: 680-144039-4

Date Collected: 10/05/17 12:35 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499084	10/19/17 12:24	CMB	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	499430	10/23/17 15:36	UI	TAL SAV
	Instrument ID:	CMSP2								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:43	BCB	TAL SAV
	Instrument ID:	ICPE								

Client Sample ID: G6M-95-19X-Fall17 — Lab Sample ID: 680-144039-4

Date Collected: 10/05/17 12:35 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:58	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: G6M-95-20X-Fall17 — Lab Sample ID: 680-144039-5

Date Collected: 10/05/17 13:25 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499084	10/19/17 12:47	CMB	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	499333	10/20/17 22:11	CMB	TAL SAV
	Instrument ID:	CMSB								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:01	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:24	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: G6M-03-08X-Fall17 — Lab Sample ID: 680-144039-6

Date Collected: 10/04/17 14:30 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499430	10/23/17 16:01	UI	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	497904	10/10/17 17:05	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	497761	10/10/17 05:51	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:38	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:54	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	390642	10/09/17 20:52	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	497666	10/09/17 06:30	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			390842	10/10/17 21:47	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: G6M-03-08X-Fall17 — Lab Sample ID: 680-144039-6

Date Collected: 10/04/17 14:30 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			391354	10/15/17 13:58	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-04-14X-Fall17 — Lab Sample ID: 680-144039-7

Date Collected: 10/06/17 09:10 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499108	10/19/17 15:25	JLK	TAL SAV
	Instrument ID:	CMSB								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:32	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:49	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: G6M-04-13X-Fall17 — Lab Sample ID: 680-144039-8

Date Collected: 10/06/17 12:05 — **Matrix: Water**
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499108	10/19/17 15:47	JLK	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498054	10/11/17 17:18	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	497761	10/10/17 06:09	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:06	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:28	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	390642	10/09/17 20:56	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	497666	10/09/17 06:30	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			390842	10/10/17 22:01	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391354	10/15/17 13:27	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Client Sample ID: Dup-02--Fall17

Lab Sample ID: 680-144039-9

Date Collected: 10/06/17 12:10
Matrix: Water
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499108	10/19/17 16:09	JLK	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498054	10/11/17 17:31	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	497761	10/10/17 06:27	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	50 mL	497778	10/09/17 13:11	BCB	TAL SAV
Dissolved	Analysis	6010C		1			498134	10/11/17 10:12	BCB	TAL SAV
	Instrument ID:	ICPE								
Dissolved	Prep	3005A			50 mL	250 mL	497777	10/09/17 13:10	BCB	TAL SAV
Dissolved	Analysis	6020A		1			498265	10/11/17 18:32	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	390642	10/09/17 20:54	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	497666	10/09/17 09:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			390842	10/10/17 22:16	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391354	10/15/17 13:21	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: Trip Blank

Lab Sample ID: 680-144039-10

Date Collected: 10/06/17 00:00
Matrix: Water
Date Received: 10/07/17 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499108	10/19/17 14:41	JLK	TAL SAV
	Instrument ID:	CMSB								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 1 of: 1

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Remarks	Lab. No.
66M-13-06X-Fall17		10/5/17	810	P	GW	13 (39)	3	3	1	1	2	1	1	1	MS/MSD	
DUP-1-Fall17		10/5/17	815	P	GW	13	X	X	X	X	X	X	X	X		
66M-13-05X-Fall17		10/5/17	1050	P	GW	13	X	X	X	X	X	X	X	X		
66M-95-19X-Fall17		10/5/17	1235	P	GW	4	X							X		
66M-95-20X-Fall17		10/5/17	1335	P	GW	4	X							X		
66M-03-08X-Fall17		10/4/17	1430	P	GW	13	X	X	X	X	X	X	X	X		
66M-04-14X-Fall17		10/6/17	910	P	GW	4	X							X		
66M-04-13X-Fall17		10/6/17	1205	P	GW	13	X	X	X	X	X	X	X	X		
DUP-02-Fall17		10/6/17	1210	P	GW	13	X	X	X	X	X	X	X	X		
	Trip Blank	—	—	O	O	2	X									

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out: Via:
Returned: Via:

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[illegible]	10/6/17	1525	[illegible]	10-6-17	1525
	[illegible]	10-6-17	1500			
				[illegible]	10-7-17	915
				2.0°C (CF)		2.2°C

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

360325-Boston

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 1 of: 1

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Remarks	Lab. No.
66M-13	-06X-Fall17	10/5/17	810	P	GW	13 (39)	3	3	1	1	2	1	1	1	MS/MSD	
DUP-1	-Fall17	10/5/17	815	P	GW	13	X	X	X	X	X	X	X	X		
66M-13	-05X-Fall17	10/5/17	1050	P	GW	13	X	X	X	X	X	X	X	X		
66M-95	-19X-Fall17	10/5/17	1235	P	GW	4	X							X		
66M-95	-20X-Fall17	10/5/17	1335	P	GW	4	X							X		
66M-03	-08X-Fall17	10/4/17	1430	P	GW	13	X	X	X	X	X	X	X	X		
66M-04	-14X-Fall17	10/6/17	910	P	GW	4	X							X		
66M-04	-13X-Fall17	10/6/17	1205	P	GW	13	X	X	X	X	X	X	X	X		
DUP-02	-Fall17	10/6/17	1210	P	GW	13	X	X	X	X	X	X	X	X		
	Trip Blank	—	—	O	O	2	X									

680-144039 Chain of Custody

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out: Via:
Returned: Via:
Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[signature]	10/6/17	1525	[signature]	10-6-17	1525
	[signature]	10-6-17	1000	[signature]	10-6-17	1030

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature 0.2 C
IR#7 +0.1

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-144039-1

Login Number: 144039

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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.	N/A	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144039-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144217-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
293 Boston Post Road
Suite 100
Marlborough, Massachusetts 01752

Attn: Laurie Ekes

Authorized for release by:
10/30/2017 4:56:19 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 6
Method Summary 7
Definitions/Glossary 8
Client Sample Results 10
Surrogate Summary 35
QC Sample Results 36
QC Association Summary 52
Lab Chronicle 56
Chain of Custody 62
Receipt Checklists 66
Certification Summary 67

Job ID: 680-144217-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-144217-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 10/12/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.1º C and 3.3º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples Trip Blank (680-144217-1), Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6), DUP-4-Fall17 (680-144217-7), Trip Blank (680-144217-8), G6M-04-15X-Fall17 (680-144217-9), XSA-12-96X-Fall17 (680-144217-12), XSA-12-97X-Fall17 (680-144217-13), XSA-12-95X-Fall17 (680-144217-14) and MW-7-Fall17 (680-144217-15) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/20/2017 and 10/21/2017.

The continuing calibration verification (CCV) associated with batch 680-499358 recovered above the upper control limit for hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 680-499323: Hexachlorobutadiene and Dichlorodifluoromethane. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. The compounds were high bias and the associated samples were non-detect for the affected analytes.

The laboratory control sample duplicate (LCSD) for analytical batch 680-499323 recovered outside control limits for the following analytes: Hexachlorobutadiene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Samples G6M-07-02X-Fall17 (680-144217-3)[20X] and DUP-3-Fall17 (680-144217-4)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-499323.

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

DISSOLVED GASES

Samples Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6) and DUP-4-Fall17 (680-144217-7) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 10/18/2017.

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

Job ID: 680-144217-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

METALS (ICPMS) - DISSOLVED

Samples G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6), DUP-4-Fall17 (680-144217-7), G6M-04-15X-Fall17 (680-144217-9), G6M-04-31X-Fall17 (680-144217-10), XSA-12-96X-Fall17 (680-144217-12), XSA-12-97X-Fall17 (680-144217-13), XSA-12-95X-Fall17 (680-144217-14) and MW-7-Fall17 (680-144217-15) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/17/2017 and analyzed on 10/26/2017 and 10/27/2017.

Iron was detected in method blank MB 680-498793/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Manganese failed the recovery criteria high for the MS/MSD of sample G6M-04-15X-Fall17 (680-144217-9) in batch 680-500246.

Refer to the QC report for details.

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

METALS

Sample Micro Rinse Blank-Fall17 (680-144217-2) was analyzed for Metals in accordance with EPA SW-846 Method 6020. The samples were prepared on 10/16/2017 and analyzed on 10/18/2017.

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

ALKALINITY

Samples Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6) and DUP-4-Fall17 (680-144217-7) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 10/16/2017.

Alkalinity was detected in method blank MB 280-391605/33 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN

Samples Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6) and DUP-4-Fall17 (680-144217-7) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 10/16/2017.

Samples G6M-07-02X-Fall17 (680-144217-3)[2X] and DUP-3-Fall17 (680-144217-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6) and DUP-4-Fall17 (680-144217-7) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 10/17/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)

Samples Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6) and DUP-4-Fall17 (680-144217-7) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 10/17/2017.

Job ID: 680-144217-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Samples G6M-07-02X-Fall17 (680-144217-3)[2X] and DUP-3-Fall17 (680-144217-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL ORGANIC CARBON

Samples Micro Rinse Blank-Fall17 (680-144217-2), G6M-07-02X-Fall17 (680-144217-3), DUP-3-Fall17 (680-144217-4), MW-3-Fall17 (680-144217-5), G6M-97-05B-Fall17 (680-144217-6) and DUP-4-Fall17 (680-144217-7) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 10/17/2017.

Total Organic Carbon - Duplicates was detected in method blank MB 280-391583/35 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples G6M-07-02X-Fall17 (680-144217-3)[80X] and DUP-3-Fall17 (680-144217-4)[70X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144217-1	Trip Blank	Water	10/11/17 00:00	10/12/17 09:55
680-144217-2	Micro Rinse Blank-Fall17	Water	10/10/17 14:05	10/12/17 09:55
680-144217-3	G6M-07-02X-Fall17	Water	10/10/17 16:20	10/12/17 09:55
680-144217-4	DUP-3-Fall17	Water	10/10/17 16:25	10/12/17 09:55
680-144217-5	MW-3-Fall17	Water	10/11/17 11:40	10/12/17 09:55
680-144217-6	G6M-97-05B-Fall17	Water	10/11/17 12:55	10/12/17 09:55
680-144217-7	DUP-4-Fall17	Water	10/11/17 13:00	10/12/17 09:55
680-144217-8	Trip Blank	Water	10/11/17 00:00	10/12/17 09:55
680-144217-9	G6M-04-15X-Fall17	Water	10/09/17 11:25	10/12/17 09:55
680-144217-10	G6M-04-31X-Fall17	Water	10/09/17 13:20	10/12/17 09:55
680-144217-12	XSA-12-96X-Fall17	Water	10/10/17 09:50	10/12/17 09:55
680-144217-13	XSA-12-97X-Fall17	Water	10/10/17 11:25	10/12/17 09:55
680-144217-14	XSA-12-95X-Fall17	Water	10/10/17 12:55	10/12/17 09:55
680-144217-15	MW-7-Fall17	Water	10/11/17 10:05	10/12/17 09:55

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
D	The reported value is from a dilution.

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
M	Manual integrated compound.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144217-1

Date Collected: 10/11/17 00:00

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 13:09	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:09	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:09	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:09	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 13:09	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 13:09	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:09	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 13:09	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:09	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 13:09	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:09	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 13:09	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 13:09	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/21/17 13:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 13:09	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 13:09	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:09	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:09	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:09	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 13:09	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 13:09	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 13:09	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 13:09	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:09	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 13:09	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/21/17 13:09	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 13:09	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 13:09	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:09	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 13:09	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:09	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 13:09	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 13:09	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:09	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:09	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 13:09	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 13:09	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:09	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 13:09	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 13:09	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 13:09	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:09	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 13:09	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144217-1
Date Collected: 10/11/17 00:00
Matrix: Water
Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:09	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 13:09	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/21/17 13:09	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:09	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:09	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:09	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:09	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:09	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:09	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 13:09	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 13:09	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 13:09	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 13:09	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:09	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/21/17 13:09*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 119*		*10/21/17 13:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/21/17 13:09*	*1*
Toluene-d8 (Surr)	*108*		*89 - 112*		*10/21/17 13:09*	*1*

Client Sample ID: Micro Rinse Blank-Fall17

Lab Sample ID: 680-144217-2
Date Collected: 10/10/17 14:05
Matrix: Water
Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**8.9**	**J**	10	10	7.0	ug/L		10/21/17 13:59	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:59	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:59	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:59	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 13:59	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 13:59	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:59	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 13:59	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:59	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 13:59	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:59	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 13:59	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 13:59	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/21/17 13:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 13:59	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: Micro Rinse Blank-Fall17
Date Collected: 10/10/17 14:05
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 13:59	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:59	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:59	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:59	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 13:59	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 13:59	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 13:59	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 13:59	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:59	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 13:59	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/21/17 13:59	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 13:59	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 13:59	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:59	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 13:59	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:59	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 13:59	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 13:59	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:59	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:59	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 13:59	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 13:59	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:59	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 13:59	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 13:59	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 13:59	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:59	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 13:59	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:59	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 13:59	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/21/17 13:59	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:59	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:59	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:59	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:59	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:59	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:59	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 13:59	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 13:59	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 13:59	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 13:59	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:59	1

Client Sample ID: Micro Rinse Blank-Fall17

Lab Sample ID: 680-144217-2

Date Collected: 10/10/17 14:05

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/21/17 13:59*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 119*		*10/21/17 13:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*81 - 118*		*10/21/17 13:59*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/21/17 13:59*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/18/17 23:29	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 23:29	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/18/17 23:29	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/17/17 15:34	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/18/17 18:21	1
Iron	**66**	**J**	100	75	25	ug/L		10/18/17 18:21	1
Manganese	**3.6**	**J**	5.0	5.0	1.8	ug/L		10/18/17 18:21	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/16/17 17:54	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**0.51**	**J**	1.0	0.50	0.16	mg/L		10/17/17 01:55	1
Alkalinity	3.2	U	5.0	3.2	1.1	mg/L		10/16/17 21:05	1

Client Sample ID: G6M-07-02X-Fall17

Lab Sample ID: 680-144217-3

Date Collected: 10/10/17 16:20

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	U	200	200	140	ug/L		10/21/17 19:45	20
Benzene	20	U	20	20	8.6	ug/L		10/21/17 19:45	20
Bromobenzene	20	U	20	20	10	ug/L		10/21/17 19:45	20
Bromoform	20	U	20	20	8.6	ug/L		10/21/17 19:45	20
Bromomethane	100	U	100	100	50	ug/L		10/21/17 19:45	20
2-Butanone (MEK)	**150**	**J D**	200	200	68	ug/L		10/21/17 19:45	20
Carbon disulfide	40	U	40	40	8.6	ug/L		10/21/17 19:45	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		10/21/17 19:45	20
Chlorobenzene	10	U	20	10	5.2	ug/L		10/21/17 19:45	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		10/21/17 19:45	20
Chlorodibromomethane	10	U	20	10	6.4	ug/L		10/21/17 19:45	20
Chloroethane	100	U	100	100	50	ug/L		10/21/17 19:45	20
Chloroform	20	U	20	20	10	ug/L		10/21/17 19:45	20
Chloromethane	20	U	20	20	8.0	ug/L		10/21/17 19:45	20

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: G6M-07-02X-Fall17
Date Collected: 10/10/17 16:20
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Chlorotoluene	10	U	20	10	5.4	ug/L		10/21/17 19:45	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		10/21/17 19:45	20
cis-1,2-Dichloroethene	20	U	20	20	8.2	ug/L		10/21/17 19:45	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		10/21/17 19:45	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		10/21/17 19:45	20
Dibromomethane	20	U	20	20	7.0	ug/L		10/21/17 19:45	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		10/21/17 19:45	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		10/21/17 19:45	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		10/21/17 19:45	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		10/21/17 19:45	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		10/21/17 19:45	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		10/21/17 19:45	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		10/21/17 19:45	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		10/21/17 19:45	20
1,2-Dichloroethene, Total	20	U	40	20	15	ug/L		10/21/17 19:45	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		10/21/17 19:45	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		10/21/17 19:45	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		10/21/17 19:45	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		10/21/17 19:45	20
Ethylbenzene	10	U	20	10	6.6	ug/L		10/21/17 19:45	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		10/21/17 19:45	20
Hexachlorobutadiene	100	U Q	100	100	50	ug/L		10/21/17 19:45	20
2-Hexanone	100	U	200	100	40	ug/L		10/21/17 19:45	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		10/21/17 19:45	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		10/21/17 19:45	20
Methylene Chloride	100	U	100	100	50	ug/L		10/21/17 19:45	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		10/21/17 19:45	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		10/21/17 19:45	20
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		10/21/17 19:45	20
Naphthalene	100	U	100	100	50	ug/L		10/21/17 19:45	20
n-Butylbenzene	**19**	**J D**	20	20	9.4	ug/L		10/21/17 19:45	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		10/21/17 19:45	20
o-Xylene	10	U	20	10	4.6	ug/L		10/21/17 19:45	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		10/21/17 19:45	20
Styrene	10	U	20	10	5.4	ug/L		10/21/17 19:45	20
tert-Butylbenzene	20	U	20	20	9.0	ug/L		10/21/17 19:45	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		10/21/17 19:45	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		10/21/17 19:45	20
Tetrachloroethene	**910**	**D**	20	20	15	ug/L		10/21/17 19:45	20
Toluene	20	U	20	20	9.6	ug/L		10/21/17 19:45	20
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		10/21/17 19:45	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		10/21/17 19:45	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		10/21/17 19:45	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		10/21/17 19:45	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		10/21/17 19:45	20
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		10/21/17 19:45	20
Trichloroethene	20	U	20	20	9.6	ug/L		10/21/17 19:45	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		10/21/17 19:45	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		10/21/17 19:45	20

Client Sample ID: G6M-07-02X-Fall17

Lab Sample ID: 680-144217-3

Date Collected: 10/10/17 16:20

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	13	J D	20	20	9.4	ug/L		10/21/17 19:45	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		10/21/17 19:45	20
Vinyl acetate	40	U	40	40	16	ug/L		10/21/17 19:45	20
Vinyl chloride	20	U	20	20	10	ug/L		10/21/17 19:45	20
Xylenes, Total	10	U	40	10	4.6	ug/L		10/21/17 19:45	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*10/21/17 19:45*	*20*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 19:45*	*20*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/21/17 19:45*	*20*
Toluene-d8 (Surr)	*106*		*89 - 112*		*10/21/17 19:45*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	24		1.1	1.1	0.55	ug/L		10/18/17 23:42	1
Ethylene	4.3		1.0	1.0	0.50	ug/L		10/18/17 23:42	1
Methane (TCD)	1200		390	77	39	ug/L		10/18/17 23:42	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	20	D M	2.0	2.0	0.80	mg/L		10/17/17 16:10	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	37		3.0	3.0	1.5	ug/L		10/27/17 00:33	1
Iron	220000	B	100	75	25	ug/L		10/27/17 00:33	1
Manganese	14000		5.0	5.0	1.8	ug/L		10/27/17 00:33	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	2.0		0.20	0.10	0.038	mg/L		10/16/17 17:56	2
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	3400		80	40	12	mg/L		10/17/17 02:20	80
Alkalinity	520	B	5.0	3.2	1.1	mg/L		10/16/17 21:43	1

Client Sample ID: DUP-3-Fall17

Lab Sample ID: 680-144217-4

Date Collected: 10/10/17 16:25

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	U	200	200	140	ug/L		10/21/17 19:20	20
Benzene	20	U	20	20	8.6	ug/L		10/21/17 19:20	20
Bromobenzene	20	U	20	20	10	ug/L		10/21/17 19:20	20
Bromoform	20	U	20	20	8.6	ug/L		10/21/17 19:20	20
Bromomethane	100	U	100	100	50	ug/L		10/21/17 19:20	20
2-Butanone (MEK)	170	J D	200	200	68	ug/L		10/21/17 19:20	20
Carbon disulfide	31	J D	40	40	8.6	ug/L		10/21/17 19:20	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		10/21/17 19:20	20
Chlorobenzene	10	U	20	10	5.2	ug/L		10/21/17 19:20	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		10/21/17 19:20	20

Client Sample ID: DUP-3-Fall17
Date Collected: 10/10/17 16:25
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chlorodibromomethane	10	U	20	10	6.4	ug/L		10/21/17 19:20	20
Chloroethane	100	U	100	100	50	ug/L		10/21/17 19:20	20
Chloroform	20	U	20	20	10	ug/L		10/21/17 19:20	20
Chloromethane	20	U	20	20	8.0	ug/L		10/21/17 19:20	20
2-Chlorotoluene	10	U	20	10	5.4	ug/L		10/21/17 19:20	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		10/21/17 19:20	20
cis-1,2-Dichloroethene	20	U	20	20	8.2	ug/L		10/21/17 19:20	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		10/21/17 19:20	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		10/21/17 19:20	20
Dibromomethane	20	U	20	20	7.0	ug/L		10/21/17 19:20	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		10/21/17 19:20	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		10/21/17 19:20	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		10/21/17 19:20	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		10/21/17 19:20	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		10/21/17 19:20	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		10/21/17 19:20	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		10/21/17 19:20	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		10/21/17 19:20	20
1,2-Dichloroethene, Total	20	U	40	20	15	ug/L		10/21/17 19:20	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		10/21/17 19:20	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		10/21/17 19:20	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		10/21/17 19:20	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		10/21/17 19:20	20
Ethylbenzene	10	U	20	10	6.6	ug/L		10/21/17 19:20	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		10/21/17 19:20	20
Hexachlorobutadiene	100	U Q	100	100	50	ug/L		10/21/17 19:20	20
2-Hexanone	100	U	200	100	40	ug/L		10/21/17 19:20	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		10/21/17 19:20	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		10/21/17 19:20	20
Methylene Chloride	100	U	100	100	50	ug/L		10/21/17 19:20	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		10/21/17 19:20	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		10/21/17 19:20	20
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		10/21/17 19:20	20
Naphthalene	100	U	100	100	50	ug/L		10/21/17 19:20	20
n-Butylbenzene	**13**	**J D**	20	20	9.4	ug/L		10/21/17 19:20	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		10/21/17 19:20	20
o-Xylene	10	U	20	10	4.6	ug/L		10/21/17 19:20	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		10/21/17 19:20	20
Styrene	10	U	20	10	5.4	ug/L		10/21/17 19:20	20
tert-Butylbenzene	20	U	20	20	9.0	ug/L		10/21/17 19:20	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		10/21/17 19:20	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		10/21/17 19:20	20
Tetrachloroethene	**440**	**D**	20	20	15	ug/L		10/21/17 19:20	20
Toluene	20	U	20	20	9.6	ug/L		10/21/17 19:20	20
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		10/21/17 19:20	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		10/21/17 19:20	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		10/21/17 19:20	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		10/21/17 19:20	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		10/21/17 19:20	20

Client Sample ID: DUP-3-Fall17

Lab Sample ID: 680-144217-4

Date Collected: 10/10/17 16:25

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		10/21/17 19:20	20
Trichloroethene	20	U	20	20	9.6	ug/L		10/21/17 19:20	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		10/21/17 19:20	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		10/21/17 19:20	20
1,2,4-Trimethylbenzene	20	U	20	20	9.4	ug/L		10/21/17 19:20	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		10/21/17 19:20	20
Vinyl acetate	40	U	40	40	16	ug/L		10/21/17 19:20	20
Vinyl chloride	20	U	20	20	10	ug/L		10/21/17 19:20	20
Xylenes, Total	10	U	40	10	4.6	ug/L		10/21/17 19:20	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*10/21/17 19:20*	*20*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*10/21/17 19:20*	*20*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*10/21/17 19:20*	*20*
Toluene-d8 (Surr)	*102*		*89 - 112*		*10/21/17 19:20*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**14**		1.1	1.1	0.55	ug/L		10/18/17 18:48	1
Ethylene	**3.0**		1.0	1.0	0.50	ug/L		10/18/17 18:48	1
Methane (TCD)	**1100**		390	77	39	ug/L		10/18/17 18:48	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**17**	**D M**	2.0	2.0	0.80	mg/L		10/17/17 16:27	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**200**		30	30	15	ug/L		10/27/17 00:46	1
Iron	**1200000**	**B**	1000	750	250	ug/L		10/27/17 00:46	1
Manganese	**75000**		50	50	18	ug/L		10/27/17 00:46	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**1.9**		0.20	0.10	0.038	mg/L		10/16/17 17:58	2
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**3000**		70	35	11	mg/L		10/17/17 03:17	70
Alkalinity	**530**	**B**	5.0	3.2	1.1	mg/L		10/16/17 21:32	1

Client Sample ID: MW-3-Fall17

Lab Sample ID: 680-144217-5

Date Collected: 10/11/17 11:40

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 14:23	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 14:23	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:23	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 14:23	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 14:23	1

Client Sample ID: MW-3-Fall17
Date Collected: 10/11/17 11:40
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 14:23	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 14:23	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 14:23	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 14:23	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 14:23	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:23	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 14:23	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 14:23	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 14:23	1
cis-1,2-Dichloroethene	**1.0**		1.0	1.0	0.41	ug/L		10/21/17 14:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 14:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 14:23	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 14:23	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:23	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 14:23	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 14:23	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 14:23	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 14:23	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 14:23	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:23	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 14:23	1
1,2-Dichloroethene, Total	**1.0**	**J**	2.0	1.0	0.74	ug/L		10/21/17 14:23	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 14:23	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 14:23	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:23	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 14:23	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 14:23	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 14:23	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 14:23	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 14:23	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 14:23	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 14:23	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 14:23	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 14:23	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 14:23	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 14:23	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 14:23	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 14:23	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 14:23	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 14:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 14:23	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/21/17 14:23	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 14:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:23	1

Client Sample ID: MW-3-Fall17

Lab Sample ID: 680-144217-5

Date Collected: 10/11/17 11:40

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 14:23	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:23	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:23	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 14:23	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 14:23	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 14:23	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 14:23	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 14:23	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 14:23	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 14:23	1
Vinyl chloride	**0.60**	**J M**	1.0	1.0	0.50	ug/L		10/21/17 14:23	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/21/17 14:23*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 119*		*10/21/17 14:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*81 - 118*		*10/21/17 14:23*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/21/17 14:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**1.9**		1.1	1.1	0.55	ug/L		10/18/17 19:01	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 19:01	1
Methane (TCD)	**5500**		390	77	39	ug/L		10/18/17 19:01	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**0.62**	**J M**	1.0	1.0	0.40	mg/L		10/17/17 17:21	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**440**		3.0	3.0	1.5	ug/L		10/27/17 00:50	1
Iron	**56000**	**B**	100	75	25	ug/L		10/27/17 00:50	1
Manganese	**9200**		5.0	5.0	1.8	ug/L		10/27/17 00:50	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.056**	**J**	0.10	0.050	0.019	mg/L		10/16/17 18:00	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**5.0**		1.0	0.50	0.16	mg/L		10/17/17 03:34	1
Alkalinity	**280**	**B**	5.0	3.2	1.1	mg/L		10/16/17 21:50	1

Client Sample ID: G6M-97-05B-Fall17

Lab Sample ID: 680-144217-6

Date Collected: 10/11/17 12:55

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 14:48	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 14:48	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: G6M-97-05B-Fall17
Date Collected: 10/11/17 12:55
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:48	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 14:48	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 14:48	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 14:48	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 14:48	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 14:48	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 14:48	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 14:48	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:48	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 14:48	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 14:48	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 14:48	1
cis-1,2-Dichloroethene	**4.4**		1.0	1.0	0.41	ug/L		10/21/17 14:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 14:48	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 14:48	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 14:48	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:48	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 14:48	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 14:48	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 14:48	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 14:48	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 14:48	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:48	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 14:48	1
1,2-Dichloroethene, Total	**4.4**		2.0	1.0	0.74	ug/L		10/21/17 14:48	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 14:48	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 14:48	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:48	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 14:48	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 14:48	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 14:48	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 14:48	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 14:48	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 14:48	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 14:48	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 14:48	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 14:48	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 14:48	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 14:48	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 14:48	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 14:48	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 14:48	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 14:48	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:48	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: G6M-97-05B-Fall17

Date Collected: 10/11/17 12:55
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-6

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 14:48	1
Tetrachloroethene	**140**		1.0	1.0	0.74	ug/L		10/21/17 14:48	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 14:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 14:48	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 14:48	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 14:48	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 14:48	1
Trichloroethene	**16**		1.0	1.0	0.48	ug/L		10/21/17 14:48	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 14:48	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 14:48	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 14:48	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 14:48	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 14:48	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 14:48	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/21/17 14:48*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 14:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/21/17 14:48*	*1*
Toluene-d8 (Surr)	*108*		*89 - 112*		*10/21/17 14:48*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/18/17 19:14	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 19:14	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/18/17 19:14	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**7.4**	**M**	1.0	1.0	0.40	mg/L		10/17/17 17:39	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/27/17 00:55	1
Iron	**65**	**J B**	100	75	25	ug/L		10/27/17 00:55	1
Manganese	**3.3**	**J**	5.0	5.0	1.8	ug/L		10/27/17 00:55	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.89**		0.10	0.050	0.019	mg/L		10/16/17 18:14	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**0.50**	**J**	1.0	0.50	0.16	mg/L		10/17/17 04:21	1
Alkalinity	**32**	**B**	5.0	3.2	1.1	mg/L		10/16/17 20:53	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: DUP-4-Fall17

Date Collected: 10/11/17 13:00
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-7

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 15:13	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 15:13	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:13	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 15:13	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 15:13	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 15:13	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 15:13	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 15:13	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 15:13	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 15:13	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:13	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 15:13	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 15:13	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 15:13	1
cis-1,2-Dichloroethene	**4.7**		1.0	1.0	0.41	ug/L		10/21/17 15:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 15:13	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 15:13	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 15:13	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:13	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 15:13	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 15:13	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 15:13	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 15:13	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 15:13	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:13	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 15:13	1
1,2-Dichloroethene, Total	**4.7**		2.0	1.0	0.74	ug/L		10/21/17 15:13	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 15:13	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 15:13	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:13	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 15:13	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 15:13	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 15:13	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 15:13	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 15:13	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 15:13	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 15:13	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 15:13	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 15:13	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 15:13	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 15:13	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 15:13	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 15:13	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 15:13	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: DUP-4-Fall17

Date Collected: 10/11/17 13:00
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-7

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 15:13	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 15:13	1
Tetrachloroethene	**140**		1.0	1.0	0.74	ug/L		10/21/17 15:13	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 15:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 15:13	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:13	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:13	1
1,1,2-Trichloroethane	**4.1**		1.0	0.50	0.33	ug/L		10/21/17 15:13	1
Trichloroethene	**17**		1.0	1.0	0.48	ug/L		10/21/17 15:13	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 15:13	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 15:13	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 15:13	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 15:13	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 15:13	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:13	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/21/17 15:13*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 15:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/21/17 15:13*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/21/17 15:13*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/18/17 19:27	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 19:27	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/18/17 19:27	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**7.4**	**M**	1.0	1.0	0.40	mg/L		10/17/17 17:57	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/27/17 00:59	1
Iron	**190**	**B**	100	75	25	ug/L		10/27/17 00:59	1
Manganese	**8.1**		5.0	5.0	1.8	ug/L		10/27/17 00:59	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.88**		0.10	0.050	0.019	mg/L		10/16/17 18:16	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**0.46**	**J**	1.0	0.50	0.16	mg/L		10/17/17 04:35	1
Alkalinity	**32**	**B**	5.0	3.2	1.1	mg/L		10/16/17 20:59	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144217-8

Date Collected: 10/11/17 00:00

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 13:34	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:34	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:34	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:34	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 13:34	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 13:34	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:34	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 13:34	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:34	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 13:34	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:34	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 13:34	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 13:34	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/21/17 13:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 13:34	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 13:34	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:34	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:34	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 13:34	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 13:34	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 13:34	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 13:34	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 13:34	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:34	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 13:34	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/21/17 13:34	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 13:34	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 13:34	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:34	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 13:34	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:34	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 13:34	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 13:34	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:34	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:34	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 13:34	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 13:34	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 13:34	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 13:34	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 13:34	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 13:34	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:34	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 13:34	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144217-8

Date Collected: 10/11/17 00:00

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 13:34	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 13:34	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/21/17 13:34	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:34	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 13:34	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 13:34	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 13:34	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 13:34	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 13:34	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 13:34	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 13:34	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 13:34	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 13:34	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 13:34	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/21/17 13:34*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 13:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/21/17 13:34*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*10/21/17 13:34*	*1*

Client Sample ID: G6M-04-15X-Fall17

Lab Sample ID: 680-144217-9

Date Collected: 10/09/17 11:25

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/20/17 20:14	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 20:14	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 20:14	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 20:14	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/20/17 20:14	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/20/17 20:14	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 20:14	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/20/17 20:14	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 20:14	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/20/17 20:14	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 20:14	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/20/17 20:14	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/20/17 20:14	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 20:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/20/17 20:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/20/17 20:14	1

Client Sample ID: G6M-04-15X-Fall17
Date Collected: 10/09/17 11:25
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-9
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/20/17 20:14	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 20:14	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 20:14	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 20:14	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/20/17 20:14	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/20/17 20:14	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		10/20/17 20:14	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/20/17 20:14	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 20:14	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/20/17 20:14	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/20/17 20:14	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/20/17 20:14	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/20/17 20:14	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 20:14	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/20/17 20:14	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 20:14	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/20/17 20:14	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/20/17 20:14	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 20:14	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 20:14	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/20/17 20:14	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/20/17 20:14	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 20:14	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/20/17 20:14	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/20/17 20:14	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/20/17 20:14	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 20:14	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/20/17 20:14	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 20:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 20:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/20/17 20:14	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/20/17 20:14	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 20:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 20:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 20:14	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 20:14	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 20:14	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 20:14	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 20:14	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 20:14	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/20/17 20:14	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/20/17 20:14	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/20/17 20:14	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/20/17 20:14	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 20:14	1

Client Sample ID: G6M-04-15X-Fall17

Lab Sample ID: 680-144217-9

Date Collected: 10/09/17 11:25

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/20/17 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/20/17 20:14*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*10/20/17 20:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*81 - 118*		*10/20/17 20:14*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*10/20/17 20:14*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**70**		3.0	3.0	1.5	ug/L		10/26/17 23:12	1
Iron	**15000**	**B**	100	75	25	ug/L		10/26/17 23:12	1
Manganese	**19000**	**J D**	50	50	18	ug/L		10/26/17 23:33	10

Client Sample ID: G6M-04-31X-Fall17

Lab Sample ID: 680-144217-10

Date Collected: 10/09/17 13:20

Matrix: Water

Date Received: 10/12/17 09:55

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**410**		3.0	3.0	1.5	ug/L		10/27/17 00:03	1

Client Sample ID: XSA-12-96X-Fall17

Lab Sample ID: 680-144217-12

Date Collected: 10/10/17 09:50

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 15:37	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 15:37	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:37	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 15:37	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:37	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 15:37	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 15:37	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 15:37	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 15:37	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 15:37	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 15:37	1
Chloroethane	**6.8**		5.0	5.0	2.5	ug/L		10/21/17 15:37	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:37	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 15:37	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 15:37	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 15:37	1
cis-1,2-Dichloroethene	**20**		1.0	1.0	0.41	ug/L		10/21/17 15:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 15:37	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 15:37	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 15:37	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:37	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 15:37	1

Client Sample ID: XSA-12-96X-Fall17

Lab Sample ID: 680-144217-12

Date Collected: 10/10/17 09:50

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 15:37	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 15:37	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 15:37	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 15:37	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 15:37	1
1,1-Dichloroethene	**0.64**	**J M**	1.0	1.0	0.36	ug/L		10/21/17 15:37	1
1,2-Dichloroethene, Total	**25**		2.0	1.0	0.74	ug/L		10/21/17 15:37	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 15:37	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 15:37	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:37	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 15:37	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 15:37	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 15:37	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 15:37	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 15:37	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 15:37	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 15:37	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 15:37	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 15:37	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 15:37	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:37	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 15:37	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 15:37	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 15:37	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 15:37	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 15:37	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 15:37	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 15:37	1
Tetrachloroethene	**26**		1.0	1.0	0.74	ug/L		10/21/17 15:37	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 15:37	1
trans-1,2-Dichloroethene	**5.0**		1.0	1.0	0.37	ug/L		10/21/17 15:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 15:37	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:37	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 15:37	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 15:37	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 15:37	1
Trichloroethene	**20**		1.0	1.0	0.48	ug/L		10/21/17 15:37	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 15:37	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 15:37	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 15:37	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 15:37	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 15:37	1
Vinyl chloride	**16**		1.0	1.0	0.50	ug/L		10/21/17 15:37	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/21/17 15:37*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 15:37*	*1*

Client Sample ID: XSA-12-96X-Fall17

Lab Sample ID: 680-144217-12

Date Collected: 10/10/17 09:50

Matrix: Water

Date Received: 10/12/17 09:55

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/21/17 15:37*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*10/21/17 15:37*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/27/17 00:12	1
Iron	**8200**	**B**	100	75	25	ug/L		10/27/17 00:12	1
Manganese	**6200**		5.0	5.0	1.8	ug/L		10/27/17 00:12	1

Client Sample ID: XSA-12-97X-Fall17

Lab Sample ID: 680-144217-13

Date Collected: 10/10/17 11:25

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 16:02	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:02	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:02	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:02	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 16:02	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 16:02	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:02	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 16:02	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:02	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 16:02	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:02	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 16:02	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 16:02	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/21/17 16:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 16:02	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 16:02	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:02	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:02	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:02	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 16:02	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 16:02	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 16:02	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 16:02	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:02	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 16:02	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/21/17 16:02	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 16:02	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 16:02	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:02	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 16:02	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:02	1

Client Sample ID: XSA-12-97X-Fall17

Lab Sample ID: 680-144217-13

Date Collected: 10/10/17 11:25

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 16:02	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 16:02	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:02	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:02	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 16:02	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 16:02	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:02	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 16:02	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 16:02	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 16:02	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:02	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 16:02	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:02	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 16:02	1
Tetrachloroethene	**8.0**		1.0	1.0	0.74	ug/L		10/21/17 16:02	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:02	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:02	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:02	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:02	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:02	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:02	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 16:02	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 16:02	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 16:02	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 16:02	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:02	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/21/17 16:02*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 16:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/21/17 16:02*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/21/17 16:02*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/27/17 00:16	1
Iron	**1500**	**B**	100	75	25	ug/L		10/27/17 00:16	1
Manganese	**78**		5.0	5.0	1.8	ug/L		10/27/17 00:16	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: XSA-12-95X-Fall17

Lab Sample ID: 680-144217-14

Date Collected: 10/10/17 12:55

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 16:27	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:27	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:27	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:27	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 16:27	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 16:27	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:27	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 16:27	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:27	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 16:27	1
Chloroethane	**4.4**	**J**	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:27	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 16:27	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 16:27	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:27	1
cis-1,2-Dichloroethene	**26**		1.0	1.0	0.41	ug/L		10/21/17 16:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 16:27	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 16:27	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:27	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:27	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:27	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 16:27	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 16:27	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 16:27	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 16:27	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:27	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 16:27	1
1,2-Dichloroethene, Total	**29**		2.0	1.0	0.74	ug/L		10/21/17 16:27	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 16:27	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 16:27	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:27	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 16:27	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:27	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 16:27	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 16:27	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:27	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:27	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 16:27	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 16:27	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:27	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 16:27	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 16:27	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 16:27	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:27	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 16:27	1

Client Sample ID: XSA-12-95X-Fall17

Lab Sample ID: 680-144217-14

Date Collected: 10/10/17 12:55

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:27	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 16:27	1
Tetrachloroethene	**36**		1.0	1.0	0.74	ug/L		10/21/17 16:27	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:27	1
trans-1,2-Dichloroethene	**3.1**		1.0	1.0	0.37	ug/L		10/21/17 16:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:27	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:27	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:27	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:27	1
Trichloroethene	**11**		1.0	1.0	0.48	ug/L		10/21/17 16:27	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:27	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 16:27	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 16:27	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 16:27	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 16:27	1
Vinyl chloride	**5.6**		1.0	1.0	0.50	ug/L		10/21/17 16:27	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/21/17 16:27*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 119*		*10/21/17 16:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/21/17 16:27*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/21/17 16:27*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**3.2**		3.0	3.0	1.5	ug/L		10/27/17 00:20	1
Iron	**7800**	**B**	100	75	25	ug/L		10/27/17 00:20	1
Manganese	**9700**		5.0	5.0	1.8	ug/L		10/27/17 00:20	1

Client Sample ID: MW-7-Fall17

Lab Sample ID: 680-144217-15

Date Collected: 10/11/17 10:05

Matrix: Water

Date Received: 10/12/17 09:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 16:52	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:52	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:52	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:52	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:52	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 16:52	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 16:52	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:52	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 16:52	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:52	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 16:52	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:52	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: MW-7-Fall17
Date Collected: 10/11/17 10:05
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-15
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:52	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 16:52	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 16:52	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:52	1
cis-1,2-Dichloroethene	**1.4**		1.0	1.0	0.41	ug/L		10/21/17 16:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 16:52	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 16:52	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:52	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:52	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 16:52	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 16:52	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 16:52	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 16:52	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 16:52	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 16:52	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 16:52	1
1,2-Dichloroethene, Total	**1.4**	**J**	2.0	1.0	0.74	ug/L		10/21/17 16:52	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 16:52	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 16:52	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:52	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 16:52	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:52	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 16:52	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/21/17 16:52	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 16:52	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:52	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:52	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 16:52	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 16:52	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 16:52	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:52	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 16:52	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 16:52	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 16:52	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:52	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 16:52	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 16:52	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 16:52	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/21/17 16:52	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 16:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:52	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:52	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 16:52	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 16:52	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 16:52	1
Trichloroethene	**0.53**	**J**	1.0	1.0	0.48	ug/L		10/21/17 16:52	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: MW-7-Fall17

Date Collected: 10/11/17 10:05
Date Received: 10/12/17 09:55

Lab Sample ID: 680-144217-15

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 16:52	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 16:52	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 16:52	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 16:52	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 16:52	1
Vinyl chloride	**15**		1.0	1.0	0.50	ug/L		10/21/17 16:52	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*		*10/21/17 16:52*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/21/17 16:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*81 - 118*		*10/21/17 16:52*	*1*
Toluene-d8 (Surr)	*108*		*89 - 112*		*10/21/17 16:52*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**160**		3.0	3.0	1.5	ug/L		10/27/17 00:25	1
Iron	**20000**	**B**	100	75	25	ug/L		10/27/17 00:25	1
Manganese	**19000**	**D**	50	50	18	ug/L		10/27/17 00:29	10

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-144217-1	Trip Blank	92	94	84	108
680-144217-2	Micro Rinse Blank-Fall17	92	92	83	105
680-144217-3	G6M-07-02X-Fall17	97	93	85	106
680-144217-4	DUP-3-Fall17	97	100	91	102
680-144217-5	MW-3-Fall17	94	91	83	105
680-144217-6	G6M-97-05B-Fall17	93	93	84	108
680-144217-7	DUP-4-Fall17	92	93	85	105
680-144217-8	Trip Blank	94	93	85	104
680-144217-9	G6M-04-15X-Fall17	93	97	87	106
680-144217-12	XSA-12-96X-Fall17	94	93	84	106
680-144217-13	XSA-12-97X-Fall17	94	93	84	107
680-144217-14	XSA-12-95X-Fall17	94	94	85	105
680-144217-15	MW-7-Fall17	91	93	83	108
LCS 680-499323/5	Lab Control Sample	99	102	98	105
LCS 680-499358/4	Lab Control Sample	97	101	96	100
LCSD 680-499323/6	Lab Control Sample Dup	100	99	94	107
LCSD 680-499358/5	Lab Control Sample Dup	93	96	89	101
MB 680-499323/10	Method Blank	96	94	85	107
MB 680-499358/9	Method Blank	94	95	85	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-499323/10
Matrix: Water
Analysis Batch: 499323

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/20/17 19:00	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 19:00	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:00	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 19:00	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/20/17 19:00	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/20/17 19:00	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 19:00	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/20/17 19:00	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 19:00	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/20/17 19:00	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:00	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/20/17 19:00	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/20/17 19:00	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 19:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/20/17 19:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/20/17 19:00	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/20/17 19:00	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 19:00	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:00	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/20/17 19:00	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/20/17 19:00	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/20/17 19:00	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/20/17 19:00	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/20/17 19:00	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:00	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/20/17 19:00	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/20/17 19:00	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/20/17 19:00	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/20/17 19:00	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:00	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/20/17 19:00	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 19:00	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/20/17 19:00	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/20/17 19:00	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 19:00	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 19:00	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/20/17 19:00	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/20/17 19:00	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/20/17 19:00	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/20/17 19:00	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/20/17 19:00	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/20/17 19:00	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 19:00	1

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

Lab Sample ID: MB 680-499323/10
Matrix: Water
Analysis Batch: 499323

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/20/17 19:00	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/20/17 19:00	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/20/17 19:00	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/20/17 19:00	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 19:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 19:00	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/20/17 19:00	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/20/17 19:00	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/20/17 19:00	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/20/17 19:00	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/20/17 19:00	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/20/17 19:00	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/20/17 19:00	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/20/17 19:00	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/20/17 19:00	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 19:00	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/20/17 19:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*		*10/20/17 19:00*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 119*		*10/20/17 19:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/20/17 19:00*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/20/17 19:00*	*1*

Lab Sample ID: LCS 680-499323/5
Matrix: Water
Analysis Batch: 499323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	283		ug/L		113	39 - 160
Benzene	50.0	51.5		ug/L		103	79 - 120
Bromobenzene	50.0	51.6		ug/L		103	80 - 120
Bromoform	50.0	54.2		ug/L		108	66 - 130
Bromomethane	50.0	60.8		ug/L		122	53 - 141
2-Butanone (MEK)	250	276		ug/L		110	56 - 143
Carbon disulfide	50.0	50.3		ug/L		101	64 - 133
Carbon tetrachloride	50.0	51.6		ug/L		103	72 - 136
Chlorobenzene	50.0	50.1		ug/L		100	82 - 118
Chlorobromomethane	50.0	52.6		ug/L		105	78 - 123
Chlorodibromomethane	50.0	51.8		ug/L		104	74 - 126
Chloroethane	50.0	54.3		ug/L		109	60 - 138
Chloroform	50.0	52.1		ug/L		104	79 - 124
Chloromethane	50.0	57.6		ug/L		115	50 - 139
2-Chlorotoluene	50.0	50.5		ug/L		101	79 - 122
4-Chlorotoluene	50.0	49.0		ug/L		98	78 - 122

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

Lab Sample ID: LCS 680-499323/5
Matrix: Water
Analysis Batch: 499323

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	50.0	52.5		ug/L		105	78 - 123
cis-1,3-Dichloropropene	50.0	52.3		ug/L		105	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	59.1		ug/L		118	62 - 128
Dibromomethane	50.0	52.1		ug/L		104	79 - 123
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	80 - 119
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	80 - 119
1,4-Dichlorobenzene	50.0	48.9		ug/L		98	79 - 118
Dichlorobromomethane	50.0	51.9		ug/L		104	79 - 125
Dichlorodifluoromethane	50.0	68.6		ug/L		137	32 - 152
1,1-Dichloroethane	50.0	51.8		ug/L		104	77 - 125
1,2-Dichloroethane	50.0	51.6		ug/L		103	73 - 128
1,1-Dichloroethene	50.0	54.4		ug/L		109	71 - 131
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121
1,2-Dichloropropane	50.0	52.6		ug/L		105	78 - 122
1,3-Dichloropropane	50.0	53.0		ug/L		106	80 - 119
2,2-Dichloropropane	50.0	56.0		ug/L		112	60 - 139
1,1-Dichloropropene	50.0	52.3		ug/L		105	79 - 125
Ethylbenzene	50.0	50.4		ug/L		101	79 - 121
Ethylene Dibromide	50.0	50.2		ug/L		100	75 - 127
Hexachlorobutadiene	50.0	67.2		ug/L		134	66 - 134
2-Hexanone	250	261		ug/L		105	57 - 139
Isopropylbenzene	50.0	51.7		ug/L		103	72 - 131
4-Isopropyltoluene	50.0	53.8		ug/L		108	77 - 127
Methylene Chloride	50.0	54.3		ug/L		109	74 - 124
4-Methyl-2-pentanone (MIBK)	250	266		ug/L		106	67 - 130
Methyl tert-butyl ether	50.0	54.7		ug/L		109	71 - 124
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	80 - 121
Naphthalene	50.0	53.8		ug/L		108	61 - 128
n-Butylbenzene	50.0	54.6		ug/L		109	75 - 128
N-Propylbenzene	50.0	50.2		ug/L		100	76 - 126
o-Xylene	50.0	51.7		ug/L		103	78 - 122
sec-Butylbenzene	50.0	53.8		ug/L		108	77 - 126
Styrene	50.0	51.9		ug/L		104	78 - 123
tert-Butylbenzene	50.0	52.4		ug/L		105	78 - 124
1,1,1,2-Tetrachloroethane	50.0	53.7		ug/L		107	78 - 124
1,1,2,2-Tetrachloroethane	50.0	55.2		ug/L		110	71 - 121
Tetrachloroethene	50.0	52.0		ug/L		104	74 - 129
Toluene	50.0	50.4		ug/L		101	80 - 121
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	75 - 124
trans-1,3-Dichloropropene	50.0	51.7		ug/L		103	73 - 127
1,2,3-Trichlorobenzene	50.0	54.4		ug/L		109	69 - 129
1,2,4-Trichlorobenzene	50.0	53.6		ug/L		107	69 - 130
1,1,1-Trichloroethane	50.0	52.1		ug/L		104	74 - 131
1,1,2-Trichloroethane	50.0	53.1		ug/L		106	80 - 119
Trichloroethene	50.0	50.2		ug/L		100	79 - 123
Trichlorofluoromethane	50.0	54.1		ug/L		108	65 - 141
1,2,3-Trichloropropane	50.0	55.3		ug/L		111	73 - 122
1,2,4-Trimethylbenzene	50.0	51.4		ug/L		103	76 - 124

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

Lab Sample ID: LCS 680-499323/5
Matrix: Water
Analysis Batch: 499323

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	51.1		ug/L		102	75 - 124
Vinyl acetate	100	108		ug/L		108	54 - 146
Vinyl chloride	50.0	56.7		ug/L		113	58 - 137
Xylenes, Total	100	102		ug/L		102	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*102*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

Lab Sample ID: LCSD 680-499323/6
Matrix: Water
Analysis Batch: 499323

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	250	261		ug/L		104	39 - 160	8	20
Benzene	50.0	52.4		ug/L		105	79 - 120	2	20
Bromobenzene	50.0	51.4		ug/L		103	80 - 120	0	20
Bromoform	50.0	52.1		ug/L		104	66 - 130	4	20
Bromomethane	50.0	61.1		ug/L		122	53 - 141	1	20
2-Butanone (MEK)	250	266		ug/L		106	56 - 143	4	20
Carbon disulfide	50.0	51.6		ug/L		103	64 - 133	2	20
Carbon tetrachloride	50.0	52.5		ug/L		105	72 - 136	2	20
Chlorobenzene	50.0	51.2		ug/L		102	82 - 118	2	20
Chlorobromomethane	50.0	50.5		ug/L		101	78 - 123	4	20
Chlorodibromomethane	50.0	50.5		ug/L		101	74 - 126	3	20
Chloroethane	50.0	55.3		ug/L		111	60 - 138	2	20
Chloroform	50.0	51.0		ug/L		102	79 - 124	2	20
Chloromethane	50.0	55.8		ug/L		112	50 - 139	3	20
2-Chlorotoluene	50.0	51.1		ug/L		102	79 - 122	1	20
4-Chlorotoluene	50.0	50.3		ug/L		101	78 - 122	3	20
cis-1,2-Dichloroethene	50.0	51.4		ug/L		103	78 - 123	2	20
cis-1,3-Dichloropropene	50.0	51.6		ug/L		103	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	57.0		ug/L		114	62 - 128	4	20
Dibromomethane	50.0	49.8		ug/L		100	79 - 123	4	20
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	80 - 119	0	20
1,3-Dichlorobenzene	50.0	50.5		ug/L		101	80 - 119	3	20
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	79 - 118	1	20
Dichlorobromomethane	50.0	51.5		ug/L		103	79 - 125	1	20
Dichlorodifluoromethane	50.0	69.7		ug/L		139	32 - 152	2	20
1,1-Dichloroethane	50.0	52.3		ug/L		105	77 - 125	1	20
1,2-Dichloroethane	50.0	50.0		ug/L		100	73 - 128	3	20
1,1-Dichloroethene	50.0	55.8		ug/L		112	71 - 131	3	20
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121	1	20
1,2-Dichloropropane	50.0	52.0		ug/L		104	78 - 122	1	20
1,3-Dichloropropane	50.0	51.2		ug/L		102	80 - 119	4	20
2,2-Dichloropropane	50.0	55.5		ug/L		111	60 - 139	1	20

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

Lab Sample ID: LCSD 680-499323/6
Matrix: Water
Analysis Batch: 499323

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-Dichloropropene	50.0	52.6		ug/L		105	79 - 125	1	20
Ethylbenzene	50.0	51.7		ug/L		103	79 - 121	3	20
Ethylene Dibromide	50.0	48.1		ug/L		96	75 - 127	4	20
Hexachlorobutadiene	50.0	69.0	Q	ug/L		138	66 - 134	3	20
2-Hexanone	250	247		ug/L		99	57 - 139	6	20
Isopropylbenzene	50.0	53.0		ug/L		106	72 - 131	3	20
4-Isopropyltoluene	50.0	55.3		ug/L		111	77 - 127	3	20
Methylene Chloride	50.0	54.2		ug/L		108	74 - 124	0	20
4-Methyl-2-pentanone (MIBK)	250	250		ug/L		100	67 - 130	6	20
Methyl tert-butyl ether	50.0	51.8		ug/L		104	71 - 124	6	20
m-Xylene & p-Xylene	50.0	51.4		ug/L		103	80 - 121	2	20
Naphthalene	50.0	53.7		ug/L		107	61 - 128	0	20
n-Butylbenzene	50.0	55.7		ug/L		111	75 - 128	2	20
N-Propylbenzene	50.0	51.0		ug/L		102	76 - 126	2	20
o-Xylene	50.0	52.0		ug/L		104	78 - 122	0	20
sec-Butylbenzene	50.0	55.4		ug/L		111	77 - 126	3	20
Styrene	50.0	51.9		ug/L		104	78 - 123	0	20
tert-Butylbenzene	50.0	53.7		ug/L		107	78 - 124	2	20
1,1,1,2-Tetrachloroethane	50.0	53.4		ug/L		107	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	52.9		ug/L		106	71 - 121	4	20
Tetrachloroethene	50.0	53.2		ug/L		106	74 - 129	2	20
Toluene	50.0	50.9		ug/L		102	80 - 121	1	20
trans-1,2-Dichloroethene	50.0	52.6		ug/L		105	75 - 124	0	20
trans-1,3-Dichloropropene	50.0	49.3		ug/L		99	73 - 127	5	20
1,2,3-Trichlorobenzene	50.0	53.9		ug/L		108	69 - 129	1	20
1,2,4-Trichlorobenzene	50.0	53.3		ug/L		107	69 - 130	0	20
1,1,1-Trichloroethane	50.0	52.4		ug/L		105	74 - 131	1	20
1,1,2-Trichloroethane	50.0	50.9		ug/L		102	80 - 119	4	20
Trichloroethene	50.0	51.3		ug/L		103	79 - 123	2	20
Trichlorofluoromethane	50.0	55.0		ug/L		110	65 - 141	2	20
1,2,3-Trichloropropane	50.0	52.7		ug/L		105	73 - 122	5	20
1,2,4-Trimethylbenzene	50.0	51.5		ug/L		103	76 - 124	0	20
1,3,5-Trimethylbenzene	50.0	52.1		ug/L		104	75 - 124	2	20
Vinyl acetate	100	102		ug/L		102	54 - 146	5	20
Vinyl chloride	50.0	57.9		ug/L		116	58 - 137	2	20
Xylenes, Total	100	103		ug/L		103	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*94*		*81 - 118*
Toluene-d8 (Surr)	*107*		*89 - 112*

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

Lab Sample ID: MB 680-499358/9
Matrix: Water
Analysis Batch: 499358

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/21/17 12:45	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 12:45	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 12:45	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 12:45	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/21/17 12:45	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/21/17 12:45	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 12:45	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/21/17 12:45	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 12:45	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/21/17 12:45	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 12:45	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 12:45	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 12:45	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 12:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/21/17 12:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/21/17 12:45	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/21/17 12:45	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 12:45	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 12:45	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/21/17 12:45	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/21/17 12:45	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 12:45	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/21/17 12:45	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 12:45	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 12:45	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/21/17 12:45	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/21/17 12:45	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/21/17 12:45	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 12:45	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 12:45	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/21/17 12:45	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 12:45	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/21/17 12:45	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/21/17 12:45	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 12:45	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 12:45	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/21/17 12:45	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/21/17 12:45	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/21/17 12:45	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 12:45	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/21/17 12:45	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/21/17 12:45	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 12:45	1

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

Lab Sample ID: MB 680-499358/9
Matrix: Water
Analysis Batch: 499358

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/21/17 12:45	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/21/17 12:45	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 12:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/21/17 12:45	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/21/17 12:45	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 12:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 12:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 12:45	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/21/17 12:45	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/21/17 12:45	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/21/17 12:45	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/21/17 12:45	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/21/17 12:45	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/21/17 12:45	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/21/17 12:45	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/21/17 12:45	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/21/17 12:45	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/21/17 12:45	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/21/17 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/21/17 12:45*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 119*		*10/21/17 12:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/21/17 12:45*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/21/17 12:45*	*1*

Lab Sample ID: LCS 680-499358/4
Matrix: Water
Analysis Batch: 499358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	268		ug/L		107	39 - 160
Benzene	50.0	50.0		ug/L		100	79 - 120
Bromobenzene	50.0	50.7		ug/L		101	80 - 120
Bromoform	50.0	52.3		ug/L		105	66 - 130
Bromomethane	50.0	52.5		ug/L		105	53 - 141
2-Butanone (MEK)	250	267		ug/L		107	56 - 143
Carbon disulfide	50.0	48.2		ug/L		96	64 - 133
Carbon tetrachloride	50.0	50.3		ug/L		101	72 - 136
Chlorobenzene	50.0	49.5		ug/L		99	82 - 118
Chlorobromomethane	50.0	49.9		ug/L		100	78 - 123
Chlorodibromomethane	50.0	50.5		ug/L		101	74 - 126
Chloroethane	50.0	51.7		ug/L		103	60 - 138
Chloroform	50.0	50.8		ug/L		102	79 - 124
Chloromethane	50.0	50.6		ug/L		101	50 - 139
2-Chlorotoluene	50.0	49.5		ug/L		99	79 - 122
4-Chlorotoluene	50.0	49.2		ug/L		98	78 - 122

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

Lab Sample ID: LCS 680-499358/4
Matrix: Water
Analysis Batch: 499358

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	50.0	51.3		ug/L		103	78 - 123
cis-1,3-Dichloropropene	50.0	51.0		ug/L		102	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	55.7		ug/L		111	62 - 128
Dibromomethane	50.0	51.6		ug/L		103	79 - 123
1,2-Dichlorobenzene	50.0	50.1		ug/L		100	80 - 119
1,3-Dichlorobenzene	50.0	48.7		ug/L		97	80 - 119
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	79 - 118
Dichlorobromomethane	50.0	50.5		ug/L		101	79 - 125
Dichlorodifluoromethane	50.0	63.6		ug/L		127	32 - 152
1,1-Dichloroethane	50.0	51.4		ug/L		103	77 - 125
1,2-Dichloroethane	50.0	50.3		ug/L		101	73 - 128
1,1-Dichloroethene	50.0	54.0		ug/L		108	71 - 131
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121
1,2-Dichloropropane	50.0	51.2		ug/L		102	78 - 122
1,3-Dichloropropane	50.0	52.3		ug/L		105	80 - 119
2,2-Dichloropropane	50.0	53.4		ug/L		107	60 - 139
1,1-Dichloropropene	50.0	50.3		ug/L		101	79 - 125
Ethylbenzene	50.0	49.6		ug/L		99	79 - 121
Ethylene Dibromide	50.0	50.0		ug/L		100	75 - 127
Hexachlorobutadiene	50.0	65.4		ug/L		131	66 - 134
2-Hexanone	250	244		ug/L		98	57 - 139
Isopropylbenzene	50.0	50.5		ug/L		101	72 - 131
4-Isopropyltoluene	50.0	52.4		ug/L		105	77 - 127
Methylene Chloride	50.0	52.8		ug/L		106	74 - 124
4-Methyl-2-pentanone (MIBK)	250	244		ug/L		98	67 - 130
Methyl tert-butyl ether	50.0	52.3		ug/L		105	71 - 124
m-Xylene & p-Xylene	50.0	49.7		ug/L		99	80 - 121
Naphthalene	50.0	52.1		ug/L		104	61 - 128
n-Butylbenzene	50.0	53.8		ug/L		108	75 - 128
N-Propylbenzene	50.0	50.3		ug/L		101	76 - 126
o-Xylene	50.0	49.7		ug/L		99	78 - 122
sec-Butylbenzene	50.0	53.6		ug/L		107	77 - 126
Styrene	50.0	50.4		ug/L		101	78 - 123
tert-Butylbenzene	50.0	51.5		ug/L		103	78 - 124
1,1,1,2-Tetrachloroethane	50.0	52.9		ug/L		106	78 - 124
1,1,2,2-Tetrachloroethane	50.0	53.3		ug/L		107	71 - 121
Tetrachloroethene	50.0	50.8		ug/L		102	74 - 129
Toluene	50.0	49.3		ug/L		99	80 - 121
trans-1,2-Dichloroethene	50.0	52.6		ug/L		105	75 - 124
trans-1,3-Dichloropropene	50.0	50.1		ug/L		100	73 - 127
1,2,3-Trichlorobenzene	50.0	54.7		ug/L		109	69 - 129
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	69 - 130
1,1,1-Trichloroethane	50.0	50.3		ug/L		101	74 - 131
1,1,2-Trichloroethane	50.0	51.2		ug/L		102	80 - 119
Trichloroethene	50.0	49.1		ug/L		98	79 - 123
Trichlorofluoromethane	50.0	54.3		ug/L		109	65 - 141
1,2,3-Trichloropropane	50.0	53.1		ug/L		106	73 - 122
1,2,4-Trimethylbenzene	50.0	50.2		ug/L		100	76 - 124

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

Lab Sample ID: LCS 680-499358/4
Matrix: Water
Analysis Batch: 499358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	50.6		ug/L		101	75 - 124
Vinyl acetate	100	102		ug/L		102	54 - 146
Vinyl chloride	50.0	53.9		ug/L		108	58 - 137
Xylenes, Total	100	99.4		ug/L		99	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*
Toluene-d8 (Surr)	*100*		*89 - 112*

Lab Sample ID: LCSD 680-499358/5
Matrix: Water
Analysis Batch: 499358

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	250	242		ug/L		97	39 - 160	10	20
Benzene	50.0	49.8		ug/L		100	79 - 120	0	20
Bromobenzene	50.0	49.3		ug/L		99	80 - 120	3	20
Bromoform	50.0	50.0		ug/L		100	66 - 130	5	20
Bromomethane	50.0	53.8		ug/L		108	53 - 141	3	20
2-Butanone (MEK)	250	242		ug/L		97	56 - 143	10	20
Carbon disulfide	50.0	48.5		ug/L		97	64 - 133	1	20
Carbon tetrachloride	50.0	49.8		ug/L		100	72 - 136	1	20
Chlorobenzene	50.0	49.1		ug/L		98	82 - 118	1	20
Chlorobromomethane	50.0	47.4		ug/L		95	78 - 123	5	20
Chlorodibromomethane	50.0	48.0		ug/L		96	74 - 126	5	20
Chloroethane	50.0	51.1		ug/L		102	60 - 138	1	20
Chloroform	50.0	47.8		ug/L		96	79 - 124	6	20
Chloromethane	50.0	50.5		ug/L		101	50 - 139	0	20
2-Chlorotoluene	50.0	48.8		ug/L		98	79 - 122	1	20
4-Chlorotoluene	50.0	48.1		ug/L		96	78 - 122	2	20
cis-1,2-Dichloroethene	50.0	49.0		ug/L		98	78 - 123	5	20
cis-1,3-Dichloropropene	50.0	48.1		ug/L		96	75 - 124	6	20
1,2-Dibromo-3-Chloropropane	50.0	51.5		ug/L		103	62 - 128	8	20
Dibromomethane	50.0	47.9		ug/L		96	79 - 123	7	20
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	80 - 119	2	20
1,3-Dichlorobenzene	50.0	48.7		ug/L		97	80 - 119	0	20
1,4-Dichlorobenzene	50.0	47.9		ug/L		96	79 - 118	1	20
Dichlorobromomethane	50.0	48.3		ug/L		97	79 - 125	5	20
Dichlorodifluoromethane	50.0	64.4		ug/L		129	32 - 152	1	20
1,1-Dichloroethane	50.0	49.5		ug/L		99	77 - 125	4	20
1,2-Dichloroethane	50.0	47.2		ug/L		94	73 - 128	6	20
1,1-Dichloroethene	50.0	52.7		ug/L		105	71 - 131	2	20
1,2-Dichloroethene, Total	100	99.6		ug/L		100	79 - 121	4	20
1,2-Dichloropropane	50.0	49.3		ug/L		99	78 - 122	4	20
1,3-Dichloropropane	50.0	49.1		ug/L		98	80 - 119	6	20
2,2-Dichloropropane	50.0	51.1		ug/L		102	60 - 139	5	20

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

Lab Sample ID: LCSD 680-499358/5
Matrix: Water
Analysis Batch: 499358

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-Dichloropropene	50.0	49.8		ug/L		100	79 - 125	1	20
Ethylbenzene	50.0	49.6		ug/L		99	79 - 121	0	20
Ethylene Dibromide	50.0	46.8		ug/L		94	75 - 127	7	20
Hexachlorobutadiene	50.0	65.0		ug/L		130	66 - 134	1	20
2-Hexanone	250	223		ug/L		89	57 - 139	9	20
Isopropylbenzene	50.0	50.4		ug/L		101	72 - 131	0	20
4-Isopropyltoluene	50.0	52.7		ug/L		105	77 - 127	1	20
Methylene Chloride	50.0	51.2		ug/L		102	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	250	225		ug/L		90	67 - 130	8	20
Methyl tert-butyl ether	50.0	48.7		ug/L		97	71 - 124	7	20
m-Xylene & p-Xylene	50.0	49.0		ug/L		98	80 - 121	1	20
Naphthalene	50.0	49.7		ug/L		99	61 - 128	5	20
n-Butylbenzene	50.0	54.3		ug/L		109	75 - 128	1	20
N-Propylbenzene	50.0	49.4		ug/L		99	76 - 126	2	20
o-Xylene	50.0	49.2		ug/L		98	78 - 122	1	20
sec-Butylbenzene	50.0	52.6		ug/L		105	77 - 126	2	20
Styrene	50.0	50.1		ug/L		100	78 - 123	0	20
tert-Butylbenzene	50.0	51.2		ug/L		102	78 - 124	0	20
1,1,1,2-Tetrachloroethane	50.0	50.7		ug/L		101	78 - 124	4	20
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/L		100	71 - 121	6	20
Tetrachloroethene	50.0	49.7		ug/L		99	74 - 129	2	20
Toluene	50.0	47.9		ug/L		96	80 - 121	3	20
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	75 - 124	4	20
trans-1,3-Dichloropropene	50.0	47.5		ug/L		95	73 - 127	5	20
1,2,3-Trichlorobenzene	50.0	53.5		ug/L		107	69 - 129	2	20
1,2,4-Trichlorobenzene	50.0	52.2		ug/L		104	69 - 130	1	20
1,1,1-Trichloroethane	50.0	49.9		ug/L		100	74 - 131	1	20
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	80 - 119	5	20
Trichloroethene	50.0	47.5		ug/L		95	79 - 123	3	20
Trichlorofluoromethane	50.0	51.8		ug/L		104	65 - 141	5	20
1,2,3-Trichloropropane	50.0	49.7		ug/L		99	73 - 122	7	20
1,2,4-Trimethylbenzene	50.0	49.4		ug/L		99	76 - 124	1	20
1,3,5-Trimethylbenzene	50.0	49.7		ug/L		99	75 - 124	2	20
Vinyl acetate	100	94.3		ug/L		94	54 - 146	8	20
Vinyl chloride	50.0	54.2		ug/L		108	58 - 137	1	20
Xylenes, Total	100	98.2		ug/L		98	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*
Dibromofluoromethane (Surr)	*96*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*89*		*81 - 118*
Toluene-d8 (Surr)	*101*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-498940/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/18/17 11:04	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 11:04	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/18/17 11:04	1
Methane (TCD)	77	U	390	77	39	ug/L		10/18/17 11:04	1

Lab Sample ID: MB 680-498940/43 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/18/17 18:36	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/18/17 18:36	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/18/17 18:36	1
Methane (TCD)	77	U	390	77	39	ug/L		10/18/17 18:36	1

Lab Sample ID: LCS 680-498940/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1960		ug/L		102	75 - 125

Lab Sample ID: LCS 680-498940/37 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1890		ug/L		98	75 - 125

Lab Sample ID: LCS 680-498940/38 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	321		ug/L		111	75 - 125
Ethylene	269	284		ug/L		105	75 - 125
Methane	154	164		ug/L		107	75 - 125

Lab Sample ID: LCS 680-498940/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	320		ug/L		111	75 - 125
Ethylene	269	292		ug/L		108	75 - 125
Methane	154	162		ug/L		105	75 - 125

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

Lab Sample ID: LCSD 680-498940/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1920		ug/L		100	75 - 125	2	30

Lab Sample ID: LCSD 680-498940/40 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2000		ug/L		104	75 - 125	6	30

Lab Sample ID: LCSD 680-498940/41 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	313		ug/L		109	75 - 125	2	30
Ethylene	269	282		ug/L		105	75 - 125	1	30
Methane	154	159		ug/L		103	75 - 125	3	30

Lab Sample ID: LCSD 680-498940/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498940

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	323		ug/L		112	75 - 125	1	30
Ethylene	269	292		ug/L		108	75 - 125	0	30
Methane	154	165		ug/L		107	75 - 125	2	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-498761/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/17/17 08:23	1

Lab Sample ID: LCS 680-498761/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.1		mg/L		101	87 - 112

Lab Sample ID: LCSD 680-498761/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.3		mg/L		103	87 - 112	2	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 680-144217-2 DU — **Client Sample ID: Micro Rinse Blank-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	1.0	U		1.0	U	mg/L				NC	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-498682/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499113 — **Prep Batch: 498682**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/18/17 18:13	1
Iron	75	U	100	75	25	ug/L		10/18/17 18:13	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/18/17 18:13	1

Lab Sample ID: LCS 680-498682/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499113 — **Prep Batch: 498682**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			100	108		ug/L		108	84 - 116		
Iron			5000	5540		ug/L		111	87 - 118		
Manganese			500	565		ug/L		113	87 - 115		

Lab Sample ID: 680-144217-2 MS — **Client Sample ID: Micro Rinse Blank-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499113 — **Prep Batch: 498682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	3.0	U	100	107		ug/L		107	84 - 116		
Iron	66	J	5000	5400		ug/L		107	87 - 118		
Manganese	3.6	J	500	550		ug/L		109	87 - 115		

Lab Sample ID: 680-144217-2 MSD — **Client Sample ID: Micro Rinse Blank-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499113 — **Prep Batch: 498682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.0	U	100	105		ug/L		105	84 - 116	2	20
Iron	66	J	5000	5370		ug/L		106	87 - 118	1	20
Manganese	3.6	J	500	536		ug/L		107	87 - 115	3	20

Lab Sample ID: MB 680-498793/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 500246 — **Prep Batch: 498793**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/26/17 23:03	1
Iron	66.9	J	100	75	25	ug/L		10/26/17 23:03	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/26/17 23:03	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-498793/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 500246 — **Prep Batch: 498793**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	98.9		ug/L		99	84 - 116
Iron	5000	5220		ug/L		104	87 - 118
Manganese	500	532		ug/L		106	87 - 115

Lab Sample ID: 680-144217-9 MS — **Client Sample ID: G6M-04-15X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500246 — **Prep Batch: 498793**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	70		100	174		ug/L		104	84 - 116
Iron	15000	B	5000	20200		ug/L		106	87 - 118

Lab Sample ID: 680-144217-9 MS — **Client Sample ID: G6M-04-15X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500246 — **Prep Batch: 498793**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	19000	J D	500	19600	4 D	ug/L		119	87 - 115

Lab Sample ID: 680-144217-9 MSD — **Client Sample ID: G6M-04-15X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500246 — **Prep Batch: 498793**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	70		100	177		ug/L		107	84 - 116	2	20
Iron	15000	B	5000	19700		ug/L		96	87 - 118	3	20

Lab Sample ID: 680-144217-9 MSD — **Client Sample ID: G6M-04-15X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500246 — **Prep Batch: 498793**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	19000	J D	500	19700	4 D	ug/L		149	87 - 115	1	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-391541/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391541

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/16/17 17:44	1

Lab Sample ID: LCS 280-391541/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	5.08		mg/L		102	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-498743/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/16/17 10:05	1

Lab Sample ID: LCS 680-498743/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	7.82		mg/L		78	75 - 125

Lab Sample ID: LCSD 680-498743/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	7.67		mg/L		77	75 - 125	2	30

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

Lab Sample ID: MB 280-391583/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391583

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.167	J	1.0	0.50	0.16	mg/L		10/16/17 22:17	1

Lab Sample ID: LCS 280-391583/34 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	24.1		mg/L		96	88 - 112

Lab Sample ID: 680-144217-5 MS — **Client Sample ID: MW-3-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	5.0		25.0	28.4		mg/L		93	88 - 112

Lab Sample ID: 680-144217-5 MSD — **Client Sample ID: MW-3-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391583

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	5.0		25.0	28.6		mg/L		94	88 - 112	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-391605/33
Matrix: Water
Analysis Batch: 391605

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.24	J	5.0	3.2	1.1	mg/L		10/16/17 20:06	1

Lab Sample ID: LCS 280-391605/31
Matrix: Water
Analysis Batch: 391605

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			200	189		mg/L		95	90 - 110		

Lab Sample ID: LCSD 280-391605/32
Matrix: Water
Analysis Batch: 391605

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
Alkalinity			200	193		mg/L		96	90 - 110	2	10

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

GC/MS VOA

Analysis Batch: 499323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-9	G6M-04-15X-Fall17	Total/NA	Water	8260B	
MB 680-499323/10	Method Blank	Total/NA	Water	8260B	
LCS 680-499323/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-499323/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 499358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-1	Trip Blank	Total/NA	Water	8260B	
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	8260B	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	8260B	
680-144217-4	DUP-3-Fall17	Total/NA	Water	8260B	
680-144217-5	MW-3-Fall17	Total/NA	Water	8260B	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	8260B	
680-144217-7	DUP-4-Fall17	Total/NA	Water	8260B	
680-144217-8	Trip Blank	Total/NA	Water	8260B	
680-144217-12	XSA-12-96X-Fall17	Total/NA	Water	8260B	
680-144217-13	XSA-12-97X-Fall17	Total/NA	Water	8260B	
680-144217-14	XSA-12-95X-Fall17	Total/NA	Water	8260B	
680-144217-15	MW-7-Fall17	Total/NA	Water	8260B	
MB 680-499358/9	Method Blank	Total/NA	Water	8260B	
LCS 680-499358/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-499358/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 498940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	RSK-175	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	RSK-175	
680-144217-4	DUP-3-Fall17	Total/NA	Water	RSK-175	
680-144217-5	MW-3-Fall17	Total/NA	Water	RSK-175	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	RSK-175	
680-144217-7	DUP-4-Fall17	Total/NA	Water	RSK-175	
MB 680-498940/10	Method Blank	Total/NA	Water	RSK-175	
MB 680-498940/43	Method Blank	Total/NA	Water	RSK-175	
LCS 680-498940/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-498940/37	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-498940/38	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-498940/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-498940/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-498940/40	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-498940/41	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-498940/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 498761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	9056A	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 498761 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-4	DUP-3-Fall17	Total/NA	Water	9056A	
680-144217-5	MW-3-Fall17	Total/NA	Water	9056A	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	9056A	
680-144217-7	DUP-4-Fall17	Total/NA	Water	9056A	
MB 680-498761/2	Method Blank	Total/NA	Water	9056A	
LCS 680-498761/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-498761/4	Lab Control Sample Dup	Total/NA	Water	9056A	
680-144217-2 DU	Micro Rinse Blank-Fall17	Total/NA	Water	9056A	

Metals

Prep Batch: 498682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	3010A	
MB 680-498682/1-A	Method Blank	Total/NA	Water	3010A	
LCS 680-498682/2-A	Lab Control Sample	Total/NA	Water	3010A	
680-144217-2 MS	Micro Rinse Blank-Fall17	Total/NA	Water	3010A	
680-144217-2 MSD	Micro Rinse Blank-Fall17	Total/NA	Water	3010A	

Prep Batch: 498793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-3	G6M-07-02X-Fall17	Dissolved	Water	3005A	
680-144217-4	DUP-3-Fall17	Dissolved	Water	3005A	
680-144217-5	MW-3-Fall17	Dissolved	Water	3005A	
680-144217-6	G6M-97-05B-Fall17	Dissolved	Water	3005A	
680-144217-7	DUP-4-Fall17	Dissolved	Water	3005A	
680-144217-9	G6M-04-15X-Fall17	Dissolved	Water	3005A	
680-144217-10	G6M-04-31X-Fall17	Dissolved	Water	3005A	
680-144217-12	XSA-12-96X-Fall17	Dissolved	Water	3005A	
680-144217-13	XSA-12-97X-Fall17	Dissolved	Water	3005A	
680-144217-14	XSA-12-95X-Fall17	Dissolved	Water	3005A	
680-144217-15	MW-7-Fall17	Dissolved	Water	3005A	
MB 680-498793/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-498793/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-144217-9 MS	G6M-04-15X-Fall17	Dissolved	Water	3005A	
680-144217-9 MSD	G6M-04-15X-Fall17	Dissolved	Water	3005A	

Analysis Batch: 499113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	6020A	498682
MB 680-498682/1-A	Method Blank	Total/NA	Water	6020A	498682
LCS 680-498682/2-A	Lab Control Sample	Total/NA	Water	6020A	498682
680-144217-2 MS	Micro Rinse Blank-Fall17	Total/NA	Water	6020A	498682
680-144217-2 MSD	Micro Rinse Blank-Fall17	Total/NA	Water	6020A	498682

Analysis Batch: 500246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-3	G6M-07-02X-Fall17	Dissolved	Water	6020A	498793
680-144217-4	DUP-3-Fall17	Dissolved	Water	6020A	498793
680-144217-5	MW-3-Fall17	Dissolved	Water	6020A	498793

Metals (Continued)

Analysis Batch: 500246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-6	G6M-97-05B-Fall17	Dissolved	Water	6020A	498793
680-144217-7	DUP-4-Fall17	Dissolved	Water	6020A	498793
680-144217-9	G6M-04-15X-Fall17	Dissolved	Water	6020A	498793
680-144217-9	G6M-04-15X-Fall17	Dissolved	Water	6020A	498793
680-144217-10	G6M-04-31X-Fall17	Dissolved	Water	6020A	498793
680-144217-12	XSA-12-96X-Fall17	Dissolved	Water	6020A	498793
680-144217-13	XSA-12-97X-Fall17	Dissolved	Water	6020A	498793
680-144217-14	XSA-12-95X-Fall17	Dissolved	Water	6020A	498793
680-144217-15	MW-7-Fall17	Dissolved	Water	6020A	498793
680-144217-15	MW-7-Fall17	Dissolved	Water	6020A	498793
MB 680-498793/1-A	Method Blank	Total Recoverable	Water	6020A	498793
LCS 680-498793/2-A	Lab Control Sample	Total Recoverable	Water	6020A	498793
680-144217-9 MS	G6M-04-15X-Fall17	Dissolved	Water	6020A	498793
680-144217-9 MS	G6M-04-15X-Fall17	Dissolved	Water	6020A	498793
680-144217-9 MSD	G6M-04-15X-Fall17	Dissolved	Water	6020A	498793
680-144217-9 MSD	G6M-04-15X-Fall17	Dissolved	Water	6020A	498793

General Chemistry

Analysis Batch: 391541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	353.2	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	353.2	
680-144217-4	DUP-3-Fall17	Total/NA	Water	353.2	
680-144217-5	MW-3-Fall17	Total/NA	Water	353.2	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	353.2	
680-144217-7	DUP-4-Fall17	Total/NA	Water	353.2	
MB 280-391541/22	Method Blank	Total/NA	Water	353.2	
LCS 280-391541/21	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 391583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	9060A	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	9060A	
680-144217-4	DUP-3-Fall17	Total/NA	Water	9060A	
680-144217-5	MW-3-Fall17	Total/NA	Water	9060A	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	9060A	
680-144217-7	DUP-4-Fall17	Total/NA	Water	9060A	
MB 280-391583/35	Method Blank	Total/NA	Water	9060A	
LCS 280-391583/34	Lab Control Sample	Total/NA	Water	9060A	
680-144217-5 MS	MW-3-Fall17	Total/NA	Water	9060A	
680-144217-5 MSD	MW-3-Fall17	Total/NA	Water	9060A	

Analysis Batch: 391605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	SM 2320B	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	SM 2320B	
680-144217-4	DUP-3-Fall17	Total/NA	Water	SM 2320B	
680-144217-5	MW-3-Fall17	Total/NA	Water	SM 2320B	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 391605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-7	DUP-4-Fall17	Total/NA	Water	SM 2320B	
MB 280-391605/33	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-391605/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-391605/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 498743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144217-2	Micro Rinse Blank-Fall17	Total/NA	Water	9034	
680-144217-3	G6M-07-02X-Fall17	Total/NA	Water	9034	
680-144217-4	DUP-3-Fall17	Total/NA	Water	9034	
680-144217-5	MW-3-Fall17	Total/NA	Water	9034	
680-144217-6	G6M-97-05B-Fall17	Total/NA	Water	9034	
680-144217-7	DUP-4-Fall17	Total/NA	Water	9034	
MB 680-498743/1	Method Blank	Total/NA	Water	9034	
LCS 680-498743/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-498743/3	Lab Control Sample Dup	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: Trip Blank — Lab Sample ID: 680-144217-1

Date Collected: 10/11/17 00:00 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 13:09	CMB	TAL SAV
	Instrument ID:	CMSP2								

Client Sample ID: Micro Rinse Blank-Fall17 — Lab Sample ID: 680-144217-2

Date Collected: 10/10/17 14:05 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 13:59	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498940	10/18/17 23:29	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498761	10/17/17 15:34	CJM	TAL SAV
	Instrument ID:	CICL								
Total/NA	Prep	3010A			50 mL	250 mL	498682	10/16/17 14:03	BJB	TAL SAV
Total/NA	Analysis	6020A		1			499113	10/18/17 18:21	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 17:54	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			391583	10/17/17 01:55	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391605	10/16/17 21:05	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-07-02X-Fall17 — Lab Sample ID: 680-144217-3

Date Collected: 10/10/17 16:20 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	499358	10/21/17 19:45	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498940	10/18/17 23:42	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		2	5 mL	5 mL	498761	10/17/17 16:10	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:33	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		2	100 mL	100 mL	391541	10/16/17 17:56	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								

Client Sample ID: G6M-07-02X-Fall17

Lab Sample ID: 680-144217-3

Date Collected: 10/10/17 16:20

Matrix: Water

Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		80			391583	10/17/17 02:20	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391605	10/16/17 21:43	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: DUP-3-Fall17

Lab Sample ID: 680-144217-4

Date Collected: 10/10/17 16:25

Matrix: Water

Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	499358	10/21/17 19:20	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498940	10/18/17 18:48	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		2	5 mL	5 mL	498761	10/17/17 16:27	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			5 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:46	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		2	100 mL	100 mL	391541	10/16/17 17:58	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		70			391583	10/17/17 03:17	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391605	10/16/17 21:32	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: MW-3-Fall17

Lab Sample ID: 680-144217-5

Date Collected: 10/11/17 11:40

Matrix: Water

Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 14:23	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498940	10/18/17 19:01	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498761	10/17/17 17:21	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: MW-3-Fall17

Lab Sample ID: 680-144217-5

Date Collected: 10/11/17 11:40
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		1			500246	10/27/17 00:50	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 18:00	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			391583	10/17/17 03:34	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391605	10/16/17 21:50	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-97-05B-Fall17

Lab Sample ID: 680-144217-6

Date Collected: 10/11/17 12:55
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 14:48	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498940	10/18/17 19:14	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498761	10/17/17 17:39	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:55	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 18:14	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			391583	10/17/17 04:21	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391605	10/16/17 20:53	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: DUP-4-Fall17

Lab Sample ID: 680-144217-7

Date Collected: 10/11/17 13:00
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 15:13	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	498940	10/18/17 19:27	KAB	TAL SAV
	Instrument ID:	CVGU								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: DUP-4-Fall17

Lab Sample ID: 680-144217-7

Date Collected: 10/11/17 13:00
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	5 mL	5 mL	498761	10/17/17 17:57	CJM	TAL SAV
	Instrument ID: CICL									
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:59	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 18:16	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			391583	10/17/17 04:35	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			391605	10/16/17 20:59	A1D	TAL DEN
	Instrument ID: WC_AT2									

Client Sample ID: Trip Blank

Lab Sample ID: 680-144217-8

Date Collected: 10/11/17 00:00
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 13:34	CMB	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: G6M-04-15X-Fall17

Lab Sample ID: 680-144217-9

Date Collected: 10/09/17 11:25
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499323	10/20/17 20:14	JLK	TAL SAV
	Instrument ID: CMSP2									
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/26/17 23:12	BWR	TAL SAV
	Instrument ID: ICPMSC									
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		10			500246	10/26/17 23:33	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: G6M-04-31X-Fall17

Lab Sample ID: 680-144217-10

Date Collected: 10/09/17 13:20
Matrix: Water
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: G6M-04-31X-Fall17 — Lab Sample ID: 680-144217-10

Date Collected: 10/09/17 13:20 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6020A		1			500246	10/27/17 00:03	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: XSA-12-96X-Fall17 — Lab Sample ID: 680-144217-12

Date Collected: 10/10/17 09:50 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 15:37	CMB	TAL SAV
	Instrument ID:	CMSP2								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:12	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: XSA-12-97X-Fall17 — Lab Sample ID: 680-144217-13

Date Collected: 10/10/17 11:25 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 16:02	CMB	TAL SAV
	Instrument ID:	CMSP2								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:16	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: XSA-12-95X-Fall17 — Lab Sample ID: 680-144217-14

Date Collected: 10/10/17 12:55 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 16:27	CMB	TAL SAV
	Instrument ID:	CMSP2								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:20	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Client Sample ID: MW-7-Fall17 — Lab Sample ID: 680-144217-15

Date Collected: 10/11/17 10:05 — **Matrix: Water**
Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	499358	10/21/17 16:52	CMB	TAL SAV
	Instrument ID:	CMSP2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Client Sample ID: MW-7-Fall17

Lab Sample ID: 680-144217-15

Date Collected: 10/11/17 10:05

Matrix: Water

Date Received: 10/12/17 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500246	10/27/17 00:25	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Dissolved	Prep	3005A			50 mL	250 mL	498793	10/17/17 10:23	AJR	TAL SAV
Dissolved	Analysis	6020A		10			500246	10/27/17 00:29	BWR	TAL SAV
	Instrument ID:	ICPMSC								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 1 of: 2

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100, Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation: Melissa Miller / KGS

Sampler(s) Signature(s): [signature]

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave, Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT: Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Total Metals	Remarks	Lab. No.
	Trip Blank	9/28/17	—		O	2	X								X		
	Micro Rinse Blank_FAL17	10/10/17	1405		W	13	X	X	X	X	X	X	X		X		
	GGM-07-02X_FAL17	10/10/17	1620	P	GW	13	X	X	X	X	X	X	X	X			
	DUP-3_FAL17	10/10/17	1625	P	GW	13	X	X	X	X	X	X	X	X			
	MW-3_FAL17	10/11/17	1140	P	GW	13	X	X	X	X	X	X	X	X			
	GGM-97-05B_FAL17	10/11/17	1255	P	GW	13	X	X	X	X	X	X	X	X			
	DUP-4_FAL17	10/11/17	1300	P	GW	13	X	X	X	X	X	X	X	X			
				P	GW												
				P	GW												
	~~Trip Blank~~			~~O~~	~~O~~												

680-144217 Chain of Custody

Shipping Details: courier pick up — Total Number of Containers: 80

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature] KGS	10/11/17	1500		[signature]	10-12-17	1515
			[signature]	10/11/17	1640				955

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments
Preserve Where Applicable ☐
On ICE ☐
Temperature 1.9/2.1 C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info
☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

360325-Boston

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 2 of: 2

Company	KOMAN GS, LLC
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752
Phone:	508-366-7442 Fax: 508-366-7445
Sampled by [Print Name(s)]/Affilliation	
Sampler(s) Signature(s)	

Laboratory:	Test America - Savannah
Address:	510 LaRoche Ave Savannah, GA 31404
Contact:	Jerry Lanier
Regulatory Facility No.	
Project Name:	Devens Fall 2017 LTM
Sampling QAP No.:	
Approval Date:	
TAT	Routine
Other:	

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs SW8260 3-40-ml VOA vials (HCl)	Dissolved Metals* SW6010/6020 1-250 ml poly (HNO3)	~~Total Metals~~ Total Cr, Fe, Mn							Remarks	Lab. No.
	Trip Blank	9/28/17	—	O	GW	2	X										
	G6M-04-15X_FAL17	10/9/17	1125	P	GW	4	X	X									
	G6M-04-31X_FAL17	10/9/17	1320	P	GW	1			X								
	G6M-04-09X_FAL17	10/9/17	1510	P	GW	4	X	X									
	XSA-12-96X_FAL17	10/10/17	950	P	GW	4	X	X									
	XSA-12-97X_FAL17	10/10/17	1125	P	GW	4	X	X									
	XSA-12-95X_FAL17	10/10/17	1255	P	GW	4	X	X									
	MW-7_FAL17	10/11/17	1005	P	GW	4	X	X									
				P	GW												
	~~Trip Blank~~			~~O~~	~~O~~		~~X~~										

Shipping Details: courier pick up — 27 ← Total Number of Containers

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:		[illegible] KGS	10/11/17	1500		[illegible]		1502
			[illegible]	[illegible]	16:40		[illegible]	10-12-17	955

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature 1.7/2.1 C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat	SE = Sediment	SP = Soil	SW = Surface Water	W = Water (Blanks)	O = Other
PRESERVATIVE CODES H = HCL + Ice	I = Ice Only	N = Nitric Acid + Ice	S = Sulfuric Acid + Ice	M = Methanol	O = Other
COLLECTION METHOD C = Composite	G=Grab	P= Pumping			O = Other

360325-Boston

360325-Boston

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 1 of: 2

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation: Melissa Miller / KGS

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT: Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Total Metals	Remarks	Lab. No.
	Trip Blank	9/28/17	—		O	2	X								X		
	Micro Rinse Blank FAL17	10/10/17	1405		W	13	X	X	X	X	X	X	X		X		
	G6M-07-02X_FAL17	10/10/17	1620	P	GW	13	X	X	X	X	X	X	X	X			
	DUP-3_FAL17	10/10/17	1625	P	GW	13	X	X	X	X	X	X	X	X			
	MW-3_FAL17	10/11/17	1140	P	GW	13	X	X	X	X	X	X	X	X			
	G6M-97-05B_FAL17	10/11/17	1255	P	GW	13	X	X	X	X	X	X	X	X			
	DUP-4_FAL17	10/11/17	1300	P	GW	13	X	X	X	X	X	X	X	X			
				P	GW												
				P	GW												
	~~Trip Blank~~			~~O~~	~~O~~												

680-144217 Chain of Custody

Shipping Details: courier pick up — 80 ← Total Number of Containers

Date Out: Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned: Via:		KGS	10/11/17	1500				15:00
Additional Comments:			10/11/17	16:40			10-12-17	0840

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature 3.3 C
DA#7 +0.1

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

300320-Boston

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 2 of: 2

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	~~Total Metals~~ 1-250 ml poly								Remarks	Lab. No.
	Trip Blank	9/28/17	—	O	W	2	X											
	G6M-04-15X_FAL17	10/9/17	1125	P	GW	4	X	X										
	G6M-04-31X_FAL17	10/9/17	1320	P	GW	1			X									
	G6M-04-09X_FAL17	10/9/17	1510	P	GW	4	X	X										
	XSA-12-96X_FAL17	10/10/17	950	P	GW	4	X	X										
	XSA-12-97X_FAL17	10/10/17	1125	P	GW	4	X	X										
	XSA-12-98X_FAL17	10/10/17	1255	P	GW	4	X	X										
	MW-7_FAL17	10/11/17	1005	P	GW	4	X	X										
				P	GW													
	~~Trip Blank~~			~~O~~	~~O~~		~~X~~											

Shipping Details: courier pick up — 27 ← Total Number of Containers

Date Out: Via:
Returned: Via:

Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
	KGS	10/11/17	1500				1502
		10/11/17	16:40				

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lckes@komangs.com

Lab Comments
Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info
☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-144217-1

Login Number: 144217

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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.	N/A	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17 *
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144217-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144305-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
293 Boston Post Road
Suite 100
Marlborough, Massachusetts 01752

Attn: Laurie Ekes

Authorized for release by:
10/30/2017 6:04:47 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Method Summary 6
Definitions/Glossary 7
Client Sample Results 9
Surrogate Summary 25
QC Sample Results 26
QC Association Summary 46
Lab Chronicle 49
Chain of Custody 53
Receipt Checklists 55
Certification Summary 56

Job ID: 680-144305-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-144305-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 10/14/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.3º C and 0.8º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5), DUP-05-Fall17 (680-144305-6), G6M-04-01X-Fall17 (680-144305-7) and Trip Blank (680-144305-8) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/25/2017, 10/26/2017 and 10/27/2017.

The following sample was analyzed outside of analytical holding time due to laboratory error: G6M-03-01X-Fall17 (680-144305-4).

Sample G6M-03-01X-Fall17 (680-144305-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-500012, and 680-500177.
.
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED GASES
Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5) and DUP-05-Fall17 (680-144305-6) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 10/20/2017.

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

METALS (ICPMS) - DISSOLVED
Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5), DUP-05-Fall17 (680-144305-6) and G6M-04-01X-Fall17 (680-144305-7) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/18/2017 and analyzed on 10/18/2017, 10/19/2017 and 10/27/2017.

Manganese failed the recovery criteria low for the MS of sample G6M-04-10X-Fall17MS (680-144305-1) in batch 680-499113.

Refer to the QC report for details.

Job ID: 680-144305-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

ALKALINITY

Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5) and DUP-05-Fall17 (680-144305-6) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 10/17/2017 and 10/18/2017.

Alkalinity was detected in method blank MB 280-391732/33 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Alkalinity was detected in method blank MB 280-391916/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN

Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5) and DUP-05-Fall17 (680-144305-6) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 10/16/2017.

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

SULFIDE

Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5) and DUP-05-Fall17 (680-144305-6) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 10/17/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)

Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5) and DUP-05-Fall17 (680-144305-6) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 10/17/2017.

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

TOTAL ORGANIC CARBON

Samples G6M-04-10X-Fall17 (680-144305-1), G6M-04-10A-Fall17 (680-144305-2), G6M-03-02X-Fall17 (680-144305-3), G6M-03-01X-Fall17 (680-144305-4), G6M-02-01X-Fall17 (680-144305-5) and DUP-05-Fall17 (680-144305-6) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 10/17/2017.

Total Organic Carbon - Duplicates was detected in method blank MB 280-391583/35 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample G6M-03-01X-Fall17 (680-144305-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144305-1	G6M-04-10X-Fall17	Water	10/12/17 09:00	10/14/17 09:59
680-144305-2	G6M-04-10A-Fall17	Water	10/12/17 10:10	10/14/17 09:59
680-144305-3	G6M-03-02X-Fall17	Water	10/12/17 12:30	10/14/17 09:59
680-144305-4	G6M-03-01X-Fall17	Water	10/12/17 13:30	10/14/17 09:59
680-144305-5	G6M-02-01X-Fall17	Water	10/13/17 09:05	10/14/17 09:59
680-144305-6	DUP-05-Fall17	Water	10/13/17 09:10	10/14/17 09:59
680-144305-7	G6M-04-01X-Fall17	Water	10/13/17 11:30	10/14/17 09:59
680-144305-8	Trip Blank	Water	10/12/17 00:00	10/14/17 09:59

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
H	Sample was prepped or analyzed beyond the specified holding time
D	The reported value is from a dilution.
M	Manual integrated compound.

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
U	Undetected at the Limit of Detection.

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-04-10X-Fall17

Lab Sample ID: 680-144305-1

Date Collected: 10/12/17 09:00

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/26/17 05:01	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:01	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:01	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:01	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/26/17 05:01	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/26/17 05:01	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:01	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/26/17 05:01	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:01	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/26/17 05:01	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:01	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 05:01	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 05:01	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/26/17 05:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 05:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/26/17 05:01	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:01	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:01	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:01	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/26/17 05:01	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 05:01	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/26/17 05:01	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 05:01	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:01	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/26/17 05:01	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/26/17 05:01	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/26/17 05:01	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 05:01	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:01	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 05:01	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:01	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 05:01	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/26/17 05:01	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:01	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:01	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/26/17 05:01	1
Methyl tert-butyl ether	**0.30**	**J**	10	0.50	0.30	ug/L		10/26/17 05:01	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:01	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 05:01	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 05:01	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/26/17 05:01	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:01	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 05:01	1

Client Sample ID: G6M-04-10X-Fall17

Lab Sample ID: 680-144305-1

Date Collected: 10/12/17 09:00

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:01	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/26/17 05:01	1
Tetrachloroethene	**1.2**		1.0	1.0	0.74	ug/L		10/26/17 05:01	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:01	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:01	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:01	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:01	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:01	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:01	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/26/17 05:01	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 05:01	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/26/17 05:01	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/26/17 05:01	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:01	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/26/17 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*		*10/26/17 05:01*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 119*		*10/26/17 05:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*10/26/17 05:01*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*10/26/17 05:01*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 15:47	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 15:47	1
Methane (TCD)	**760**		390	77	39	ug/L		10/20/17 15:47	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**34**	**M**	1.0	1.0	0.40	mg/L		10/17/17 18:15	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U J	3.0	3.0	1.5	ug/L		10/18/17 23:59	1
Iron	75	U J	100	75	25	ug/L		10/18/17 23:59	1
Manganese	**1200**	**J**	5.0	5.0	1.8	ug/L		10/18/17 23:59	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.46**		0.10	0.050	0.019	mg/L		10/16/17 19:26	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**0.90**	**J**	1.0	0.50	0.16	mg/L		10/17/17 04:50	1
Alkalinity	**13**	**B**	5.0	3.2	1.1	mg/L		10/17/17 23:33	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-04-10A-Fall17

Lab Sample ID: 680-144305-2

Date Collected: 10/12/17 10:10
Matrix: Water
Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/26/17 05:23	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:23	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:23	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:23	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/26/17 05:23	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/26/17 05:23	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:23	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/26/17 05:23	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:23	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/26/17 05:23	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:23	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 05:23	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 05:23	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:23	1
cis-1,2-Dichloroethene	**1.2**		1.0	1.0	0.41	ug/L		10/26/17 05:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 05:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/26/17 05:23	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:23	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:23	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:23	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/26/17 05:23	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 05:23	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/26/17 05:23	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 05:23	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:23	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/26/17 05:23	1
1,2-Dichloroethene, Total	**1.2**	**J**	2.0	1.0	0.74	ug/L		10/26/17 05:23	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/26/17 05:23	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 05:23	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:23	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 05:23	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:23	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 05:23	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/26/17 05:23	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:23	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:23	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/26/17 05:23	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/26/17 05:23	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:23	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 05:23	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 05:23	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/26/17 05:23	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:23	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 05:23	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-04-10A-Fall17

Lab Sample ID: 680-144305-2

Date Collected: 10/12/17 10:10
Date Received: 10/14/17 09:59

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/26/17 05:23	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/26/17 05:23	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:23	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:23	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:23	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:23	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:23	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:23	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/26/17 05:23	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 05:23	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/26/17 05:23	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/26/17 05:23	1
Vinyl chloride	**0.81**	**J**	1.0	1.0	0.50	ug/L		10/26/17 05:23	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/26/17 05:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/26/17 05:23*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*10/26/17 05:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*10/26/17 05:23*	*1*
Toluene-d8 (Surr)	*98*		*89 - 112*		*10/26/17 05:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 16:00	1
Ethylene	**3.6**		1.0	1.0	0.50	ug/L		10/20/17 16:00	1
Methane (TCD)	**9200**		390	77	39	ug/L		10/20/17 16:00	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**8.4**	**M**	1.0	1.0	0.40	mg/L		10/17/17 18:33	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**290**		3.0	3.0	1.5	ug/L		10/19/17 00:51	1
Iron	**100000**		100	75	25	ug/L		10/19/17 00:51	1
Manganese	**4600**		5.0	5.0	1.8	ug/L		10/19/17 00:51	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.12**		0.10	0.050	0.019	mg/L		10/16/17 19:28	1
Sulfide	**1.2**		1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**8.4**		1.0	0.50	0.16	mg/L		10/17/17 05:09	1
Alkalinity	**78**	**B**	5.0	3.2	1.1	mg/L		10/17/17 23:27	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-03-02X-Fall17

Lab Sample ID: 680-144305-3

Date Collected: 10/12/17 12:30
Matrix: Water
Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/26/17 05:45	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:45	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:45	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:45	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
2-Butanone (MEK)	**6.4**	**J**	10	10	3.4	ug/L		10/26/17 05:45	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/26/17 05:45	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:45	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/26/17 05:45	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:45	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/26/17 05:45	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:45	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 05:45	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 05:45	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:45	1
cis-1,2-Dichloroethene	**3.5**		1.0	1.0	0.41	ug/L		10/26/17 05:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 05:45	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/26/17 05:45	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:45	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:45	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 05:45	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/26/17 05:45	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 05:45	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/26/17 05:45	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 05:45	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 05:45	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/26/17 05:45	1
1,2-Dichloroethene, Total	**3.5**		2.0	1.0	0.74	ug/L		10/26/17 05:45	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/26/17 05:45	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 05:45	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:45	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 05:45	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:45	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 05:45	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/26/17 05:45	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:45	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:45	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/26/17 05:45	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/26/17 05:45	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 05:45	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 05:45	1
N-Propylbenzene	**0.81**	**J**	1.0	1.0	0.38	ug/L		10/26/17 05:45	1
o-Xylene	**0.30**	**J**	1.0	0.50	0.23	ug/L		10/26/17 05:45	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:45	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 05:45	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-03-02X-Fall17

Date Collected: 10/12/17 12:30
Date Received: 10/14/17 09:59

Lab Sample ID: 680-144305-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 05:45	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/26/17 05:45	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/26/17 05:45	1
Toluene	**11**		1.0	1.0	0.48	ug/L		10/26/17 05:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:45	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 05:45	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 05:45	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 05:45	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 05:45	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 05:45	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/26/17 05:45	1
1,2,4-Trimethylbenzene	**3.9**		1.0	1.0	0.47	ug/L		10/26/17 05:45	1
1,3,5-Trimethylbenzene	**1.2**		1.0	0.50	0.31	ug/L		10/26/17 05:45	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/26/17 05:45	1
Vinyl chloride	**4.0**		1.0	1.0	0.50	ug/L		10/26/17 05:45	1
Xylenes, Total	**0.30**	**J**	2.0	0.50	0.23	ug/L		10/26/17 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*		*10/26/17 05:45*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*10/26/17 05:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*10/26/17 05:45*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*10/26/17 05:45*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 16:12	1
Ethylene	**13**		1.0	1.0	0.50	ug/L		10/20/17 16:12	1
Methane (TCD)	**16000**		390	77	39	ug/L		10/20/17 16:12	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/17/17 20:03	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**250**		3.0	3.0	1.5	ug/L		10/19/17 00:30	1
Iron	**150000**		100	75	25	ug/L		10/19/17 00:30	1
Manganese	**2000**		5.0	5.0	1.8	ug/L		10/19/17 00:30	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.15**		0.10	0.050	0.019	mg/L		10/16/17 19:42	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**21**		1.0	0.50	0.16	mg/L		10/17/17 05:24	1
Alkalinity	**140**	**B**	5.0	3.2	1.1	mg/L		10/17/17 23:22	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-03-01X-Fall17

Lab Sample ID: 680-144305-4

Date Collected: 10/12/17 13:30

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**120**	**D H**	20	20	14	ug/L		10/27/17 01:53	2
Benzene	2.0	U H	2.0	2.0	0.86	ug/L		10/27/17 01:53	2
Bromobenzene	2.0	U H	2.0	2.0	1.0	ug/L		10/27/17 01:53	2
Bromoform	2.0	U H	2.0	2.0	0.86	ug/L		10/27/17 01:53	2
Bromomethane	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
2-Butanone (MEK)	**700**	**D H**	20	20	6.8	ug/L		10/27/17 01:53	2
Carbon disulfide	4.0	U H	4.0	4.0	0.86	ug/L		10/27/17 01:53	2
Carbon tetrachloride	1.0	U H	2.0	1.0	0.66	ug/L		10/27/17 01:53	2
Chlorobenzene	1.0	U H	2.0	1.0	0.52	ug/L		10/27/17 01:53	2
Chlorobromomethane	2.0	U H	2.0	2.0	0.90	ug/L		10/27/17 01:53	2
Chlorodibromomethane	1.0	U H	2.0	1.0	0.64	ug/L		10/27/17 01:53	2
Chloroethane	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
Chloroform	2.0	U H	2.0	2.0	1.0	ug/L		10/27/17 01:53	2
Chloromethane	2.0	U H	2.0	2.0	0.80	ug/L		10/27/17 01:53	2
2-Chlorotoluene	1.0	U H	2.0	1.0	0.54	ug/L		10/27/17 01:53	2
4-Chlorotoluene	2.0	U H	2.0	2.0	0.90	ug/L		10/27/17 01:53	2
cis-1,2-Dichloroethene	**240**	**D H**	2.0	2.0	0.82	ug/L		10/27/17 01:53	2
cis-1,3-Dichloropropene	2.0	U H	2.0	2.0	0.80	ug/L		10/27/17 01:53	2
1,2-Dibromo-3-Chloropropane	4.0	U H	10	4.0	2.2	ug/L		10/27/17 01:53	2
Dibromomethane	2.0	U H	2.0	2.0	0.70	ug/L		10/27/17 01:53	2
1,2-Dichlorobenzene	2.0	U H	2.0	2.0	0.74	ug/L		10/27/17 01:53	2
1,3-Dichlorobenzene	2.0	U H	2.0	2.0	0.86	ug/L		10/27/17 01:53	2
1,4-Dichlorobenzene	2.0	U H	2.0	2.0	0.92	ug/L		10/27/17 01:53	2
Dichlorobromomethane	2.0	U H	2.0	2.0	0.88	ug/L		10/27/17 01:53	2
Dichlorodifluoromethane	2.0	U H	2.0	2.0	1.2	ug/L		10/27/17 01:53	2
1,1-Dichloroethane	2.0	U H	2.0	2.0	0.76	ug/L		10/27/17 01:53	2
1,2-Dichloroethane	2.0	U H	2.0	2.0	1.0	ug/L		10/27/17 01:53	2
1,1-Dichloroethene	2.0	U H	2.0	2.0	0.72	ug/L		10/27/17 01:53	2
1,2-Dichloroethene, Total	**240**	**D H**	4.0	2.0	1.5	ug/L		10/27/17 01:53	2
1,2-Dichloropropane	2.0	U H	2.0	2.0	1.3	ug/L		10/27/17 01:53	2
1,3-Dichloropropane	2.0	U H	2.0	2.0	0.68	ug/L		10/27/17 01:53	2
2,2-Dichloropropane	2.0	U H	2.0	2.0	0.74	ug/L		10/27/17 01:53	2
1,1-Dichloropropene	2.0	U H	2.0	2.0	0.68	ug/L		10/27/17 01:53	2
Ethylbenzene	1.0	U H	2.0	1.0	0.66	ug/L		10/27/17 01:53	2
Ethylene Dibromide	2.0	U H	2.0	2.0	0.88	ug/L		10/27/17 01:53	2
Hexachlorobutadiene	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
2-Hexanone	10	U H	20	10	4.0	ug/L		10/27/17 01:53	2
Isopropylbenzene	2.0	U H	2.0	2.0	0.70	ug/L		10/27/17 01:53	2
4-Isopropyltoluene	2.0	U H	2.0	2.0	0.96	ug/L		10/27/17 01:53	2
Methylene Chloride	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
4-Methyl-2-pentanone (MIBK)	10	U H	20	10	4.2	ug/L		10/27/17 01:53	2
Methyl tert-butyl ether	1.0	U H	20	1.0	0.60	ug/L		10/27/17 01:53	2
m-Xylene & p-Xylene	2.0	U H	2.0	2.0	0.70	ug/L		10/27/17 01:53	2
Naphthalene	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
n-Butylbenzene	2.0	U H	2.0	2.0	0.94	ug/L		10/27/17 01:53	2
N-Propylbenzene	2.0	U H	2.0	2.0	0.76	ug/L		10/27/17 01:53	2
o-Xylene	1.0	U H	2.0	1.0	0.46	ug/L		10/27/17 01:53	2
sec-Butylbenzene	2.0	U H	2.0	2.0	0.84	ug/L		10/27/17 01:53	2
Styrene	1.0	U H	2.0	1.0	0.54	ug/L		10/27/17 01:53	2

Client Sample ID: G6M-03-01X-Fall17

Lab Sample ID: 680-144305-4

Date Collected: 10/12/17 13:30

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	2.0	U H	2.0	2.0	0.90	ug/L		10/27/17 01:53	2
1,1,1,2-Tetrachloroethane	2.0	U H	2.0	2.0	0.74	ug/L		10/27/17 01:53	2
1,1,2,2-Tetrachloroethane	2.0	U H	2.0	2.0	1.2	ug/L		10/27/17 01:53	2
Tetrachloroethene	2.0	U H	2.0	2.0	1.5	ug/L		10/27/17 01:53	2
Toluene	**2.0**	**D H**	2.0	2.0	0.96	ug/L		10/27/17 01:53	2
trans-1,2-Dichloroethene	2.0	U H	2.0	2.0	0.74	ug/L		10/27/17 01:53	2
trans-1,3-Dichloropropene	2.0	U H	2.0	2.0	0.84	ug/L		10/27/17 01:53	2
1,2,3-Trichlorobenzene	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
1,2,4-Trichlorobenzene	10	U H	10	10	5.0	ug/L		10/27/17 01:53	2
1,1,1-Trichloroethane	2.0	U H	2.0	2.0	0.74	ug/L		10/27/17 01:53	2
1,1,2-Trichloroethane	1.0	U H	2.0	1.0	0.66	ug/L		10/27/17 01:53	2
Trichloroethene	**9.7**	**D H**	2.0	2.0	0.96	ug/L		10/27/17 01:53	2
Trichlorofluoromethane	2.0	U H	2.0	2.0	0.84	ug/L		10/27/17 01:53	2
1,2,3-Trichloropropane	2.0	U H	2.0	2.0	0.78	ug/L		10/27/17 01:53	2
1,2,4-Trimethylbenzene	2.0	U H	2.0	2.0	0.94	ug/L		10/27/17 01:53	2
1,3,5-Trimethylbenzene	1.0	U H	2.0	1.0	0.62	ug/L		10/27/17 01:53	2
Vinyl acetate	4.0	U H	4.0	4.0	1.6	ug/L		10/27/17 01:53	2
Vinyl chloride	**160**	**D H**	2.0	2.0	1.0	ug/L		10/27/17 01:53	2
Xylenes, Total	1.0	U H	4.0	1.0	0.46	ug/L		10/27/17 01:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*10/27/17 01:53*	*2*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/27/17 01:53*	*2*
1,2-Dichloroethane-d4 (Surr)	*88*		*81 - 118*		*10/27/17 01:53*	*2*
Toluene-d8 (Surr)	*104*		*89 - 112*		*10/27/17 01:53*	*2*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 16:25	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 16:25	1
Methane (TCD)	**8000**		390	77	39	ug/L		10/20/17 16:25	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**0.50**	**J M**	1.0	1.0	0.40	mg/L		10/17/17 20:39	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**130**		3.0	3.0	1.5	ug/L		10/19/17 00:21	1
Iron	**210000**		100	75	25	ug/L		10/19/17 00:21	1
Manganese	**65000**	**D**	50	50	18	ug/L		10/27/17 12:35	10

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.12**		0.10	0.050	0.019	mg/L		10/16/17 19:44	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**72**		2.0	1.0	0.31	mg/L		10/17/17 05:41	2
Alkalinity	**390**	**B**	5.0	3.2	1.1	mg/L		10/17/17 23:15	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-02-01X-Fall17

Lab Sample ID: 680-144305-5

Date Collected: 10/13/17 09:05
Matrix: Water
Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 00:14	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 00:14	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:14	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 00:14	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 00:14	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 00:14	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 00:14	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 00:14	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 00:14	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 00:14	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:14	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 00:14	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 00:14	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 00:14	1
cis-1,2-Dichloroethene	**0.77**	**J**	1.0	1.0	0.41	ug/L		10/27/17 00:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 00:14	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 00:14	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 00:14	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:14	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 00:14	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 00:14	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 00:14	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 00:14	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 00:14	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:14	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 00:14	1
1,2-Dichloroethene, Total	**0.77**	**J**	2.0	1.0	0.74	ug/L		10/27/17 00:14	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 00:14	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 00:14	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:14	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 00:14	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 00:14	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 00:14	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 00:14	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 00:14	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 00:14	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 00:14	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 00:14	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 00:14	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 00:14	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 00:14	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 00:14	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 00:14	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 00:14	1

Client Sample ID: G6M-02-01X-Fall17

Lab Sample ID: 680-144305-5

Date Collected: 10/13/17 09:05

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 00:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 00:14	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 00:14	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 00:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 00:14	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:14	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:14	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 00:14	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 00:14	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 00:14	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 00:14	1
1,2,4-Trimethylbenzene	**0.87**	**J**	1.0	1.0	0.47	ug/L		10/27/17 00:14	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 00:14	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 00:14	1
Vinyl chloride	**0.52**	**J M**	1.0	1.0	0.50	ug/L		10/27/17 00:14	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/27/17 00:14*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 119*		*10/27/17 00:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*81 - 118*		*10/27/17 00:14*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*10/27/17 00:14*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 16:38	1
Ethylene	**3.8**		1.0	1.0	0.50	ug/L		10/20/17 16:38	1
Methane (TCD)	**12000**		390	77	39	ug/L		10/20/17 16:38	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**0.57**	**J M**	1.0	1.0	0.40	mg/L		10/17/17 20:57	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**400**		3.0	3.0	1.5	ug/L		10/19/17 00:43	1
Iron	**76000**		100	75	25	ug/L		10/19/17 00:43	1
Manganese	**1300**		5.0	5.0	1.8	ug/L		10/19/17 00:43	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.10**		0.10	0.050	0.019	mg/L		10/16/17 19:46	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**3.3**		1.0	0.50	0.16	mg/L		10/17/17 06:25	1
Alkalinity	**64**		5.0	3.2	1.1	mg/L		10/17/17 23:38	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: DUP-05-Fall17

Lab Sample ID: 680-144305-6

Date Collected: 10/13/17 09:10

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 16:41	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 16:41	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:41	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 16:41	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 16:41	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 16:41	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 16:41	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 16:41	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 16:41	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 16:41	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:41	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 16:41	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 16:41	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 16:41	1
cis-1,2-Dichloroethene	**0.83**	**J**	1.0	1.0	0.41	ug/L		10/27/17 16:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 16:41	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 16:41	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 16:41	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:41	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 16:41	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 16:41	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 16:41	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 16:41	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 16:41	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:41	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 16:41	1
1,2-Dichloroethene, Total	**0.83**	**J**	2.0	1.0	0.74	ug/L		10/27/17 16:41	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 16:41	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 16:41	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:41	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 16:41	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 16:41	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 16:41	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 16:41	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 16:41	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 16:41	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 16:41	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 16:41	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 16:41	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 16:41	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 16:41	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 16:41	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 16:41	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 16:41	1

Client Sample ID: DUP-05-Fall17

Lab Sample ID: 680-144305-6

Date Collected: 10/13/17 09:10

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 16:41	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 16:41	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 16:41	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 16:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 16:41	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:41	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:41	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 16:41	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 16:41	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 16:41	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 16:41	1
1,2,4-Trimethylbenzene	**0.90**	**J**	1.0	1.0	0.47	ug/L		10/27/17 16:41	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 16:41	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 16:41	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:41	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*85 - 114*		*10/27/17 16:41*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*10/27/17 16:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*10/27/17 16:41*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*10/27/17 16:41*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 16:50	1
Ethylene	**4.4**		1.0	1.0	0.50	ug/L		10/20/17 16:50	1
Methane (TCD)	**13000**		390	77	39	ug/L		10/20/17 16:50	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**0.61**	**J M**	1.0	1.0	0.40	mg/L		10/17/17 21:15	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**400**		3.0	3.0	1.5	ug/L		10/19/17 00:25	1
Iron	**76000**		100	75	25	ug/L		10/19/17 00:25	1
Manganese	**1300**		5.0	5.0	1.8	ug/L		10/19/17 00:25	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.11**		0.10	0.050	0.019	mg/L		10/16/17 19:48	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/17/17 04:39	1
Total Organic Carbon - Duplicates	**3.3**		1.0	0.50	0.16	mg/L		10/17/17 06:40	1
Alkalinity	**71**	**B**	5.0	3.2	1.1	mg/L		10/18/17 12:38	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-04-01X-Fall17
Date Collected: 10/13/17 11:30
Date Received: 10/14/17 09:59

Lab Sample ID: 680-144305-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 00:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 00:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 00:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 00:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 00:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 00:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 00:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 00:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 00:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 00:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 00:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 00:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/27/17 00:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 00:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 00:39	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 00:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 00:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 00:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 00:39	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 00:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 00:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:39	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 00:39	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/27/17 00:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 00:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 00:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:39	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 00:39	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 00:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 00:39	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 00:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 00:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 00:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 00:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 00:39	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 00:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 00:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 00:39	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 00:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 00:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 00:39	1

Client Sample ID: G6M-04-01X-Fall17

Lab Sample ID: 680-144305-7

Date Collected: 10/13/17 11:30

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 00:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 00:39	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 00:39	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 00:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 00:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 00:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 00:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 00:39	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 00:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 00:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 00:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 00:39	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 00:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 00:39	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 00:39	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*10/27/17 00:39*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 119*		*10/27/17 00:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*81 - 118*		*10/27/17 00:39*	*1*
Toluene-d8 (Surr)	*108*		*89 - 112*		*10/27/17 00:39*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**450**		3.0	3.0	1.5	ug/L		10/19/17 00:47	1
Iron	**81000**		100	75	25	ug/L		10/19/17 00:47	1
Manganese	**18000**	**D**	50	50	18	ug/L		10/27/17 12:40	10

Client Sample ID: Trip Blank

Lab Sample ID: 680-144305-8

Date Collected: 10/12/17 00:00

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/25/17 23:51	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/25/17 23:51	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 23:51	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/25/17 23:51	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/25/17 23:51	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/25/17 23:51	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/25/17 23:51	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/25/17 23:51	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/25/17 23:51	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/25/17 23:51	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1

Client Sample ID: Trip Blank
Date Collected: 10/12/17 00:00
Date Received: 10/14/17 09:59

Lab Sample ID: 680-144305-8
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 23:51	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/25/17 23:51	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/25/17 23:51	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/25/17 23:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/25/17 23:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/25/17 23:51	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/25/17 23:51	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/25/17 23:51	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 23:51	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/25/17 23:51	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/25/17 23:51	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/25/17 23:51	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/25/17 23:51	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/25/17 23:51	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 23:51	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/25/17 23:51	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/25/17 23:51	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/25/17 23:51	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/25/17 23:51	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 23:51	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/25/17 23:51	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/25/17 23:51	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/25/17 23:51	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/25/17 23:51	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/25/17 23:51	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/25/17 23:51	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/25/17 23:51	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/25/17 23:51	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/25/17 23:51	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/25/17 23:51	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/25/17 23:51	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/25/17 23:51	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/25/17 23:51	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/25/17 23:51	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/25/17 23:51	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 23:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/25/17 23:51	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/25/17 23:51	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/25/17 23:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 23:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/25/17 23:51	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 23:51	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 23:51	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/25/17 23:51	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/25/17 23:51	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144305-8

Date Collected: 10/12/17 00:00

Matrix: Water

Date Received: 10/14/17 09:59

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/25/17 23:51	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/25/17 23:51	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/25/17 23:51	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/25/17 23:51	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/25/17 23:51	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 23:51	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/25/17 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/25/17 23:51*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 119*		*10/25/17 23:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/25/17 23:51*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*10/25/17 23:51*	*1*

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-144305-1	G6M-04-10X-Fall17	91	96	93	101
680-144305-2	G6M-04-10A-Fall17	92	97	93	98
680-144305-3	G6M-03-02X-Fall17	91	97	93	99
680-144305-4	G6M-03-01X-Fall17	95	93	88	104
680-144305-5	G6M-02-01X-Fall17	92	90	83	106
680-144305-6	DUP-05-Fall17	103	103	101	104
680-144305-7	G6M-04-01X-Fall17	95	94	87	108
680-144305-8	Trip Blank	93	96	92	100
LCS 680-500012/6	Lab Control Sample	93	101	95	98
LCS 680-500177/4	Lab Control Sample	90	97	89	102
LCS 680-500257/4	Lab Control Sample	104	106	103	106
LCSD 680-500012/7	Lab Control Sample Dup	95	100	94	97
LCSD 680-500177/5	Lab Control Sample Dup	91	96	89	102
LCSD 680-500257/6	Lab Control Sample Dup	101	106	106	106
MB 680-500012/11	Method Blank	93	93	92	100
MB 680-500177/9	Method Blank	94	89	83	107
MB 680-500257/9	Method Blank	106	105	103	104

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-500012/11
Matrix: Water
Analysis Batch: 500012

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/25/17 22:45	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/25/17 22:45	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 22:45	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/25/17 22:45	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/25/17 22:45	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/25/17 22:45	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/25/17 22:45	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/25/17 22:45	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/25/17 22:45	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/25/17 22:45	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 22:45	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/25/17 22:45	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/25/17 22:45	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/25/17 22:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/25/17 22:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/25/17 22:45	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/25/17 22:45	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/25/17 22:45	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 22:45	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/25/17 22:45	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/25/17 22:45	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/25/17 22:45	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/25/17 22:45	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/25/17 22:45	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 22:45	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/25/17 22:45	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/25/17 22:45	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/25/17 22:45	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/25/17 22:45	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 22:45	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/25/17 22:45	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/25/17 22:45	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/25/17 22:45	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/25/17 22:45	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/25/17 22:45	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/25/17 22:45	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/25/17 22:45	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/25/17 22:45	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/25/17 22:45	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/25/17 22:45	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/25/17 22:45	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/25/17 22:45	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/25/17 22:45	1

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

Lab Sample ID: MB 680-500012/11
Matrix: Water
Analysis Batch: 500012

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/25/17 22:45	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/25/17 22:45	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 22:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/25/17 22:45	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/25/17 22:45	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/25/17 22:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 22:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/25/17 22:45	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/25/17 22:45	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/25/17 22:45	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/25/17 22:45	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/25/17 22:45	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/25/17 22:45	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/25/17 22:45	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/25/17 22:45	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/25/17 22:45	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/25/17 22:45	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 22:45	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/25/17 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/25/17 22:45*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 119*		*10/25/17 22:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/25/17 22:45*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*10/25/17 22:45*	*1*

Lab Sample ID: LCS 680-500012/6
Matrix: Water
Analysis Batch: 500012

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	239		ug/L		96	39 - 160
Benzene	50.0	51.7		ug/L		103	79 - 120
Bromobenzene	50.0	51.3		ug/L		103	80 - 120
Bromoform	50.0	51.1		ug/L		102	66 - 130
Bromomethane	50.0	57.2		ug/L		114	53 - 141
2-Butanone (MEK)	250	250		ug/L		100	56 - 143
Carbon disulfide	50.0	52.1		ug/L		104	64 - 133
Carbon tetrachloride	50.0	51.4		ug/L		103	72 - 136
Chlorobenzene	50.0	50.8		ug/L		102	82 - 118
Chlorobromomethane	50.0	51.2		ug/L		102	78 - 123
Chlorodibromomethane	50.0	49.6		ug/L		99	74 - 126
Chloroethane	50.0	54.7		ug/L		109	60 - 138
Chloroform	50.0	51.4		ug/L		103	79 - 124
Chloromethane	50.0	52.5		ug/L		105	50 - 139
2-Chlorotoluene	50.0	51.8		ug/L		104	79 - 122
4-Chlorotoluene	50.0	52.3		ug/L		105	78 - 122

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

Lab Sample ID: LCS 680-500012/6
Matrix: Water
Analysis Batch: 500012

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	50.0	51.5		ug/L		103	78 - 123
cis-1,3-Dichloropropene	50.0	56.6		ug/L		113	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	55.2		ug/L		110	62 - 128
Dibromomethane	50.0	51.5		ug/L		103	79 - 123
1,2-Dichlorobenzene	50.0	49.9		ug/L		100	80 - 119
1,3-Dichlorobenzene	50.0	49.9		ug/L		100	80 - 119
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	79 - 118
Dichlorobromomethane	50.0	55.1		ug/L		110	79 - 125
Dichlorodifluoromethane	50.0	54.2		ug/L		108	32 - 152
1,1-Dichloroethane	50.0	50.7		ug/L		101	77 - 125
1,2-Dichloroethane	50.0	49.5		ug/L		99	73 - 128
1,1-Dichloroethene	50.0	51.4		ug/L		103	71 - 131
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121
1,2-Dichloropropane	50.0	51.8		ug/L		104	78 - 122
1,3-Dichloropropane	50.0	50.0		ug/L		100	80 - 119
2,2-Dichloropropane	50.0	58.6		ug/L		117	60 - 139
1,1-Dichloropropene	50.0	54.8		ug/L		110	79 - 125
Ethylbenzene	50.0	51.6		ug/L		103	79 - 121
Ethylene Dibromide	50.0	52.6		ug/L		105	75 - 127
Hexachlorobutadiene	50.0	59.7		ug/L		119	66 - 134
2-Hexanone	250	271		ug/L		109	57 - 139
Isopropylbenzene	50.0	53.6		ug/L		107	72 - 131
4-Isopropyltoluene	50.0	53.8		ug/L		108	77 - 127
Methylene Chloride	50.0	51.1		ug/L		102	74 - 124
4-Methyl-2-pentanone (MIBK)	250	267		ug/L		107	67 - 130
Methyl tert-butyl ether	50.0	51.1		ug/L		102	71 - 124
m-Xylene & p-Xylene	50.0	52.6		ug/L		105	80 - 121
Naphthalene	50.0	47.3		ug/L		95	61 - 128
n-Butylbenzene	50.0	57.6		ug/L		115	75 - 128
N-Propylbenzene	50.0	54.6		ug/L		109	76 - 126
o-Xylene	50.0	52.2		ug/L		104	78 - 122
sec-Butylbenzene	50.0	54.9		ug/L		110	77 - 126
Styrene	50.0	51.9		ug/L		104	78 - 123
tert-Butylbenzene	50.0	53.7		ug/L		107	78 - 124
1,1,1,2-Tetrachloroethane	50.0	52.2		ug/L		104	78 - 124
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	71 - 121
Tetrachloroethene	50.0	53.9		ug/L		108	74 - 129
Toluene	50.0	52.1		ug/L		104	80 - 121
trans-1,2-Dichloroethene	50.0	53.7		ug/L		107	75 - 124
trans-1,3-Dichloropropene	50.0	55.6		ug/L		111	73 - 127
1,2,3-Trichlorobenzene	50.0	50.3		ug/L		101	69 - 129
1,2,4-Trichlorobenzene	50.0	50.7		ug/L		101	69 - 130
1,1,1-Trichloroethane	50.0	53.5		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	52.4		ug/L		105	80 - 119
Trichloroethene	50.0	51.9		ug/L		104	79 - 123
Trichlorofluoromethane	50.0	54.8		ug/L		110	65 - 141
1,2,3-Trichloropropane	50.0	55.4		ug/L		111	73 - 122
1,2,4-Trimethylbenzene	50.0	52.8		ug/L		106	76 - 124

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

Lab Sample ID: LCS 680-500012/6
Matrix: Water
Analysis Batch: 500012

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	53.7		ug/L		107	75 - 124
Vinyl acetate	100	122		ug/L		122	54 - 146
Vinyl chloride	50.0	54.1		ug/L		108	58 - 137
Xylenes, Total	100	105		ug/L		105	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
Toluene-d8 (Surr)	*98*		*89 - 112*

Lab Sample ID: LCSD 680-500012/7
Matrix: Water
Analysis Batch: 500012

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	250	250		ug/L		100	39 - 160	4	20
Benzene	50.0	51.5		ug/L		103	79 - 120	1	20
Bromobenzene	50.0	51.0		ug/L		102	80 - 120	1	20
Bromoform	50.0	51.3		ug/L		103	66 - 130	0	20
Bromomethane	50.0	56.3		ug/L		113	53 - 141	2	20
2-Butanone (MEK)	250	250		ug/L		100	56 - 143	0	20
Carbon disulfide	50.0	52.3		ug/L		105	64 - 133	0	20
Carbon tetrachloride	50.0	51.2		ug/L		102	72 - 136	0	20
Chlorobenzene	50.0	49.8		ug/L		100	82 - 118	2	20
Chlorobromomethane	50.0	51.0		ug/L		102	78 - 123	0	20
Chlorodibromomethane	50.0	49.1		ug/L		98	74 - 126	1	20
Chloroethane	50.0	54.4		ug/L		109	60 - 138	1	20
Chloroform	50.0	50.8		ug/L		102	79 - 124	1	20
Chloromethane	50.0	51.6		ug/L		103	50 - 139	2	20
2-Chlorotoluene	50.0	51.3		ug/L		103	79 - 122	1	20
4-Chlorotoluene	50.0	51.7		ug/L		103	78 - 122	1	20
cis-1,2-Dichloroethene	50.0	51.2		ug/L		102	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	56.0		ug/L		112	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	56.7		ug/L		113	62 - 128	3	20
Dibromomethane	50.0	50.3		ug/L		101	79 - 123	2	20
1,2-Dichlorobenzene	50.0	49.7		ug/L		99	80 - 119	0	20
1,3-Dichlorobenzene	50.0	50.2		ug/L		100	80 - 119	1	20
1,4-Dichlorobenzene	50.0	50.2		ug/L		100	79 - 118	0	20
Dichlorobromomethane	50.0	54.2		ug/L		108	79 - 125	2	20
Dichlorodifluoromethane	50.0	53.5		ug/L		107	32 - 152	1	20
1,1-Dichloroethane	50.0	50.6		ug/L		101	77 - 125	0	20
1,2-Dichloroethane	50.0	48.9		ug/L		98	73 - 128	1	20
1,1-Dichloroethene	50.0	50.3		ug/L		101	71 - 131	2	20
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121	0	20
1,2-Dichloropropane	50.0	51.2		ug/L		102	78 - 122	1	20
1,3-Dichloropropane	50.0	48.5		ug/L		97	80 - 119	3	20
2,2-Dichloropropane	50.0	58.2		ug/L		116	60 - 139	1	20

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

Lab Sample ID: LCSD 680-500012/7
Matrix: Water
Analysis Batch: 500012

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-Dichloropropene	50.0	54.7		ug/L		109	79 - 125	0	20
Ethylbenzene	50.0	51.2		ug/L		102	79 - 121	1	20
Ethylene Dibromide	50.0	51.7		ug/L		103	75 - 127	2	20
Hexachlorobutadiene	50.0	56.0		ug/L		112	66 - 134	6	20
2-Hexanone	250	267		ug/L		107	57 - 139	2	20
Isopropylbenzene	50.0	53.0		ug/L		106	72 - 131	1	20
4-Isopropyltoluene	50.0	53.6		ug/L		107	77 - 127	0	20
Methylene Chloride	50.0	51.2		ug/L		102	74 - 124	0	20
4-Methyl-2-pentanone (MIBK)	250	264		ug/L		106	67 - 130	1	20
Methyl tert-butyl ether	50.0	51.3		ug/L		103	71 - 124	0	20
m-Xylene & p-Xylene	50.0	52.3		ug/L		105	80 - 121	1	20
Naphthalene	50.0	48.1		ug/L		96	61 - 128	2	20
n-Butylbenzene	50.0	56.1		ug/L		112	75 - 128	3	20
N-Propylbenzene	50.0	53.8		ug/L		108	76 - 126	1	20
o-Xylene	50.0	51.6		ug/L		103	78 - 122	1	20
sec-Butylbenzene	50.0	53.0		ug/L		106	77 - 126	4	20
Styrene	50.0	51.0		ug/L		102	78 - 123	2	20
tert-Butylbenzene	50.0	52.2		ug/L		104	78 - 124	3	20
1,1,1,2-Tetrachloroethane	50.0	51.5		ug/L		103	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	71 - 121	1	20
Tetrachloroethene	50.0	52.5		ug/L		105	74 - 129	3	20
Toluene	50.0	51.2		ug/L		102	80 - 121	2	20
trans-1,2-Dichloroethene	50.0	54.1		ug/L		108	75 - 124	1	20
trans-1,3-Dichloropropene	50.0	54.8		ug/L		110	73 - 127	1	20
1,2,3-Trichlorobenzene	50.0	48.3		ug/L		97	69 - 129	4	20
1,2,4-Trichlorobenzene	50.0	49.0		ug/L		98	69 - 130	3	20
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	74 - 131	0	20
1,1,2-Trichloroethane	50.0	50.6		ug/L		101	80 - 119	3	20
Trichloroethene	50.0	51.4		ug/L		103	79 - 123	1	20
Trichlorofluoromethane	50.0	54.5		ug/L		109	65 - 141	1	20
1,2,3-Trichloropropane	50.0	55.1		ug/L		110	73 - 122	1	20
1,2,4-Trimethylbenzene	50.0	52.0		ug/L		104	76 - 124	2	20
1,3,5-Trimethylbenzene	50.0	53.1		ug/L		106	75 - 124	1	20
Vinyl acetate	100	123		ug/L		123	54 - 146	1	20
Vinyl chloride	50.0	53.5		ug/L		107	58 - 137	1	20
Xylenes, Total	100	104		ug/L		104	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*94*		*81 - 118*
Toluene-d8 (Surr)	*97*		*89 - 112*

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

Lab Sample ID: MB 680-500177/9
Matrix: Water
Analysis Batch: 500177

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/26/17 19:17	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 19:17	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 19:17	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 19:17	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/26/17 19:17	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/26/17 19:17	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 19:17	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/26/17 19:17	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 19:17	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/26/17 19:17	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 19:17	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 19:17	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 19:17	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 19:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/26/17 19:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/26/17 19:17	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/26/17 19:17	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 19:17	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 19:17	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/26/17 19:17	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/26/17 19:17	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 19:17	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/26/17 19:17	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 19:17	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 19:17	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/26/17 19:17	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/26/17 19:17	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/26/17 19:17	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 19:17	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 19:17	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/26/17 19:17	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 19:17	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/26/17 19:17	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/26/17 19:17	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 19:17	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 19:17	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/26/17 19:17	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/26/17 19:17	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/26/17 19:17	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 19:17	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/26/17 19:17	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/26/17 19:17	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 19:17	1

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

Lab Sample ID: MB 680-500177/9
Matrix: Water
Analysis Batch: 500177

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/26/17 19:17	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/26/17 19:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 19:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/26/17 19:17	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/26/17 19:17	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 19:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 19:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 19:17	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/26/17 19:17	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/26/17 19:17	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/26/17 19:17	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/26/17 19:17	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/26/17 19:17	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/26/17 19:17	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/26/17 19:17	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/26/17 19:17	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/26/17 19:17	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 19:17	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/26/17 19:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/26/17 19:17*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 119*		*10/26/17 19:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*81 - 118*		*10/26/17 19:17*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/26/17 19:17*	*1*

Lab Sample ID: LCS 680-500177/4
Matrix: Water
Analysis Batch: 500177

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	253		ug/L		101	39 - 160
Benzene	50.0	51.3		ug/L		103	79 - 120
Bromobenzene	50.0	52.0		ug/L		104	80 - 120
Bromoform	50.0	48.2		ug/L		96	66 - 130
Bromomethane	50.0	60.6		ug/L		121	53 - 141
2-Butanone (MEK)	250	263		ug/L		105	56 - 143
Carbon disulfide	50.0	47.5		ug/L		95	64 - 133
Carbon tetrachloride	50.0	47.2		ug/L		94	72 - 136
Chlorobenzene	50.0	50.8		ug/L		102	82 - 118
Chlorobromomethane	50.0	50.3		ug/L		101	78 - 123
Chlorodibromomethane	50.0	48.8		ug/L		98	74 - 126
Chloroethane	50.0	54.4		ug/L		109	60 - 138
Chloroform	50.0	49.1		ug/L		98	79 - 124
Chloromethane	50.0	46.4		ug/L		93	50 - 139
2-Chlorotoluene	50.0	49.7		ug/L		99	79 - 122
4-Chlorotoluene	50.0	50.8		ug/L		102	78 - 122

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

Lab Sample ID: LCS 680-500177/4
Matrix: Water
Analysis Batch: 500177

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	50.0	48.6		ug/L		97	78 - 123
cis-1,3-Dichloropropene	50.0	49.1		ug/L		98	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/L		96	62 - 128
Dibromomethane	50.0	50.4		ug/L		101	79 - 123
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	80 - 119
1,3-Dichlorobenzene	50.0	47.9		ug/L		96	80 - 119
1,4-Dichlorobenzene	50.0	48.0		ug/L		96	79 - 118
Dichlorobromomethane	50.0	48.4		ug/L		97	79 - 125
Dichlorodifluoromethane	50.0	51.5		ug/L		103	32 - 152
1,1-Dichloroethane	50.0	49.6		ug/L		99	77 - 125
1,2-Dichloroethane	50.0	48.4		ug/L		97	73 - 128
1,1-Dichloroethene	50.0	50.5		ug/L		101	71 - 131
1,2-Dichloroethene, Total	100	100		ug/L		100	79 - 121
1,2-Dichloropropane	50.0	50.9		ug/L		102	78 - 122
1,3-Dichloropropane	50.0	52.1		ug/L		104	80 - 119
2,2-Dichloropropane	50.0	50.4		ug/L		101	60 - 139
1,1-Dichloropropene	50.0	49.5		ug/L		99	79 - 125
Ethylbenzene	50.0	50.5		ug/L		101	79 - 121
Ethylene Dibromide	50.0	49.7		ug/L		99	75 - 127
Hexachlorobutadiene	50.0	58.8		ug/L		118	66 - 134
2-Hexanone	250	233		ug/L		93	57 - 139
Isopropylbenzene	50.0	50.9		ug/L		102	72 - 131
4-Isopropyltoluene	50.0	50.6		ug/L		101	77 - 127
Methylene Chloride	50.0	51.7		ug/L		103	74 - 124
4-Methyl-2-pentanone (MIBK)	250	229		ug/L		92	67 - 130
Methyl tert-butyl ether	50.0	50.8		ug/L		102	71 - 124
m-Xylene & p-Xylene	50.0	51.3		ug/L		103	80 - 121
Naphthalene	50.0	47.3		ug/L		95	61 - 128
n-Butylbenzene	50.0	51.9		ug/L		104	75 - 128
N-Propylbenzene	50.0	50.7		ug/L		101	76 - 126
o-Xylene	50.0	49.9		ug/L		100	78 - 122
sec-Butylbenzene	50.0	54.6		ug/L		109	77 - 126
Styrene	50.0	51.6		ug/L		103	78 - 123
tert-Butylbenzene	50.0	52.9		ug/L		106	78 - 124
1,1,1,2-Tetrachloroethane	50.0	50.6		ug/L		101	78 - 124
1,1,2,2-Tetrachloroethane	50.0	52.3		ug/L		105	71 - 121
Tetrachloroethene	50.0	50.7		ug/L		101	74 - 129
Toluene	50.0	50.8		ug/L		102	80 - 121
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	75 - 124
trans-1,3-Dichloropropene	50.0	48.5		ug/L		97	73 - 127
1,2,3-Trichlorobenzene	50.0	49.8		ug/L		100	69 - 129
1,2,4-Trichlorobenzene	50.0	49.2		ug/L		98	69 - 130
1,1,1-Trichloroethane	50.0	48.3		ug/L		97	74 - 131
1,1,2-Trichloroethane	50.0	52.2		ug/L		104	80 - 119
Trichloroethene	50.0	49.3		ug/L		99	79 - 123
Trichlorofluoromethane	50.0	50.7		ug/L		101	65 - 141
1,2,3-Trichloropropane	50.0	51.8		ug/L		104	73 - 122
1,2,4-Trimethylbenzene	50.0	51.9		ug/L		104	76 - 124

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

Lab Sample ID: LCS 680-500177/4
Matrix: Water
Analysis Batch: 500177

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	51.3		ug/L		103	75 - 124
Vinyl acetate	100	95.0		ug/L		95	54 - 146
Vinyl chloride	50.0	50.8		ug/L		102	58 - 137
Xylenes, Total	100	101		ug/L		101	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*85 - 114*
Dibromofluoromethane (Surr)	*97*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*89*		*81 - 118*
Toluene-d8 (Surr)	*102*		*89 - 112*

Lab Sample ID: LCSD 680-500177/5
Matrix: Water
Analysis Batch: 500177

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	250	251		ug/L		101	39 - 160	1	20
Benzene	50.0	51.1		ug/L		102	79 - 120	0	20
Bromobenzene	50.0	52.6		ug/L		105	80 - 120	1	20
Bromoform	50.0	49.9		ug/L		100	66 - 130	3	20
Bromomethane	50.0	61.7		ug/L		123	53 - 141	2	20
2-Butanone (MEK)	250	260		ug/L		104	56 - 143	1	20
Carbon disulfide	50.0	47.6		ug/L		95	64 - 133	0	20
Carbon tetrachloride	50.0	47.0		ug/L		94	72 - 136	0	20
Chlorobenzene	50.0	50.8		ug/L		102	82 - 118	0	20
Chlorobromomethane	50.0	50.1		ug/L		100	78 - 123	1	20
Chlorodibromomethane	50.0	47.9		ug/L		96	74 - 126	2	20
Chloroethane	50.0	52.4		ug/L		105	60 - 138	4	20
Chloroform	50.0	49.3		ug/L		99	79 - 124	0	20
Chloromethane	50.0	46.0		ug/L		92	50 - 139	1	20
2-Chlorotoluene	50.0	50.6		ug/L		101	79 - 122	2	20
4-Chlorotoluene	50.0	51.6		ug/L		103	78 - 122	2	20
cis-1,2-Dichloroethene	50.0	49.2		ug/L		98	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	49.4		ug/L		99	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	50.3		ug/L		101	62 - 128	4	20
Dibromomethane	50.0	50.2		ug/L		100	79 - 123	0	20
1,2-Dichlorobenzene	50.0	49.2		ug/L		98	80 - 119	2	20
1,3-Dichlorobenzene	50.0	48.4		ug/L		97	80 - 119	1	20
1,4-Dichlorobenzene	50.0	49.5		ug/L		99	79 - 118	3	20
Dichlorobromomethane	50.0	48.6		ug/L		97	79 - 125	0	20
Dichlorodifluoromethane	50.0	51.6		ug/L		103	32 - 152	0	20
1,1-Dichloroethane	50.0	49.5		ug/L		99	77 - 125	0	20
1,2-Dichloroethane	50.0	48.6		ug/L		97	73 - 128	0	20
1,1-Dichloroethene	50.0	50.3		ug/L		101	71 - 131	0	20
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121	0	20
1,2-Dichloropropane	50.0	51.1		ug/L		102	78 - 122	0	20
1,3-Dichloropropane	50.0	51.9		ug/L		104	80 - 119	0	20
2,2-Dichloropropane	50.0	49.5		ug/L		99	60 - 139	2	20

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

Lab Sample ID: LCSD 680-500177/5
Matrix: Water
Analysis Batch: 500177

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-Dichloropropene	50.0	48.4		ug/L		97	79 - 125	2	20
Ethylbenzene	50.0	51.1		ug/L		102	79 - 121	1	20
Ethylene Dibromide	50.0	49.6		ug/L		99	75 - 127	0	20
Hexachlorobutadiene	50.0	60.2		ug/L		120	66 - 134	2	20
2-Hexanone	250	232		ug/L		93	57 - 139	0	20
Isopropylbenzene	50.0	51.3		ug/L		103	72 - 131	1	20
4-Isopropyltoluene	50.0	51.9		ug/L		104	77 - 127	2	20
Methylene Chloride	50.0	51.2		ug/L		102	74 - 124	1	20
4-Methyl-2-pentanone (MIBK)	250	230		ug/L		92	67 - 130	0	20
Methyl tert-butyl ether	50.0	50.7		ug/L		101	71 - 124	0	20
m-Xylene & p-Xylene	50.0	50.6		ug/L		101	80 - 121	1	20
Naphthalene	50.0	48.7		ug/L		97	61 - 128	3	20
n-Butylbenzene	50.0	54.2		ug/L		108	75 - 128	4	20
N-Propylbenzene	50.0	51.4		ug/L		103	76 - 126	1	20
o-Xylene	50.0	51.2		ug/L		102	78 - 122	3	20
sec-Butylbenzene	50.0	54.9		ug/L		110	77 - 126	1	20
Styrene	50.0	52.4		ug/L		105	78 - 123	2	20
tert-Butylbenzene	50.0	52.5		ug/L		105	78 - 124	1	20
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/L		102	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	54.0		ug/L		108	71 - 121	3	20
Tetrachloroethene	50.0	50.7		ug/L		101	74 - 129	0	20
Toluene	50.0	50.0		ug/L		100	80 - 121	2	20
trans-1,2-Dichloroethene	50.0	51.6		ug/L		103	75 - 124	0	20
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	73 - 127	2	20
1,2,3-Trichlorobenzene	50.0	52.2		ug/L		104	69 - 129	5	20
1,2,4-Trichlorobenzene	50.0	51.1		ug/L		102	69 - 130	4	20
1,1,1-Trichloroethane	50.0	48.2		ug/L		96	74 - 131	0	20
1,1,2-Trichloroethane	50.0	51.4		ug/L		103	80 - 119	2	20
Trichloroethene	50.0	48.5		ug/L		97	79 - 123	2	20
Trichlorofluoromethane	50.0	49.5		ug/L		99	65 - 141	2	20
1,2,3-Trichloropropane	50.0	52.4		ug/L		105	73 - 122	1	20
1,2,4-Trimethylbenzene	50.0	52.2		ug/L		104	76 - 124	1	20
1,3,5-Trimethylbenzene	50.0	51.9		ug/L		104	75 - 124	1	20
Vinyl acetate	100	94.6		ug/L		95	54 - 146	1	20
Vinyl chloride	50.0	50.3		ug/L		101	58 - 137	1	20
Xylenes, Total	100	102		ug/L		102	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*
Dibromofluoromethane (Surr)	*96*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*89*		*81 - 118*
Toluene-d8 (Surr)	*102*		*89 - 112*

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

Lab Sample ID: MB 680-500257/9
Matrix: Water
Analysis Batch: 500257

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 15:18	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:18	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:18	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:18	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 15:18	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 15:18	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:18	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 15:18	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:18	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 15:18	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:18	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 15:18	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 15:18	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/27/17 15:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 15:18	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 15:18	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:18	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:18	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:18	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 15:18	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 15:18	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 15:18	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 15:18	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:18	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 15:18	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/27/17 15:18	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 15:18	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 15:18	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:18	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 15:18	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:18	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 15:18	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 15:18	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:18	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:18	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 15:18	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 15:18	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:18	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 15:18	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 15:18	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 15:18	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:18	1

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

Lab Sample ID: MB 680-500257/9
Matrix: Water
Analysis Batch: 500257

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 15:18	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:18	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 15:18	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 15:18	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:18	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:18	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:18	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:18	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:18	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:18	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 15:18	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 15:18	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 15:18	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 15:18	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:18	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 15:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*85 - 114*		*10/27/17 15:18*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 119*		*10/27/17 15:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*81 - 118*		*10/27/17 15:18*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*10/27/17 15:18*	*1*

Lab Sample ID: LCS 680-500257/4
Matrix: Water
Analysis Batch: 500257

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	256		ug/L		102	39 - 160
Benzene	50.0	53.2		ug/L		106	79 - 120
Bromobenzene	50.0	51.4		ug/L		103	80 - 120
Bromoform	50.0	47.1		ug/L		94	66 - 130
Bromomethane	50.0	48.6		ug/L		97	53 - 141
2-Butanone (MEK)	250	266		ug/L		106	56 - 143
Carbon disulfide	50.0	50.2		ug/L		100	64 - 133
Carbon tetrachloride	50.0	48.0		ug/L		96	72 - 136
Chlorobenzene	50.0	52.1		ug/L		104	82 - 118
Chlorobromomethane	50.0	51.4		ug/L		103	78 - 123
Chlorodibromomethane	50.0	47.5		ug/L		95	74 - 126
Chloroethane	50.0	52.6		ug/L		105	60 - 138
Chloroform	50.0	52.1		ug/L		104	79 - 124
Chloromethane	50.0	53.9		ug/L		108	50 - 139
2-Chlorotoluene	50.0	52.5		ug/L		105	79 - 122
4-Chlorotoluene	50.0	52.6		ug/L		105	78 - 122

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

Lab Sample ID: LCS 680-500257/4
Matrix: Water
Analysis Batch: 500257

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	50.0	53.3		ug/L		107	78 - 123
cis-1,3-Dichloropropene	50.0	54.7		ug/L		109	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	50.7		ug/L		101	62 - 128
Dibromomethane	50.0	52.3		ug/L		105	79 - 123
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	80 - 119
1,3-Dichlorobenzene	50.0	52.0		ug/L		104	80 - 119
1,4-Dichlorobenzene	50.0	51.5		ug/L		103	79 - 118
Dichlorobromomethane	50.0	49.5		ug/L		99	79 - 125
Dichlorodifluoromethane	50.0	50.4		ug/L		101	32 - 152
1,1-Dichloroethane	50.0	53.3		ug/L		107	77 - 125
1,2-Dichloroethane	50.0	52.1		ug/L		104	73 - 128
1,1-Dichloroethene	50.0	47.9		ug/L		96	71 - 131
1,2-Dichloroethene, Total	100	106		ug/L		106	79 - 121
1,2-Dichloropropane	50.0	49.0		ug/L		98	78 - 122
1,3-Dichloropropane	50.0	50.4		ug/L		101	80 - 119
2,2-Dichloropropane	50.0	50.7		ug/L		101	60 - 139
1,1-Dichloropropene	50.0	55.3		ug/L		111	79 - 125
Ethylbenzene	50.0	52.6		ug/L		105	79 - 121
Ethylene Dibromide	50.0	51.6		ug/L		103	75 - 127
Hexachlorobutadiene	50.0	49.7		ug/L		99	66 - 134
2-Hexanone	250	260		ug/L		104	57 - 139
Isopropylbenzene	50.0	52.6		ug/L		105	72 - 131
4-Isopropyltoluene	50.0	52.5		ug/L		105	77 - 127
Methylene Chloride	50.0	53.6		ug/L		107	74 - 124
4-Methyl-2-pentanone (MIBK)	250	259		ug/L		103	67 - 130
Methyl tert-butyl ether	50.0	53.7		ug/L		107	71 - 124
m-Xylene & p-Xylene	50.0	52.4		ug/L		105	80 - 121
Naphthalene	50.0	53.7		ug/L		107	61 - 128
n-Butylbenzene	50.0	52.9		ug/L		106	75 - 128
N-Propylbenzene	50.0	52.1		ug/L		104	76 - 126
o-Xylene	50.0	52.1		ug/L		104	78 - 122
sec-Butylbenzene	50.0	46.8		ug/L		94	77 - 126
Styrene	50.0	51.8		ug/L		104	78 - 123
tert-Butylbenzene	50.0	51.5		ug/L		103	78 - 124
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/L		102	78 - 124
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	71 - 121
Tetrachloroethene	50.0	52.6		ug/L		105	74 - 129
Toluene	50.0	52.4		ug/L		105	80 - 121
trans-1,2-Dichloroethene	50.0	53.0		ug/L		106	75 - 124
trans-1,3-Dichloropropene	50.0	53.5		ug/L		107	73 - 127
1,2,3-Trichlorobenzene	50.0	55.3		ug/L		111	69 - 129
1,2,4-Trichlorobenzene	50.0	53.3		ug/L		107	69 - 130
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	53.6		ug/L		107	80 - 119
Trichloroethene	50.0	52.5		ug/L		105	79 - 123
Trichlorofluoromethane	50.0	48.2		ug/L		96	65 - 141
1,2,3-Trichloropropane	50.0	50.4		ug/L		101	73 - 122
1,2,4-Trimethylbenzene	50.0	52.0		ug/L		104	76 - 124

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

Lab Sample ID: LCS 680-500257/4
Matrix: Water
Analysis Batch: 500257

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	52.3		ug/L		105	75 - 124
Vinyl acetate	100	91.1		ug/L		91	54 - 146
Vinyl chloride	50.0	48.8		ug/L		98	58 - 137
Xylenes, Total	100	105		ug/L		105	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*85 - 114*
Dibromofluoromethane (Surr)	*106*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*103*		*81 - 118*
Toluene-d8 (Surr)	*106*		*89 - 112*

Lab Sample ID: LCSD 680-500257/6
Matrix: Water
Analysis Batch: 500257

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	250	262		ug/L		105	39 - 160	2	20
Benzene	50.0	53.0		ug/L		106	79 - 120	0	20
Bromobenzene	50.0	53.0		ug/L		106	80 - 120	3	20
Bromoform	50.0	49.0		ug/L		98	66 - 130	4	20
Bromomethane	50.0	49.8		ug/L		100	53 - 141	3	20
2-Butanone (MEK)	250	267		ug/L		107	56 - 143	0	20
Carbon disulfide	50.0	52.0		ug/L		104	64 - 133	4	20
Carbon tetrachloride	50.0	49.1		ug/L		98	72 - 136	2	20
Chlorobenzene	50.0	51.6		ug/L		103	82 - 118	1	20
Chlorobromomethane	50.0	53.4		ug/L		107	78 - 123	4	20
Chlorodibromomethane	50.0	49.3		ug/L		99	74 - 126	4	20
Chloroethane	50.0	53.8		ug/L		108	60 - 138	2	20
Chloroform	50.0	53.1		ug/L		106	79 - 124	2	20
Chloromethane	50.0	54.6		ug/L		109	50 - 139	1	20
2-Chlorotoluene	50.0	53.6		ug/L		107	79 - 122	2	20
4-Chlorotoluene	50.0	53.7		ug/L		107	78 - 122	2	20
cis-1,2-Dichloroethene	50.0	54.3		ug/L		109	78 - 123	2	20
cis-1,3-Dichloropropene	50.0	55.4		ug/L		111	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	51.6		ug/L		103	62 - 128	2	20
Dibromomethane	50.0	54.3		ug/L		109	79 - 123	4	20
1,2-Dichlorobenzene	50.0	52.6		ug/L		105	80 - 119	1	20
1,3-Dichlorobenzene	50.0	52.1		ug/L		104	80 - 119	0	20
1,4-Dichlorobenzene	50.0	51.5		ug/L		103	79 - 118	0	20
Dichlorobromomethane	50.0	49.5		ug/L		99	79 - 125	0	20
Dichlorodifluoromethane	50.0	51.9		ug/L		104	32 - 152	3	20
1,1-Dichloroethane	50.0	53.7		ug/L		107	77 - 125	1	20
1,2-Dichloroethane	50.0	54.2		ug/L		108	73 - 128	4	20
1,1-Dichloroethene	50.0	50.0		ug/L		100	71 - 131	4	20
1,2-Dichloroethene, Total	100	107		ug/L		107	79 - 121	1	20
1,2-Dichloropropane	50.0	49.8		ug/L		100	78 - 122	2	20
1,3-Dichloropropane	50.0	53.0		ug/L		106	80 - 119	5	20
2,2-Dichloropropane	50.0	55.9		ug/L		112	60 - 139	10	20

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

Lab Sample ID: LCSD 680-500257/6
Matrix: Water
Analysis Batch: 500257

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-Dichloropropene	50.0	54.7		ug/L		109	79 - 125	1	20
Ethylbenzene	50.0	53.6		ug/L		107	79 - 121	2	20
Ethylene Dibromide	50.0	53.9		ug/L		108	75 - 127	4	20
Hexachlorobutadiene	50.0	49.6		ug/L		99	66 - 134	0	20
2-Hexanone	250	266		ug/L		107	57 - 139	2	20
Isopropylbenzene	50.0	53.9		ug/L		108	72 - 131	2	20
4-Isopropyltoluene	50.0	53.6		ug/L		107	77 - 127	2	20
Methylene Chloride	50.0	53.6		ug/L		107	74 - 124	0	20
4-Methyl-2-pentanone (MIBK)	250	264		ug/L		106	67 - 130	2	20
Methyl tert-butyl ether	50.0	53.8		ug/L		108	71 - 124	0	20
m-Xylene & p-Xylene	50.0	53.5		ug/L		107	80 - 121	2	20
Naphthalene	50.0	54.0		ug/L		108	61 - 128	1	20
n-Butylbenzene	50.0	54.5		ug/L		109	75 - 128	3	20
N-Propylbenzene	50.0	53.6		ug/L		107	76 - 126	3	20
o-Xylene	50.0	53.1		ug/L		106	78 - 122	2	20
sec-Butylbenzene	50.0	48.8		ug/L		98	77 - 126	4	20
Styrene	50.0	54.4		ug/L		109	78 - 123	5	20
tert-Butylbenzene	50.0	54.1		ug/L		108	78 - 124	5	20
1,1,1,2-Tetrachloroethane	50.0	50.5		ug/L		101	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	53.8		ug/L		108	71 - 121	3	20
Tetrachloroethene	50.0	54.4		ug/L		109	74 - 129	3	20
Toluene	50.0	53.6		ug/L		107	80 - 121	2	20
trans-1,2-Dichloroethene	50.0	53.1		ug/L		106	75 - 124	0	20
trans-1,3-Dichloropropene	50.0	55.5		ug/L		111	73 - 127	4	20
1,2,3-Trichlorobenzene	50.0	53.2		ug/L		106	69 - 129	4	20
1,2,4-Trichlorobenzene	50.0	53.4		ug/L		107	69 - 130	0	20
1,1,1-Trichloroethane	50.0	54.5		ug/L		109	74 - 131	2	20
1,1,2-Trichloroethane	50.0	53.7		ug/L		107	80 - 119	0	20
Trichloroethene	50.0	54.2		ug/L		108	79 - 123	3	20
Trichlorofluoromethane	50.0	49.6		ug/L		99	65 - 141	3	20
1,2,3-Trichloropropane	50.0	50.9		ug/L		102	73 - 122	1	20
1,2,4-Trimethylbenzene	50.0	53.9		ug/L		108	76 - 124	3	20
1,3,5-Trimethylbenzene	50.0	53.9		ug/L		108	75 - 124	3	20
Vinyl acetate	100	103		ug/L		103	54 - 146	12	20
Vinyl chloride	50.0	50.6		ug/L		101	58 - 137	4	20
Xylenes, Total	100	107		ug/L		107	79 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*
Dibromofluoromethane (Surr)	*106*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*106*		*81 - 118*
Toluene-d8 (Surr)	*106*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-499249/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499249

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/20/17 11:06	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/20/17 11:06	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/20/17 11:06	1
Methane (TCD)	77	U	390	77	39	ug/L		10/20/17 11:06	1

Lab Sample ID: LCS 680-499249/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1880		ug/L		98	75 - 125

Lab Sample ID: LCS 680-499249/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	317		ug/L		110	75 - 125
Ethylene	269	286		ug/L		106	75 - 125
Methane	154	162		ug/L		105	75 - 125

Lab Sample ID: LCSD 680-499249/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1880		ug/L		98	75 - 125	0	30

Lab Sample ID: LCSD 680-499249/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	317		ug/L		110	75 - 125	0	30
Ethylene	269	284		ug/L		106	75 - 125	1	30
Methane	154	163		ug/L		106	75 - 125	0	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-498761/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/17/17 08:23	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 680-498761/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.1		mg/L		101	87 - 112

Lab Sample ID: LCSD 680-498761/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.3		mg/L		103	87 - 112	2	15

Lab Sample ID: MB 680-498783/36 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498783

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/17/17 19:09	1

Lab Sample ID: LCS 680-498783/37 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498783

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.2		mg/L		102	87 - 112

Lab Sample ID: LCSD 680-498783/38 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498783

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.4		mg/L		104	87 - 112	1	15

Lab Sample ID: 680-144305-3 DU — **Client Sample ID: G6M-03-02X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498783

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	1.0	U	1.0	U	mg/L		NC	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-498992/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 499113 — **Prep Batch: 498992**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/18/17 23:51	1
Iron	75	U	100	75	25	ug/L		10/18/17 23:51	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/18/17 23:51	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-498992/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 499113 — **Prep Batch: 498992**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	101		ug/L		101	84 - 116
Iron	5000	5050		ug/L		101	87 - 118
Manganese	500	511		ug/L		102	87 - 115

Lab Sample ID: 680-144305-1 MS — **Client Sample ID: G6M-04-10X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 499113 — **Prep Batch: 498992**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.0	U J	100	102		ug/L		102	84 - 116
Iron	75	U J	5000	4890		ug/L		98	87 - 118
Manganese	1200	J	500	1500	J	ug/L		67	87 - 115

Lab Sample ID: 680-144305-1 MSD — **Client Sample ID: G6M-04-10X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 499113 — **Prep Batch: 498992**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.0	U J	100	108		ug/L		108	84 - 116	6	20
Iron	75	U J	5000	5250		ug/L		105	87 - 118	7	20
Manganese	1200	J	500	1700		ug/L		107	87 - 115	12	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-391541/66 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391541

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/16/17 19:12	1

Lab Sample ID: LCS 280-391541/65 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	5.10		mg/L		102	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-498743/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/16/17 10:05	1

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 680-498743/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	7.82		mg/L		78	75 - 125

Lab Sample ID: LCSD 680-498743/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	7.67		mg/L		77	75 - 125	2	30

Lab Sample ID: 680-144305-1 DU — **Client Sample ID: G6M-04-10X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498743

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.0	U	1.0	U	mg/L		NC	30

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

Lab Sample ID: MB 280-391583/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391583

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.167	J	1.0	0.50	0.16	mg/L		10/16/17 22:17	1

Lab Sample ID: LCS 280-391583/34 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	24.1		mg/L		96	88 - 112

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-391732/33 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391732

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	2.56	J	5.0	3.2	1.1	mg/L		10/17/17 20:54	1

Lab Sample ID: LCS 280-391732/31 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	190		mg/L		95	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 280-391732/32 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391732

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	200	198		mg/L		99	90 - 110	4	10

Lab Sample ID: MB 280-391916/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391916

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.42	J	5.0	3.2	1.1	mg/L		10/18/17 09:51	1

Lab Sample ID: LCS 280-391916/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391916

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	190		mg/L		95	90 - 110

Lab Sample ID: LCSD 280-391916/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 391916

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	200	191		mg/L		95	90 - 110	1	10

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

GC/MS VOA

Analysis Batch: 500012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	8260B	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	8260B	
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	8260B	
680-144305-8	Trip Blank	Total/NA	Water	8260B	
MB 680-500012/11	Method Blank	Total/NA	Water	8260B	
LCS 680-500012/6	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500012/7	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 500177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	8260B	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	8260B	
680-144305-7	G6M-04-01X-Fall17	Total/NA	Water	8260B	
MB 680-500177/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500177/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500177/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 500257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-6	DUP-05-Fall17	Total/NA	Water	8260B	
MB 680-500257/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500257/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500257/6	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 499249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	RSK-175	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	RSK-175	
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	RSK-175	
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	RSK-175	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	RSK-175	
680-144305-6	DUP-05-Fall17	Total/NA	Water	RSK-175	
MB 680-499249/10	Method Blank	Total/NA	Water	RSK-175	
LCS 680-499249/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-499249/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-499249/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-499249/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 498761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	9056A	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	9056A	
MB 680-498761/2	Method Blank	Total/NA	Water	9056A	
LCS 680-498761/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-498761/4	Lab Control Sample Dup	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 498783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	9056A	
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	9056A	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	9056A	
680-144305-6	DUP-05-Fall17	Total/NA	Water	9056A	
MB 680-498783/36	Method Blank	Total/NA	Water	9056A	
LCS 680-498783/37	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-498783/38	Lab Control Sample Dup	Total/NA	Water	9056A	
680-144305-3 DU	G6M-03-02X-Fall17	Total/NA	Water	9056A	

Metals

Prep Batch: 498992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Dissolved	Water	3005A	
680-144305-2	G6M-04-10A-Fall17	Dissolved	Water	3005A	
680-144305-3	G6M-03-02X-Fall17	Dissolved	Water	3005A	
680-144305-4	G6M-03-01X-Fall17	Dissolved	Water	3005A	
680-144305-5	G6M-02-01X-Fall17	Dissolved	Water	3005A	
680-144305-6	DUP-05-Fall17	Dissolved	Water	3005A	
680-144305-7	G6M-04-01X-Fall17	Dissolved	Water	3005A	
MB 680-498992/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-498992/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-144305-1 MS	G6M-04-10X-Fall17	Dissolved	Water	3005A	
680-144305-1 MSD	G6M-04-10X-Fall17	Dissolved	Water	3005A	

Analysis Batch: 499113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Dissolved	Water	6020A	498992
680-144305-2	G6M-04-10A-Fall17	Dissolved	Water	6020A	498992
680-144305-3	G6M-03-02X-Fall17	Dissolved	Water	6020A	498992
680-144305-4	G6M-03-01X-Fall17	Dissolved	Water	6020A	498992
680-144305-5	G6M-02-01X-Fall17	Dissolved	Water	6020A	498992
680-144305-6	DUP-05-Fall17	Dissolved	Water	6020A	498992
680-144305-7	G6M-04-01X-Fall17	Dissolved	Water	6020A	498992
MB 680-498992/1-A	Method Blank	Total Recoverable	Water	6020A	498992
LCS 680-498992/2-A	Lab Control Sample	Total Recoverable	Water	6020A	498992
680-144305-1 MS	G6M-04-10X-Fall17	Dissolved	Water	6020A	498992
680-144305-1 MSD	G6M-04-10X-Fall17	Dissolved	Water	6020A	498992

Analysis Batch: 500318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-4	G6M-03-01X-Fall17	Dissolved	Water	6020A	498992
680-144305-7	G6M-04-01X-Fall17	Dissolved	Water	6020A	498992

General Chemistry

Analysis Batch: 391541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	353.2	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 391541 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	353.2	
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	353.2	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	353.2	
680-144305-6	DUP-05-Fall17	Total/NA	Water	353.2	
MB 280-391541/66	Method Blank	Total/NA	Water	353.2	
LCS 280-391541/65	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 391583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	9060A	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	9060A	
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	9060A	
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	9060A	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	9060A	
680-144305-6	DUP-05-Fall17	Total/NA	Water	9060A	
MB 280-391583/35	Method Blank	Total/NA	Water	9060A	
LCS 280-391583/34	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 391732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	SM 2320B	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	SM 2320B	
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	SM 2320B	
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	SM 2320B	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	SM 2320B	
MB 280-391732/33	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-391732/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-391732/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 391916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-6	DUP-05-Fall17	Total/NA	Water	SM 2320B	
MB 280-391916/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-391916/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-391916/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 498743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144305-1	G6M-04-10X-Fall17	Total/NA	Water	9034	
680-144305-2	G6M-04-10A-Fall17	Total/NA	Water	9034	
680-144305-3	G6M-03-02X-Fall17	Total/NA	Water	9034	
680-144305-4	G6M-03-01X-Fall17	Total/NA	Water	9034	
680-144305-5	G6M-02-01X-Fall17	Total/NA	Water	9034	
680-144305-6	DUP-05-Fall17	Total/NA	Water	9034	
MB 680-498743/1	Method Blank	Total/NA	Water	9034	
LCS 680-498743/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-498743/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-144305-1 DU	G6M-04-10X-Fall17	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-04-10X-Fall17

Lab Sample ID: 680-144305-1

Date Collected: 10/12/17 09:00

Matrix: Water

Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500012	10/26/17 05:01	CMB	TAL SAV
	Instrument ID: CMSB									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499249	10/20/17 15:47	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	498761	10/17/17 18:15	CJM	TAL SAV
	Instrument ID: CICL									
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/18/17 23:59	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 19:26	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			391583	10/17/17 04:50	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			391732	10/17/17 23:33	A1D	TAL DEN
	Instrument ID: WC_AT2									

Client Sample ID: G6M-04-10A-Fall17

Lab Sample ID: 680-144305-2

Date Collected: 10/12/17 10:10

Matrix: Water

Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500012	10/26/17 05:23	CMB	TAL SAV
	Instrument ID: CMSB									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499249	10/20/17 16:00	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	498761	10/17/17 18:33	CJM	TAL SAV
	Instrument ID: CICL									
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/19/17 00:51	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 19:28	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			391583	10/17/17 05:09	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			391732	10/17/17 23:27	A1D	TAL DEN
	Instrument ID: WC_AT2									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-03-02X-Fall17

Lab Sample ID: 680-144305-3

Date Collected: 10/12/17 12:30
Matrix: Water
Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500012	10/26/17 05:45	CMB	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499249	10/20/17 16:12	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498783	10/17/17 20:03	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/19/17 00:30	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 19:42	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			391583	10/17/17 05:24	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391732	10/17/17 23:22	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-03-01X-Fall17

Lab Sample ID: 680-144305-4

Date Collected: 10/12/17 13:30
Matrix: Water
Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	500177	10/27/17 01:53	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499249	10/20/17 16:25	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498783	10/17/17 20:39	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/19/17 00:21	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		10			500318	10/27/17 12:35	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 19:44	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		2			391583	10/17/17 05:41	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391732	10/17/17 23:15	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-02-01X-Fall17

Lab Sample ID: 680-144305-5

Date Collected: 10/13/17 09:05
Matrix: Water
Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500177	10/27/17 00:14	CMB	TAL SAV
	Instrument ID:	CMSP2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499249	10/20/17 16:38	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498783	10/17/17 20:57	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/19/17 00:43	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 19:46	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			391583	10/17/17 06:25	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391732	10/17/17 23:38	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: DUP-05-Fall17

Lab Sample ID: 680-144305-6

Date Collected: 10/13/17 09:10
Matrix: Water
Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500257	10/27/17 16:41	CMB	TAL SAV
	Instrument ID:	CMSO2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499249	10/20/17 16:50	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	498783	10/17/17 21:15	CJM	TAL SAV
	Instrument ID:	CICL								
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/19/17 00:25	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	391541	10/16/17 19:48	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	498743	10/17/17 04:39	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			391583	10/17/17 06:40	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			391916	10/18/17 12:38	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Client Sample ID: G6M-04-01X-Fall17

Lab Sample ID: 680-144305-7

Date Collected: 10/13/17 11:30

Matrix: Water

Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500177	10/27/17 00:39	CMB	TAL SAV
	Instrument ID: CMSP2									
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499113	10/19/17 00:47	BWR	TAL SAV
	Instrument ID: ICPMSC									
Dissolved	Prep	3005A			50 mL	250 mL	498992	10/18/17 11:11	AJR	TAL SAV
Dissolved	Analysis	6020A		10			500318	10/27/17 12:40	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: Trip Blank

Lab Sample ID: 680-144305-8

Date Collected: 10/12/17 00:00

Matrix: Water

Date Received: 10/14/17 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500012	10/25/17 23:51	CMB	TAL SAV
	Instrument ID: CMSB									

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 1 of: 1

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT: Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Remarks	Lab. No.
bbl-04-10X-Fall17		10/12	900	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
bbl-04-10A-Fall17		10/12	1010	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
bbl-03-02X-Fall17		10/12	1230	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
bbl-03-01X-Fall17		10/12	1330	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
bbl-02-01X-Fall17		10/13	905	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
* ~~bbl~~ DUP-05-Fall17		10/13	910	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
bbl-04-01X-Fall17		10/13	1130	P	GW	4	✓							✓		
				P	GW											
				P	GW											
	Trip Blank	10/12	800	O	O		X									
*Revised to accl. Ekes				10/16 rd. Rampelli												

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out: Via:
Returned: Via:

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[signature]	10/13/17	1250	[signature]	10-13-17	1250
	[signature]	10-13-17	1800	[signature]	10/14/17	0959
				(0.5(C+0.5)0.8		

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info

☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

680-144305 Chain of Custody

MATRIX CODES: A = Ai GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD C = Composite G=Grab P= Pumping O = Other

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of C

680-144305 Chain of Custody

Page: 1 of: 1

Company	KOMAN GS, LLC
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752
Phone:	508-366-7442 Fax: 508-366-7445
Sampled by [Print Name(s)]/Affiliation	
Sampler(s) Signature(s)	

KGS

Pr																							
H	H	I	S	O	I	S	N																
Analyses Requested																							
VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	**Dissolved Metals*-SW6010/6020** 1-250 ml poly (HNO3)																

Item No.	Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	**Dissolved Metals*-SW6010/6020** 1-250 ml poly (HNO3)	Remarks	Lab. No.
66M-04-10X-Fall17		10/12	900	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
66M-04-10A-Fall17		10/12	1010	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
66M-03-02X-Fall17		10/12	1230	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
66M-03-01X-Fall17		10/12	1330	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
66M-02-01X-Fall17		10/13	905	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
~~66M~~ DUP-04-Fall17		10/13	910	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓		
66M-04-01X-Fall17		10/13	1130	P	GW	4	✓							✓		
				P	GW											
				P	GW											
	Trip Blank	10/12	800	O	O		X									

Shipping Details	courier pick up	0	← Total Number of Containers
Date Out:	Via:		
Returned:	Via:		

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[illegible]	10/13/17	1250	[illegible]	10-13-17	1250
	[illegible]	10-13-17	1800	[illegible]	10-14-17	0850

Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature 0.3 C
REF7 +0.1

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

NJ Data Deliverable Info
☐ Commercial "A"
☐ Commercial "B"
☐ State Forms

MATRIX CODES: A = Ai GW = Groundwat	SE = Sediment	SP = Soil	SW = Surface Water	W = Water (Blanks)	O = Other
PRESERVATIVE CODES H = HCL + Ice	I = Ice Only	N = Nitric Acid + Ice	S = Sulfuric Acid + Ice	M = Methanol	O = Other
COLLECTION METHOD C = Composite	G=Grab	P= Pumping			O = Other

Tory:	Test America - Savannah
Address:	510 LaRoche Ave Savannah, GA 31404
Contact:	Jerry Lanier
Regulatory Facility No.	
Project Name:	Devens Fall 2017 LTM
Sampling QAP No.:	
Approval Date:	
TAT	Routine
Other:	

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-144305-1

Login Number: 144305

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17 *
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144305-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144476-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
293 Boston Post Road
Suite 100
Marlborough, Massachusetts 01752

Attn: Laurie Ekes

Authorized for release by:
11/2/2017 6:13:56 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 6
Method Summary 7
Definitions/Glossary 8
Client Sample Results 10
Surrogate Summary 30
QC Sample Results 31
QC Association Summary 57
Lab Chronicle 61
Chain of Custody 66
Receipt Checklists 70
Certification Summary 71

Job ID: 680-144476-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-144476-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 10/19/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.3º C and 3.6º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples G6M-02-04X (680-144476-1), G6M-13-01X (680-144476-2), G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7), Trip Blank (680-144476-8), G6M-13-03X-Fall17 (680-144476-9) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/27/2017, 10/30/2017 and 10/31/2017.

Surrogate 4-bromofluorobenzene recovery for the following sample was outside control limits: (LCSD 680-500216/4). All other sample surrogate and batch quality control (QC) met acceptance criteria; therefore, the data has been reported.

The continuing calibration verification (CCV) associated with batch 500485 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 680-500485/2) and (CCV 680-500485/3).

The continuing calibration verification (CCV) analyzed in batch 680-500485 was outside the method criteria for the following analyte(s): Dichlorodifluoromethane. This compound has been identified as a poor performer when analyzed using this method. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The following sample was diluted due to th appearance of foam: G6M-02-08X-Fall17 (680-144476-11). Elevated reporting limits (RL) are provided.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 680-500485 recovered outside control limits for the following analyte: hexachlorobutadiene. This analyte was biased high in the LCS/D and were not detected in the associated samples; therefore, the data have been reported.

The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 680-500216 was outside control limits for bromomethane. Note that this analyte is a known poor performer when analyzed using this method.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Job ID: 680-144476-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Sample G6M-02-08X-Fall17 (680-144476-11)[20X] required dilution prior to analysis due to the presence of foam when analyzing. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-500485.

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

DISSOLVED GASES
Samples G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 10/26/2017 and 10/27/2017.

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

METALS (ICPMS) - DISSOLVED
Samples G6M-02-04X (680-144476-1), G6M-13-01X (680-144476-2), G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7), G6M-13-03X-Fall17 (680-144476-9), G6M-04-22X-Fall17 (680-144476-10) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/20/2017 and analyzed on 10/23/2017 and 10/30/2017.

Manganese failed the recovery criteria high for the MS of sample G6M-13-04XMS (680-144476-3) in batch 680-499696.

Arsenic, Iron and Manganese failed the recovery criteria low for the MSD of sample G6M-13-04XMSD (680-144476-3) in batch 680-499696.

Refer to the QC report for details.

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

ALKALINITY
Samples G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 10/23/2017.

Alkalinity was detected in method blank MB 280-392443/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN
Samples G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 10/23/2017.

Nitrate/Nitrite-N failed the recovery criteria low for the MS/MSD of sample G6M-13-04X (680-144476-3) in batch 280-392445.

Refer to the QC report for details.

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

SULFIDE
Samples G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for sulfide in accordance with EPA SW846 Method

Job ID: 680-144476-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

9034. The samples were analyzed on 10/20/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 10/23/2017 and 10/24/2017.

Sample G6M-02-08X-Fall17 (680-144476-11)[2X] required dilution prior to analysis due to color. The reporting limits have been adjusted accordingly.

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

TOTAL ORGANIC CARBON
Samples G6M-13-04X (680-144476-3), G6M-04-07X (680-144476-4), G6M-04-06X (680-144476-5), G6M-03-09X (680-144476-6), G6M-04-05X (680-144476-7) and G6M-02-08X-Fall17 (680-144476-11) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 10/24/2017.

Total Organic Carbon - Duplicates was detected in method blank MB 280-392531/37 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample G6M-02-08X-Fall17 (680-144476-11)[7.69X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144476-1	G6M-02-04X	Water	10/16/17 08:40	10/19/17 09:21
680-144476-2	G6M-13-01X	Water	10/16/17 10:55	10/19/17 09:21
680-144476-3	G6M-13-04X	Water	10/16/17 13:00	10/19/17 09:21
680-144476-4	G6M-04-07X	Water	10/17/17 09:30	10/19/17 09:21
680-144476-5	G6M-04-06X	Water	10/17/17 11:00	10/19/17 09:21
680-144476-6	G6M-03-09X	Water	10/17/17 12:55	10/19/17 09:21
680-144476-7	G6M-04-05X	Water	10/17/17 14:45	10/19/17 09:21
680-144476-8	Trip Blank	Water	10/16/17 08:00	10/19/17 09:21
680-144476-9	G6M-13-03X-Fall17	Water	10/18/17 09:15	10/19/17 09:21
680-144476-10	G6M-04-22X-Fall17	Water	10/18/17 11:35	10/19/17 09:21
680-144476-11	G6M-02-08X-Fall17	Water	10/18/17 13:20	10/19/17 09:21

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
Q	One or more quality control criteria failed.

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

HPLC/IC

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
M	Manual integrated compound.

Metals

Qualifier	Qualifier Description
D	The reported value is from a dilution.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

General Chemistry

Qualifier	Qualifier Description
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-02-04X

Lab Sample ID: 680-144476-1

Date Collected: 10/16/17 08:40

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 15:56	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:56	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:56	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:56	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 15:56	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 15:56	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:56	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 15:56	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:56	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 15:56	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:56	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 15:56	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 15:56	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/27/17 15:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 15:56	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 15:56	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:56	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:56	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:56	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 15:56	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 15:56	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 15:56	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 15:56	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:56	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 15:56	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/27/17 15:56	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 15:56	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 15:56	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:56	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 15:56	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:56	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 15:56	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 15:56	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:56	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:56	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 15:56	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 15:56	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:56	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 15:56	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 15:56	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 15:56	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:56	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 15:56	1

Client Sample ID: G6M-02-04X

Lab Sample ID: 680-144476-1

Date Collected: 10/16/17 08:40

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:56	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 15:56	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 15:56	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:56	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:56	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:56	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:56	1
Trichloroethene	**1.0**		1.0	1.0	0.48	ug/L		10/27/17 15:56	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:56	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 15:56	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 15:56	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 15:56	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 15:56	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:56	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/27/17 15:56*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 119*		*10/27/17 15:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*81 - 118*		*10/27/17 15:56*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/27/17 15:56*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**440**		3.0	3.0	1.5	ug/L		10/23/17 15:31	1
Iron	**22000**		100	75	25	ug/L		10/23/17 15:31	1
Manganese	**1300**		5.0	5.0	1.8	ug/L		10/23/17 15:31	1

Client Sample ID: G6M-13-01X

Lab Sample ID: 680-144476-2

Date Collected: 10/16/17 10:55

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U M	10	10	7.0	ug/L		10/27/17 16:20	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 16:20	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:20	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 16:20	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 16:20	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 16:20	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 16:20	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 16:20	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 16:20	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 16:20	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-13-01X

Date Collected: 10/16/17 10:55
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:20	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 16:20	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 16:20	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 16:20	1
cis-1,2-Dichloroethene	**0.65**	**J**	1.0	1.0	0.41	ug/L		10/27/17 16:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 16:20	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 16:20	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 16:20	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:20	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 16:20	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 16:20	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 16:20	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 16:20	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 16:20	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:20	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 16:20	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/27/17 16:20	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 16:20	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 16:20	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:20	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 16:20	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 16:20	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 16:20	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 16:20	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 16:20	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 16:20	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 16:20	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 16:20	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 16:20	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 16:20	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 16:20	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 16:20	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 16:20	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 16:20	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 16:20	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 16:20	1
Tetrachloroethene	**10**		1.0	1.0	0.74	ug/L		10/27/17 16:20	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 16:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 16:20	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 16:20	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 16:20	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 16:20	1
Trichloroethene	**0.79**	**J**	1.0	1.0	0.48	ug/L		10/27/17 16:20	1

Client Sample ID: G6M-13-01X

Lab Sample ID: 680-144476-2

Date Collected: 10/16/17 10:55

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 16:20	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 16:20	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 16:20	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 16:20	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 16:20	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 16:20	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*10/27/17 16:20*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 119*		*10/27/17 16:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/27/17 16:20*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*10/27/17 16:20*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**3.6**		3.0	3.0	1.5	ug/L		10/23/17 14:52	1
Iron	**830**		100	75	25	ug/L		10/23/17 14:52	1
Manganese	**34**		5.0	5.0	1.8	ug/L		10/23/17 14:52	1

Client Sample ID: G6M-13-04X

Lab Sample ID: 680-144476-3

Date Collected: 10/16/17 13:00

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 17:10	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 17:10	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 17:10	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 17:10	1
Bromomethane	5.0	U J	5.0	5.0	2.5	ug/L		10/27/17 17:10	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 17:10	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 17:10	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 17:10	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 17:10	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 17:10	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 17:10	1
Chloroethane	**5.7**		5.0	5.0	2.5	ug/L		10/27/17 17:10	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 17:10	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 17:10	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 17:10	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 17:10	1
cis-1,2-Dichloroethene	**25**		1.0	1.0	0.41	ug/L		10/27/17 17:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 17:10	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 17:10	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 17:10	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 17:10	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 17:10	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 17:10	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 17:10	1

Client Sample ID: G6M-13-04X

Date Collected: 10/16/17 13:00
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 17:10	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 17:10	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 17:10	1
1,1-Dichloroethene	**0.71**	**J M**	1.0	1.0	0.36	ug/L		10/27/17 17:10	1
1,2-Dichloroethene, Total	**26**		2.0	1.0	0.74	ug/L		10/27/17 17:10	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 17:10	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 17:10	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 17:10	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 17:10	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 17:10	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 17:10	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 17:10	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 17:10	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 17:10	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 17:10	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 17:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 17:10	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 17:10	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 17:10	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 17:10	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 17:10	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 17:10	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 17:10	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 17:10	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 17:10	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 17:10	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 17:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 17:10	1
Tetrachloroethene	**40**		1.0	1.0	0.74	ug/L		10/27/17 17:10	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 17:10	1
trans-1,2-Dichloroethene	**0.81**	**J**	1.0	1.0	0.37	ug/L		10/27/17 17:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 17:10	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 17:10	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 17:10	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 17:10	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 17:10	1
Trichloroethene	**40**		1.0	1.0	0.48	ug/L		10/27/17 17:10	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 17:10	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 17:10	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 17:10	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 17:10	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 17:10	1
Vinyl chloride	**33**		1.0	1.0	0.50	ug/L		10/27/17 17:10	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*85 - 114*		*10/27/17 17:10*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 119*		*10/27/17 17:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*81 - 118*		*10/27/17 17:10*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/27/17 17:10*	*1*

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.5		1.1	1.1	0.55	ug/L		10/26/17 15:47	1
Ethylene	7.6		1.0	1.0	0.50	ug/L		10/26/17 15:47	1
Methane (TCD)	2500		390	77	39	ug/L		10/26/17 15:47	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	4.1	M	1.0	1.0	0.40	mg/L		10/23/17 23:54	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	340	J	3.0	3.0	1.5	ug/L		10/23/17 14:26	1
Iron	27000	J	100	75	25	ug/L		10/23/17 14:26	1
Manganese	7100	J	5.0	5.0	1.8	ug/L		10/23/17 14:26	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U J	0.10	0.050	0.019	mg/L		10/23/17 18:03	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 08:01	1
Total Organic Carbon - Duplicates	1.8		1.0	0.50	0.16	mg/L		10/24/17 08:02	1
Alkalinity	190	B	5.0	3.2	1.1	mg/L		10/23/17 14:50	1

Client Sample ID: G6M-04-07X

Lab Sample ID: 680-144476-4

Date Collected: 10/17/17 09:30

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/30/17 12:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 12:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 12:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 12:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/30/17 12:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/30/17 12:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 12:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/30/17 12:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 12:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/30/17 12:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 12:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 12:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 12:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 12:39	1
cis-1,2-Dichloroethene	56		1.0	1.0	0.41	ug/L		10/30/17 12:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 12:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/30/17 12:39	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 12:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 12:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 12:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/30/17 12:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 12:39	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		10/30/17 12:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 12:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 12:39	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-04-07X

Date Collected: 10/17/17 09:30
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-4

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/30/17 12:39	1
1,2-Dichloroethene, Total	**57**		2.0	1.0	0.74	ug/L		10/30/17 12:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/30/17 12:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 12:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 12:39	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 12:39	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 12:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 12:39	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/30/17 12:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 12:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 12:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/30/17 12:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/30/17 12:39	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 12:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 12:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 12:39	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/30/17 12:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 12:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 12:39	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 12:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 12:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/30/17 12:39	1
Tetrachloroethene	**38**		1.0	1.0	0.74	ug/L		10/30/17 12:39	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 12:39	1
trans-1,2-Dichloroethene	**0.39**	**J**	1.0	1.0	0.37	ug/L		10/30/17 12:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 12:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 12:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 12:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 12:39	1
Trichloroethene	**20**		1.0	1.0	0.48	ug/L		10/30/17 12:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 12:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/30/17 12:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 12:39	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/30/17 12:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/30/17 12:39	1
Vinyl chloride	**3.1**		1.0	1.0	0.50	ug/L		10/30/17 12:39	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/30/17 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*85 - 114*		*10/30/17 12:39*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*10/30/17 12:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*81 - 118*		*10/30/17 12:39*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*10/30/17 12:39*	*1*

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-04-07X

Lab Sample ID: 680-144476-4

Date Collected: 10/17/17 09:30
Matrix: Water
Date Received: 10/19/17 09:21

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/26/17 01:51	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 01:51	1
Methane (TCD)	**760**		390	77	39	ug/L		10/26/17 01:51	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**7.6**	**M**	1.0	1.0	0.40	mg/L		10/24/17 00:47	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**18**		3.0	3.0	1.5	ug/L		10/23/17 15:26	1
Iron	**1700**		100	75	25	ug/L		10/23/17 15:26	1
Manganese	**5200**		5.0	5.0	1.8	ug/L		10/23/17 15:26	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/23/17 18:09	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 08:09	1
Total Organic Carbon - Duplicates	**1.1**		1.0	0.50	0.16	mg/L		10/24/17 08:53	1
Alkalinity	**170**	**B**	5.0	3.2	1.1	mg/L		10/23/17 15:02	1

Client Sample ID: G6M-04-06X

Lab Sample ID: 680-144476-5

Date Collected: 10/17/17 11:00
Matrix: Water
Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/30/17 13:01	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:01	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:01	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:01	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/30/17 13:01	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/30/17 13:01	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:01	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/30/17 13:01	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:01	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/30/17 13:01	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:01	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 13:01	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 13:01	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:01	1
cis-1,2-Dichloroethene	**0.60**	**J**	1.0	1.0	0.41	ug/L		10/30/17 13:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 13:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/30/17 13:01	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:01	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:01	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:01	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/30/17 13:01	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-04-06X

Date Collected: 10/17/17 11:00
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-5

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 13:01	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		10/30/17 13:01	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 13:01	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:01	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/30/17 13:01	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/30/17 13:01	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/30/17 13:01	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 13:01	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:01	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 13:01	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:01	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 13:01	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/30/17 13:01	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:01	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:01	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/30/17 13:01	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/30/17 13:01	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:01	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 13:01	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 13:01	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/30/17 13:01	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:01	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 13:01	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:01	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/30/17 13:01	1
Tetrachloroethene	**1.8**		1.0	1.0	0.74	ug/L		10/30/17 13:01	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:01	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:01	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:01	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:01	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:01	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:01	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/30/17 13:01	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 13:01	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/30/17 13:01	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/30/17 13:01	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:01	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/30/17 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*85 - 114*		*10/30/17 13:01*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/30/17 13:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/30/17 13:01*	*1*

Client Sample ID: G6M-04-06X

Lab Sample ID: 680-144476-5

Date Collected: 10/17/17 11:00

Matrix: Water

Date Received: 10/19/17 09:21

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*89 - 112*		*10/30/17 13:01*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/26/17 02:04	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 02:04	1
Methane	**1.6**		0.58	0.58	0.29	ug/L		10/26/17 02:04	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**16**	**M**	1.0	1.0	0.40	mg/L		10/24/17 01:21	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/23/17 14:56	1
Iron	**30**	**J**	100	75	25	ug/L		10/23/17 14:56	1
Manganese	**98**		5.0	5.0	1.8	ug/L		10/23/17 14:56	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.068**	**J**	0.10	0.050	0.019	mg/L		10/23/17 18:11	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 08:09	1
Total Organic Carbon - Duplicates	**0.90**	**J**	1.0	0.50	0.16	mg/L		10/24/17 09:12	1
Alkalinity	**58**	**B**	5.0	3.2	1.1	mg/L		10/23/17 14:56	1

Client Sample ID: G6M-03-09X

Lab Sample ID: 680-144476-6

Date Collected: 10/17/17 12:55

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/30/17 13:23	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:23	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:23	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:23	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/30/17 13:23	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/30/17 13:23	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:23	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/30/17 13:23	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:23	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/30/17 13:23	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:23	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 13:23	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 13:23	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/30/17 13:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 13:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/30/17 13:23	1

Client Sample ID: G6M-03-09X
Date Collected: 10/17/17 12:55
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:23	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:23	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:23	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/30/17 13:23	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 13:23	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		10/30/17 13:23	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 13:23	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:23	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/30/17 13:23	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/30/17 13:23	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/30/17 13:23	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 13:23	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:23	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 13:23	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:23	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 13:23	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/30/17 13:23	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:23	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:23	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/30/17 13:23	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/30/17 13:23	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:23	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 13:23	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 13:23	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/30/17 13:23	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:23	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 13:23	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:23	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/30/17 13:23	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/30/17 13:23	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:23	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:23	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:23	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:23	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:23	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:23	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/30/17 13:23	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 13:23	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/30/17 13:23	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/30/17 13:23	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:23	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/30/17 13:23	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-03-09X

Lab Sample ID: 680-144476-6

Date Collected: 10/17/17 12:55
Matrix: Water
Date Received: 10/19/17 09:21

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*85 - 114*		*10/30/17 13:23*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*10/30/17 13:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*10/30/17 13:23*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*10/30/17 13:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/26/17 02:17	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 02:17	1
Methane	**0.48**	**J**	0.58	0.58	0.29	ug/L		10/26/17 02:17	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**11**	**M**	1.0	1.0	0.40	mg/L		10/24/17 01:39	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/23/17 15:09	1
Iron	75	U	100	75	25	ug/L		10/23/17 15:09	1
Manganese	**180**		5.0	5.0	1.8	ug/L		10/23/17 15:09	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**1.7**		0.10	0.050	0.019	mg/L		10/23/17 18:13	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 08:09	1
Total Organic Carbon - Duplicates	**0.72**	**J**	1.0	0.50	0.16	mg/L		10/24/17 10:05	1
Alkalinity	**24**	**B**	5.0	3.2	1.1	mg/L		10/23/17 15:18	1

Client Sample ID: G6M-04-05X

Lab Sample ID: 680-144476-7

Date Collected: 10/17/17 14:45
Matrix: Water
Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/30/17 13:45	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:45	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:45	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:45	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/30/17 13:45	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/30/17 13:45	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:45	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/30/17 13:45	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:45	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/30/17 13:45	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:45	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 13:45	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 13:45	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/30/17 13:45	1

Client Sample ID: G6M-04-05X
Date Collected: 10/17/17 14:45
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 13:45	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/30/17 13:45	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:45	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:45	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 13:45	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/30/17 13:45	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 13:45	1
Dichlorodifluoromethane	1.0	U Q	1.0	1.0	0.60	ug/L		10/30/17 13:45	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 13:45	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:45	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/30/17 13:45	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/30/17 13:45	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/30/17 13:45	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 13:45	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:45	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 13:45	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:45	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 13:45	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/30/17 13:45	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:45	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:45	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/30/17 13:45	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/30/17 13:45	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 13:45	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 13:45	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 13:45	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/30/17 13:45	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:45	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 13:45	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 13:45	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/30/17 13:45	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/30/17 13:45	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:45	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 13:45	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 13:45	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 13:45	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 13:45	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 13:45	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/30/17 13:45	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 13:45	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/30/17 13:45	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/30/17 13:45	1

Client Sample ID: G6M-04-05X

Lab Sample ID: 680-144476-7

Date Collected: 10/17/17 14:45

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 13:45	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/30/17 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*85 - 114*		*10/30/17 13:45*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*10/30/17 13:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*10/30/17 13:45*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*10/30/17 13:45*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/26/17 02:29	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 02:29	1
Methane	**260**		0.58	0.58	0.29	ug/L		10/26/17 02:29	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**16**	**M**	1.0	1.0	0.40	mg/L		10/24/17 01:56	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/23/17 15:18	1
Iron	75	U	100	75	25	ug/L		10/23/17 15:18	1
Manganese	**15**		5.0	5.0	1.8	ug/L		10/23/17 15:18	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.17**		0.10	0.050	0.019	mg/L		10/23/17 18:15	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 08:09	1
Total Organic Carbon - Duplicates	**0.91**	**J**	1.0	0.50	0.16	mg/L		10/24/17 10:22	1
Alkalinity	**31**	**B**	5.0	3.2	1.1	mg/L		10/23/17 14:38	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144476-8

Date Collected: 10/16/17 08:00

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 15:31	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:31	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:31	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:31	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 15:31	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 15:31	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:31	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 15:31	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:31	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 15:31	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:31	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: Trip Blank
Date Collected: 10/16/17 08:00
Date Received: 10/19/17 09:21

Lab Sample ID: 680-144476-8
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 15:31	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 15:31	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/27/17 15:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 15:31	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 15:31	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:31	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:31	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 15:31	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 15:31	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 15:31	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 15:31	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 15:31	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:31	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 15:31	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/27/17 15:31	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 15:31	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 15:31	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:31	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 15:31	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:31	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 15:31	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 15:31	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:31	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:31	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 15:31	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 15:31	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 15:31	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 15:31	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 15:31	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 15:31	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:31	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 15:31	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 15:31	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 15:31	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 15:31	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:31	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 15:31	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 15:31	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 15:31	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 15:31	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 15:31	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144476-8

Date Collected: 10/16/17 08:00

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 15:31	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 15:31	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 15:31	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 15:31	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:31	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*10/27/17 15:31*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 119*		*10/27/17 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*81 - 118*		*10/27/17 15:31*	*1*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/27/17 15:31*	*1*

Client Sample ID: G6M-13-03X-Fall17

Lab Sample ID: 680-144476-9

Date Collected: 10/18/17 09:15

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/31/17 21:28	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/31/17 21:28	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 21:28	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/31/17 21:28	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/31/17 21:28	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/31/17 21:28	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/31/17 21:28	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/31/17 21:28	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/31/17 21:28	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/31/17 21:28	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 21:28	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/31/17 21:28	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/31/17 21:28	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/31/17 21:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/31/17 21:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/31/17 21:28	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/31/17 21:28	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/31/17 21:28	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 21:28	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/31/17 21:28	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/31/17 21:28	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/31/17 21:28	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/31/17 21:28	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/31/17 21:28	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 21:28	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/31/17 21:28	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/31/17 21:28	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/31/17 21:28	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/31/17 21:28	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-13-03X-Fall17

Lab Sample ID: 680-144476-9

Date Collected: 10/18/17 09:15

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 21:28	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/31/17 21:28	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/31/17 21:28	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/31/17 21:28	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/31/17 21:28	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/31/17 21:28	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/31/17 21:28	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/31/17 21:28	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/31/17 21:28	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/31/17 21:28	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/31/17 21:28	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/31/17 21:28	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/31/17 21:28	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/31/17 21:28	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/31/17 21:28	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/31/17 21:28	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 21:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/31/17 21:28	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/31/17 21:28	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/31/17 21:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 21:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/31/17 21:28	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 21:28	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 21:28	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/31/17 21:28	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/31/17 21:28	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/31/17 21:28	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/31/17 21:28	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/31/17 21:28	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/31/17 21:28	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/31/17 21:28	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 21:28	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/31/17 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*10/31/17 21:28*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*10/31/17 21:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*10/31/17 21:28*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*10/31/17 21:28*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/23/17 15:13	1
Iron	75	U	100	75	25	ug/L		10/23/17 15:13	1
Manganese	**550**		5.0	5.0	1.8	ug/L		10/23/17 15:13	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-04-22X-Fall17

Lab Sample ID: 680-144476-10

Date Collected: 10/18/17 11:35
Matrix: Water
Date Received: 10/19/17 09:21

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**970**		3.0	3.0	1.5	ug/L		10/23/17 15:22	1

Client Sample ID: G6M-02-08X-Fall17

Lab Sample ID: 680-144476-11

Date Collected: 10/18/17 13:20
Matrix: Water
Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	200	U	200	200	140	ug/L		10/31/17 21:52	20
Benzene	20	U	20	20	8.6	ug/L		10/31/17 21:52	20
Bromobenzene	20	U	20	20	10	ug/L		10/31/17 21:52	20
Bromoform	20	U	20	20	8.6	ug/L		10/31/17 21:52	20
Bromomethane	100	U	100	100	50	ug/L		10/31/17 21:52	20
2-Butanone (MEK)	**180**	**J D**	200	200	68	ug/L		10/31/17 21:52	20
Carbon disulfide	40	U	40	40	8.6	ug/L		10/31/17 21:52	20
Carbon tetrachloride	10	U	20	10	6.6	ug/L		10/31/17 21:52	20
Chlorobenzene	10	U	20	10	5.2	ug/L		10/31/17 21:52	20
Chlorobromomethane	20	U	20	20	9.0	ug/L		10/31/17 21:52	20
Chlorodibromomethane	10	U	20	10	6.4	ug/L		10/31/17 21:52	20
Chloroethane	100	U	100	100	50	ug/L		10/31/17 21:52	20
Chloroform	20	U	20	20	10	ug/L		10/31/17 21:52	20
Chloromethane	20	U	20	20	8.0	ug/L		10/31/17 21:52	20
2-Chlorotoluene	10	U	20	10	5.4	ug/L		10/31/17 21:52	20
4-Chlorotoluene	20	U	20	20	9.0	ug/L		10/31/17 21:52	20
cis-1,2-Dichloroethene	20	U	20	20	8.2	ug/L		10/31/17 21:52	20
cis-1,3-Dichloropropene	20	U	20	20	8.0	ug/L		10/31/17 21:52	20
1,2-Dibromo-3-Chloropropane	40	U	100	40	22	ug/L		10/31/17 21:52	20
Dibromomethane	20	U	20	20	7.0	ug/L		10/31/17 21:52	20
1,2-Dichlorobenzene	20	U	20	20	7.4	ug/L		10/31/17 21:52	20
1,3-Dichlorobenzene	20	U	20	20	8.6	ug/L		10/31/17 21:52	20
1,4-Dichlorobenzene	20	U	20	20	9.2	ug/L		10/31/17 21:52	20
Dichlorobromomethane	20	U	20	20	8.8	ug/L		10/31/17 21:52	20
Dichlorodifluoromethane	20	U	20	20	12	ug/L		10/31/17 21:52	20
1,1-Dichloroethane	20	U	20	20	7.6	ug/L		10/31/17 21:52	20
1,2-Dichloroethane	20	U	20	20	10	ug/L		10/31/17 21:52	20
1,1-Dichloroethene	20	U	20	20	7.2	ug/L		10/31/17 21:52	20
1,2-Dichloroethene, Total	20	U	40	20	15	ug/L		10/31/17 21:52	20
1,2-Dichloropropane	20	U	20	20	13	ug/L		10/31/17 21:52	20
1,3-Dichloropropane	20	U	20	20	6.8	ug/L		10/31/17 21:52	20
2,2-Dichloropropane	20	U	20	20	7.4	ug/L		10/31/17 21:52	20
1,1-Dichloropropene	20	U	20	20	6.8	ug/L		10/31/17 21:52	20
Ethylbenzene	10	U	20	10	6.6	ug/L		10/31/17 21:52	20
Ethylene Dibromide	20	U	20	20	8.8	ug/L		10/31/17 21:52	20
Hexachlorobutadiene	100	U	100	100	50	ug/L		10/31/17 21:52	20
2-Hexanone	100	U	200	100	40	ug/L		10/31/17 21:52	20
Isopropylbenzene	20	U	20	20	7.0	ug/L		10/31/17 21:52	20
4-Isopropyltoluene	20	U	20	20	9.6	ug/L		10/31/17 21:52	20
Methylene Chloride	100	U	100	100	50	ug/L		10/31/17 21:52	20
4-Methyl-2-pentanone (MIBK)	100	U	200	100	42	ug/L		10/31/17 21:52	20
Methyl tert-butyl ether	10	U	200	10	6.0	ug/L		10/31/17 21:52	20

Client Sample ID: G6M-02-08X-Fall17

Lab Sample ID: 680-144476-11

Date Collected: 10/18/17 13:20

Matrix: Water

Date Received: 10/19/17 09:21

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
m-Xylene & p-Xylene	20	U	20	20	7.0	ug/L		10/31/17 21:52	20
Naphthalene	100	U	100	100	50	ug/L		10/31/17 21:52	20
n-Butylbenzene	20	U	20	20	9.4	ug/L		10/31/17 21:52	20
N-Propylbenzene	20	U	20	20	7.6	ug/L		10/31/17 21:52	20
o-Xylene	10	U	20	10	4.6	ug/L		10/31/17 21:52	20
sec-Butylbenzene	20	U	20	20	8.4	ug/L		10/31/17 21:52	20
Styrene	10	U	20	10	5.4	ug/L		10/31/17 21:52	20
tert-Butylbenzene	20	U	20	20	9.0	ug/L		10/31/17 21:52	20
1,1,1,2-Tetrachloroethane	20	U	20	20	7.4	ug/L		10/31/17 21:52	20
1,1,2,2-Tetrachloroethane	20	U	20	20	12	ug/L		10/31/17 21:52	20
Tetrachloroethene	20	U	20	20	15	ug/L		10/31/17 21:52	20
Toluene	**140**	**D**	20	20	9.6	ug/L		10/31/17 21:52	20
trans-1,2-Dichloroethene	20	U	20	20	7.4	ug/L		10/31/17 21:52	20
trans-1,3-Dichloropropene	20	U	20	20	8.4	ug/L		10/31/17 21:52	20
1,2,3-Trichlorobenzene	100	U	100	100	50	ug/L		10/31/17 21:52	20
1,2,4-Trichlorobenzene	100	U	100	100	50	ug/L		10/31/17 21:52	20
1,1,1-Trichloroethane	20	U	20	20	7.4	ug/L		10/31/17 21:52	20
1,1,2-Trichloroethane	10	U	20	10	6.6	ug/L		10/31/17 21:52	20
Trichloroethene	20	U	20	20	9.6	ug/L		10/31/17 21:52	20
Trichlorofluoromethane	20	U	20	20	8.4	ug/L		10/31/17 21:52	20
1,2,3-Trichloropropane	20	U	20	20	7.8	ug/L		10/31/17 21:52	20
1,2,4-Trimethylbenzene	20	U	20	20	9.4	ug/L		10/31/17 21:52	20
1,3,5-Trimethylbenzene	10	U	20	10	6.2	ug/L		10/31/17 21:52	20
Vinyl acetate	40	U	40	40	16	ug/L		10/31/17 21:52	20
Vinyl chloride	20	U	20	20	10	ug/L		10/31/17 21:52	20
Xylenes, Total	10	U	40	10	4.6	ug/L		10/31/17 21:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*		*10/31/17 21:52*	*20*
Dibromofluoromethane (Surr)	*105*		*80 - 119*		*10/31/17 21:52*	*20*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*10/31/17 21:52*	*20*
Toluene-d8 (Surr)	*105*		*89 - 112*		*10/31/17 21:52*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/27/17 15:49	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 15:49	1
Methane (TCD)	**16000**		390	77	39	ug/L		10/27/17 15:49	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.0	U	2.0	2.0	0.80	mg/L		10/24/17 02:14	2

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**370**		3.0	3.0	1.5	ug/L		10/23/17 14:47	1
Iron	**640000**	**D**	1000	750	250	ug/L		10/30/17 20:36	10
Manganese	**3300**		5.0	5.0	1.8	ug/L		10/23/17 14:47	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-02-08X-Fall17

Lab Sample ID: 680-144476-11

Date Collected: 10/18/17 13:20

Matrix: Water

Date Received: 10/19/17 09:21

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.26		0.10	0.050	0.019	mg/L		10/23/17 18:17	1
Sulfide	1.6		1.0	1.0	1.0	mg/L		10/20/17 09:15	1
Total Organic Carbon - Duplicates	250		7.7	3.8	1.2	mg/L		10/24/17 10:50	7.69
Alkalinity	680	B	5.0	3.2	1.1	mg/L		10/23/17 15:13	1

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-144476-1	G6M-02-04X	93	92	86	105
680-144476-2	G6M-13-01X	94	92	84	106
680-144476-3	G6M-13-04X	96	90	85	105
680-144476-3 MS	G6M-13-04X	89	95	86	101
680-144476-3 MSD	G6M-13-04X	87	94	87	104
680-144476-4	G6M-04-07X	88	98	90	100
680-144476-5	G6M-04-06X	88	99	92	99
680-144476-6	G6M-03-09X	89	100	91	100
680-144476-7	G6M-04-05X	88	98	92	99
680-144476-8	Trip Blank	93	94	89	105
680-144476-9	G6M-13-03X-Fall17	100	103	97	104
680-144476-11	G6M-02-08X-Fall17	102	105	101	105
LCS 680-500216/3	Lab Control Sample	88	98	91	102
LCS 680-500485/4	Lab Control Sample	85	99	92	96
LCS 680-500795/3	Lab Control Sample	100	106	101	107
LCSD 680-500216/4	Lab Control Sample Dup	84 Q	91	84	95
LCSD 680-500485/5	Lab Control Sample Dup	85	101	95	97
LCSD 680-500795/4	Lab Control Sample Dup	99	104	99	106
MB 680-500216/9	Method Blank	92	91	84	107
MB 680-500485/9	Method Blank	89	99	91	99
MB 680-500795/9	Method Blank	100	101	95	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-500216/9
Matrix: Water
Analysis Batch: 500216

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/27/17 11:46	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 11:46	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 11:46	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 11:46	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/27/17 11:46	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/27/17 11:46	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 11:46	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/27/17 11:46	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 11:46	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/27/17 11:46	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 11:46	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 11:46	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 11:46	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 11:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/27/17 11:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/27/17 11:46	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/27/17 11:46	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 11:46	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 11:46	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/27/17 11:46	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/27/17 11:46	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 11:46	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/27/17 11:46	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 11:46	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 11:46	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/27/17 11:46	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/27/17 11:46	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/27/17 11:46	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 11:46	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 11:46	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/27/17 11:46	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 11:46	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/27/17 11:46	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/27/17 11:46	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 11:46	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 11:46	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/27/17 11:46	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/27/17 11:46	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/27/17 11:46	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 11:46	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/27/17 11:46	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/27/17 11:46	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 11:46	1

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

Lab Sample ID: MB 680-500216/9
Matrix: Water
Analysis Batch: 500216

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/27/17 11:46	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/27/17 11:46	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 11:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/27/17 11:46	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/27/17 11:46	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 11:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 11:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 11:46	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/27/17 11:46	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/27/17 11:46	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/27/17 11:46	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/27/17 11:46	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/27/17 11:46	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/27/17 11:46	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/27/17 11:46	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/27/17 11:46	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/27/17 11:46	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 11:46	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/27/17 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*10/27/17 11:46*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 119*		*10/27/17 11:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*		*10/27/17 11:46*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*10/27/17 11:46*	*1*

Lab Sample ID: LCS 680-500216/3
Matrix: Water
Analysis Batch: 500216

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	238		ug/L		95	39 - 160
Benzene	50.0	50.0		ug/L		100	79 - 120
Bromobenzene	50.0	50.1		ug/L		100	80 - 120
Bromoform	50.0	47.4		ug/L		95	66 - 130
Bromomethane	50.0	58.0		ug/L		116	53 - 141
2-Butanone (MEK)	250	246		ug/L		98	56 - 143
Carbon disulfide	50.0	44.7		ug/L		89	64 - 133
Carbon tetrachloride	50.0	46.8		ug/L		94	72 - 136
Chlorobenzene	50.0	49.7		ug/L		99	82 - 118
Chlorobromomethane	50.0	48.8		ug/L		98	78 - 123
Chlorodibromomethane	50.0	45.9		ug/L		92	74 - 126
Chloroethane	50.0	52.3		ug/L		105	60 - 138
Chloroform	50.0	48.7		ug/L		97	79 - 124
Chloromethane	50.0	43.6		ug/L		87	50 - 139
2-Chlorotoluene	50.0	48.9		ug/L		98	79 - 122
4-Chlorotoluene	50.0	49.1		ug/L		98	78 - 122

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

Lab Sample ID: LCS 680-500216/3
Matrix: Water
Analysis Batch: 500216

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	50.0	48.9		ug/L		98	78 - 123
cis-1,3-Dichloropropene	50.0	48.2		ug/L		96	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	48.3		ug/L		97	62 - 128
Dibromomethane	50.0	46.7		ug/L		93	79 - 123
1,2-Dichlorobenzene	50.0	47.1		ug/L		94	80 - 119
1,3-Dichlorobenzene	50.0	46.2		ug/L		92	80 - 119
1,4-Dichlorobenzene	50.0	46.8		ug/L		94	79 - 118
Dichlorobromomethane	50.0	48.5		ug/L		97	79 - 125
Dichlorodifluoromethane	50.0	51.2		ug/L		102	32 - 152
1,1-Dichloroethane	50.0	49.8		ug/L		100	77 - 125
1,2-Dichloroethane	50.0	47.5		ug/L		95	73 - 128
1,1-Dichloroethene	50.0	50.1		ug/L		100	71 - 131
1,2-Dichloroethene, Total	100	101		ug/L		101	79 - 121
1,2-Dichloropropane	50.0	49.2		ug/L		98	78 - 122
1,3-Dichloropropane	50.0	47.9		ug/L		96	80 - 119
2,2-Dichloropropane	50.0	48.8		ug/L		98	60 - 139
1,1-Dichloropropene	50.0	50.5		ug/L		101	79 - 125
Ethylbenzene	50.0	50.0		ug/L		100	79 - 121
Ethylene Dibromide	50.0	47.2		ug/L		94	75 - 127
Hexachlorobutadiene	50.0	57.1		ug/L		114	66 - 134
2-Hexanone	250	215		ug/L		86	57 - 139
Isopropylbenzene	50.0	51.0		ug/L		102	72 - 131
4-Isopropyltoluene	50.0	49.6		ug/L		99	77 - 127
Methylene Chloride	50.0	50.1		ug/L		100	74 - 124
4-Methyl-2-pentanone (MIBK)	250	218		ug/L		87	67 - 130
Methyl tert-butyl ether	50.0	50.1		ug/L		100	71 - 124
m-Xylene & p-Xylene	50.0	48.6		ug/L		97	80 - 121
Naphthalene	50.0	46.1		ug/L		92	61 - 128
n-Butylbenzene	50.0	49.8		ug/L		100	75 - 128
N-Propylbenzene	50.0	49.9		ug/L		100	76 - 126
o-Xylene	50.0	50.0		ug/L		100	78 - 122
sec-Butylbenzene	50.0	53.0		ug/L		106	77 - 126
Styrene	50.0	50.2		ug/L		100	78 - 123
tert-Butylbenzene	50.0	50.7		ug/L		101	78 - 124
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/L		104	78 - 124
1,1,2,2-Tetrachloroethane	50.0	51.9		ug/L		104	71 - 121
Tetrachloroethene	50.0	48.4		ug/L		97	74 - 129
Toluene	50.0	48.9		ug/L		98	80 - 121
trans-1,2-Dichloroethene	50.0	52.4		ug/L		105	75 - 124
trans-1,3-Dichloropropene	50.0	45.5		ug/L		91	73 - 127
1,2,3-Trichlorobenzene	50.0	50.2		ug/L		100	69 - 129
1,2,4-Trichlorobenzene	50.0	48.1		ug/L		96	69 - 130
1,1,1-Trichloroethane	50.0	47.6		ug/L		95	74 - 131
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	80 - 119
Trichloroethene	50.0	47.1		ug/L		94	79 - 123
Trichlorofluoromethane	50.0	51.3		ug/L		103	65 - 141
1,2,3-Trichloropropane	50.0	51.3		ug/L		103	73 - 122
1,2,4-Trimethylbenzene	50.0	50.2		ug/L		100	76 - 124

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

Lab Sample ID: LCS 680-500216/3
Matrix: Water
Analysis Batch: 500216

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	50.2		ug/L		100	75 - 124
Vinyl acetate	100	86.6		ug/L		87	54 - 146
Vinyl chloride	50.0	49.4		ug/L		99	58 - 137
Xylenes, Total	100	98.6		ug/L		99	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*85 - 114*
Dibromofluoromethane (Surr)	*98*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*
Toluene-d8 (Surr)	*102*		*89 - 112*

Lab Sample ID: LCSD 680-500216/4
Matrix: Water
Analysis Batch: 500216

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	250	214		ug/L		86	39 - 160	11	20
Benzene	50.0	47.2		ug/L		94	79 - 120	6	20
Bromobenzene	50.0	46.6		ug/L		93	80 - 120	7	20
Bromoform	50.0	43.4		ug/L		87	66 - 130	9	20
Bromomethane	50.0	54.7		ug/L		109	53 - 141	6	20
2-Butanone (MEK)	250	222		ug/L		89	56 - 143	10	20
Carbon disulfide	50.0	41.5		ug/L		83	64 - 133	7	20
Carbon tetrachloride	50.0	43.3		ug/L		87	72 - 136	8	20
Chlorobenzene	50.0	47.1		ug/L		94	82 - 118	5	20
Chlorobromomethane	50.0	45.3		ug/L		91	78 - 123	7	20
Chlorodibromomethane	50.0	42.5		ug/L		85	74 - 126	8	20
Chloroethane	50.0	49.5		ug/L		99	60 - 138	5	20
Chloroform	50.0	45.8		ug/L		92	79 - 124	6	20
Chloromethane	50.0	42.0		ug/L		84	50 - 139	4	20
2-Chlorotoluene	50.0	45.7		ug/L		91	79 - 122	7	20
4-Chlorotoluene	50.0	46.3		ug/L		93	78 - 122	6	20
cis-1,2-Dichloroethene	50.0	45.0		ug/L		90	78 - 123	8	20
cis-1,3-Dichloropropene	50.0	44.6		ug/L		89	75 - 124	8	20
1,2-Dibromo-3-Chloropropane	50.0	44.4		ug/L		89	62 - 128	8	20
Dibromomethane	50.0	44.4		ug/L		89	79 - 123	5	20
1,2-Dichlorobenzene	50.0	44.7		ug/L		89	80 - 119	5	20
1,3-Dichlorobenzene	50.0	43.9		ug/L		88	80 - 119	5	20
1,4-Dichlorobenzene	50.0	44.4		ug/L		89	79 - 118	5	20
Dichlorobromomethane	50.0	45.6		ug/L		91	79 - 125	6	20
Dichlorodifluoromethane	50.0	47.6		ug/L		95	32 - 152	7	20
1,1-Dichloroethane	50.0	46.6		ug/L		93	77 - 125	7	20
1,2-Dichloroethane	50.0	44.5		ug/L		89	73 - 128	7	20
1,1-Dichloroethene	50.0	46.3		ug/L		93	71 - 131	8	20
1,2-Dichloroethene, Total	100	93.5		ug/L		94	79 - 121	8	20
1,2-Dichloropropane	50.0	47.1		ug/L		94	78 - 122	4	20
1,3-Dichloropropane	50.0	45.1		ug/L		90	80 - 119	6	20
2,2-Dichloropropane	50.0	44.6		ug/L		89	60 - 139	9	20

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

Lab Sample ID: LCSD 680-500216/4
Matrix: Water
Analysis Batch: 500216

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-Dichloropropene	50.0	47.0		ug/L		94	79 - 125	7	20
Ethylbenzene	50.0	46.4		ug/L		93	79 - 121	7	20
Ethylene Dibromide	50.0	42.9		ug/L		86	75 - 127	9	20
Hexachlorobutadiene	50.0	54.9		ug/L		110	66 - 134	4	20
2-Hexanone	250	198		ug/L		79	57 - 139	8	20
Isopropylbenzene	50.0	47.0		ug/L		94	72 - 131	8	20
4-Isopropyltoluene	50.0	46.6		ug/L		93	77 - 127	6	20
Methylene Chloride	50.0	47.3		ug/L		95	74 - 124	6	20
4-Methyl-2-pentanone (MIBK)	250	199		ug/L		79	67 - 130	9	20
Methyl tert-butyl ether	50.0	46.1		ug/L		92	71 - 124	8	20
m-Xylene & p-Xylene	50.0	45.6		ug/L		91	80 - 121	6	20
Naphthalene	50.0	42.6		ug/L		85	61 - 128	8	20
n-Butylbenzene	50.0	46.8		ug/L		94	75 - 128	6	20
N-Propylbenzene	50.0	46.4		ug/L		93	76 - 126	7	20
o-Xylene	50.0	45.9		ug/L		92	78 - 122	9	20
sec-Butylbenzene	50.0	48.7		ug/L		97	77 - 126	8	20
Styrene	50.0	45.9		ug/L		92	78 - 123	9	20
tert-Butylbenzene	50.0	47.7		ug/L		95	78 - 124	6	20
1,1,1,2-Tetrachloroethane	50.0	48.0		ug/L		96	78 - 124	8	20
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/L		93	71 - 121	11	20
Tetrachloroethene	50.0	44.2		ug/L		88	74 - 129	9	20
Toluene	50.0	45.3		ug/L		91	80 - 121	8	20
trans-1,2-Dichloroethene	50.0	48.5		ug/L		97	75 - 124	8	20
trans-1,3-Dichloropropene	50.0	41.9		ug/L		84	73 - 127	8	20
1,2,3-Trichlorobenzene	50.0	47.9		ug/L		96	69 - 129	5	20
1,2,4-Trichlorobenzene	50.0	46.1		ug/L		92	69 - 130	4	20
1,1,1-Trichloroethane	50.0	43.4		ug/L		87	74 - 131	9	20
1,1,2-Trichloroethane	50.0	46.0		ug/L		92	80 - 119	9	20
Trichloroethene	50.0	43.8		ug/L		88	79 - 123	7	20
Trichlorofluoromethane	50.0	48.5		ug/L		97	65 - 141	6	20
1,2,3-Trichloropropane	50.0	46.8		ug/L		94	73 - 122	9	20
1,2,4-Trimethylbenzene	50.0	46.4		ug/L		93	76 - 124	8	20
1,3,5-Trimethylbenzene	50.0	46.1		ug/L		92	75 - 124	9	20
Vinyl acetate	100	79.1		ug/L		79	54 - 146	9	20
Vinyl chloride	50.0	46.7		ug/L		93	58 - 137	6	20
Xylenes, Total	100	91.5		ug/L		92	79 - 121	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*	*Q*	*85 - 114*
Dibromofluoromethane (Surr)	*91*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*84*		*81 - 118*
Toluene-d8 (Surr)	*95*		*89 - 112*

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

Lab Sample ID: 680-144476-3 MS
Matrix: Water
Analysis Batch: 500216

Client Sample ID: G6M-13-04X
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10	U	250	228		ug/L		91	39 - 160
Benzene	1.0	U	50.0	50.2		ug/L		100	79 - 120
Bromobenzene	1.0	U	50.0	48.0		ug/L		96	80 - 120
Bromoform	1.0	U	50.0	43.9		ug/L		88	66 - 130
Bromomethane	5.0	U J	50.0	48.3		ug/L		97	53 - 141
2-Butanone (MEK)	10	U	250	239		ug/L		96	56 - 143
Carbon disulfide	2.0	U	50.0	46.2		ug/L		92	64 - 133
Carbon tetrachloride	0.50	U	50.0	48.1		ug/L		96	72 - 136
Chlorobenzene	0.50	U	50.0	48.0		ug/L		96	82 - 118
Chlorobromomethane	1.0	U	50.0	45.7		ug/L		91	78 - 123
Chlorodibromomethane	0.50	U	50.0	44.1		ug/L		88	74 - 126
Chloroethane	5.7		50.0	60.4		ug/L		109	60 - 138
Chloroform	1.0	U	50.0	47.9		ug/L		96	79 - 124
Chloromethane	1.0	U	50.0	43.4		ug/L		87	50 - 139
2-Chlorotoluene	0.50	U	50.0	49.0		ug/L		98	79 - 122
4-Chlorotoluene	1.0	U	50.0	48.6		ug/L		97	78 - 122
cis-1,2-Dichloroethene	25		50.0	73.9		ug/L		98	78 - 123
cis-1,3-Dichloropropene	1.0	U	50.0	46.0		ug/L		92	75 - 124
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	45.2		ug/L		90	62 - 128
Dibromomethane	1.0	U	50.0	45.4		ug/L		91	79 - 123
1,2-Dichlorobenzene	1.0	U	50.0	46.7		ug/L		93	80 - 119
1,3-Dichlorobenzene	1.0	U	50.0	46.2		ug/L		92	80 - 119
1,4-Dichlorobenzene	1.0	U	50.0	46.8		ug/L		94	79 - 118
Dichlorobromomethane	1.0	U	50.0	47.0		ug/L		94	79 - 125
Dichlorodifluoromethane	1.0	U	50.0	51.2		ug/L		102	32 - 152
1,1-Dichloroethane	1.0	U	50.0	48.7		ug/L		97	77 - 125
1,2-Dichloroethane	1.0	U	50.0	44.5		ug/L		89	73 - 128
1,1-Dichloroethene	0.71	J M	50.0	49.6		ug/L		98	71 - 131
1,2-Dichloroethene, Total	26		100	126		ug/L		101	79 - 121
1,2-Dichloropropane	1.0	U	50.0	49.0		ug/L		98	78 - 122
1,3-Dichloropropane	1.0	U	50.0	46.4		ug/L		93	80 - 119
2,2-Dichloropropane	1.0	U	50.0	47.4		ug/L		95	60 - 139
1,1-Dichloropropene	1.0	U	50.0	52.3		ug/L		105	79 - 125
Ethylbenzene	0.50	U	50.0	49.4		ug/L		99	79 - 121
Ethylene Dibromide	1.0	U	50.0	44.5		ug/L		89	75 - 127
Hexachlorobutadiene	5.0	U	50.0	54.8		ug/L		110	66 - 134
2-Hexanone	5.0	U	250	211		ug/L		85	57 - 139
Isopropylbenzene	1.0	U	50.0	50.1		ug/L		100	72 - 131
4-Isopropyltoluene	1.0	U	50.0	49.6		ug/L		99	77 - 127
Methylene Chloride	5.0	U	50.0	48.3		ug/L		97	74 - 124
4-Methyl-2-pentanone (MIBK)	5.0	U	250	212		ug/L		85	67 - 130
Methyl tert-butyl ether	0.50	U	50.0	47.5		ug/L		95	71 - 124
m-Xylene & p-Xylene	1.0	U	50.0	49.3		ug/L		99	80 - 121
Naphthalene	5.0	U	50.0	41.1		ug/L		82	61 - 128
n-Butylbenzene	1.0	U	50.0	51.3		ug/L		103	75 - 128
N-Propylbenzene	1.0	U	50.0	50.5		ug/L		101	76 - 126
o-Xylene	0.50	U	50.0	49.1		ug/L		98	78 - 122
sec-Butylbenzene	1.0	U	50.0	53.0		ug/L		106	77 - 126

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

Lab Sample ID: 680-144476-3 MS
Matrix: Water
Analysis Batch: 500216

Client Sample ID: G6M-13-04X
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.50	U	50.0	49.1		ug/L		98	78 - 123
tert-Butylbenzene	1.0	U	50.0	51.6		ug/L		103	78 - 124
1,1,1,2-Tetrachloroethane	1.0	U	50.0	49.2		ug/L		98	78 - 124
1,1,2,2-Tetrachloroethane	1.0	U	50.0	48.9		ug/L		98	71 - 121
Tetrachloroethene	40		50.0	94.7		ug/L		110	74 - 129
Toluene	1.0	U	50.0	48.7		ug/L		97	80 - 121
trans-1,2-Dichloroethene	0.81	J	50.0	52.4		ug/L		103	75 - 124
trans-1,3-Dichloropropene	1.0	U	50.0	43.4		ug/L		87	73 - 127
1,2,3-Trichlorobenzene	5.0	U	50.0	42.4		ug/L		85	69 - 129
1,2,4-Trichlorobenzene	5.0	U	50.0	44.4		ug/L		89	69 - 130
1,1,1-Trichloroethane	1.0	U	50.0	48.1		ug/L		96	74 - 131
1,1,2-Trichloroethane	0.50	U	50.0	49.0		ug/L		98	80 - 119
Trichloroethene	40		50.0	88.7		ug/L		97	79 - 123
Trichlorofluoromethane	1.0	U	50.0	54.9		ug/L		110	65 - 141
1,2,3-Trichloropropane	1.0	U	50.0	47.7		ug/L		95	73 - 122
1,2,4-Trimethylbenzene	1.0	U	50.0	48.5		ug/L		97	76 - 124
1,3,5-Trimethylbenzene	0.50	U	50.0	49.9		ug/L		100	75 - 124
Vinyl acetate	2.0	U	100	81.8		ug/L		82	54 - 146
Vinyl chloride	33		50.0	83.9		ug/L		103	58 - 137
Xylenes, Total	0.50	U	100	98.4		ug/L		98	79 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*85 - 114*
Dibromofluoromethane (Surr)	*95*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*86*		*81 - 118*
Toluene-d8 (Surr)	*101*		*89 - 112*

Lab Sample ID: 680-144476-3 MSD
Matrix: Water
Analysis Batch: 500216

Client Sample ID: G6M-13-04X
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10	U	250	241		ug/L		96	39 - 160	5	20
Benzene	1.0	U	50.0	51.6		ug/L		103	79 - 120	3	20
Bromobenzene	1.0	U	50.0	48.7		ug/L		97	80 - 120	1	20
Bromoform	1.0	U	50.0	47.6		ug/L		95	66 - 130	8	20
Bromomethane	5.0	U J	50.0	62.4	J	ug/L		125	53 - 141	26	20
2-Butanone (MEK)	10	U	250	243		ug/L		97	56 - 143	2	20
Carbon disulfide	2.0	U	50.0	50.2		ug/L		100	64 - 133	8	20
Carbon tetrachloride	0.50	U	50.0	48.8		ug/L		98	72 - 136	2	20
Chlorobenzene	0.50	U	50.0	49.8		ug/L		100	82 - 118	4	20
Chlorobromomethane	1.0	U	50.0	46.2		ug/L		92	78 - 123	1	20
Chlorodibromomethane	0.50	U	50.0	46.4		ug/L		93	74 - 126	5	20
Chloroethane	5.7		50.0	66.9		ug/L		122	60 - 138	10	20
Chloroform	1.0	U	50.0	47.9		ug/L		96	79 - 124	0	20
Chloromethane	1.0	U	50.0	46.8		ug/L		94	50 - 139	7	20
2-Chlorotoluene	0.50	U	50.0	49.8		ug/L		100	79 - 122	2	20
4-Chlorotoluene	1.0	U	50.0	51.0		ug/L		102	78 - 122	5	20

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

Lab Sample ID: 680-144476-3 MSD
Matrix: Water
Analysis Batch: 500216

Client Sample ID: G6M-13-04X
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	25		50.0	74.7		ug/L		100	78 - 123	1	20
cis-1,3-Dichloropropene	1.0	U	50.0	45.9		ug/L		92	75 - 124	0	20
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	46.8		ug/L		94	62 - 128	3	20
Dibromomethane	1.0	U	50.0	45.8		ug/L		92	79 - 123	1	20
1,2-Dichlorobenzene	1.0	U	50.0	46.9		ug/L		94	80 - 119	0	20
1,3-Dichlorobenzene	1.0	U	50.0	47.2		ug/L		94	80 - 119	2	20
1,4-Dichlorobenzene	1.0	U	50.0	47.6		ug/L		95	79 - 118	2	20
Dichlorobromomethane	1.0	U	50.0	47.8		ug/L		96	79 - 125	2	20
Dichlorodifluoromethane	1.0	U	50.0	52.9		ug/L		106	32 - 152	3	20
1,1-Dichloroethane	1.0	U	50.0	50.4		ug/L		101	77 - 125	3	20
1,2-Dichloroethane	1.0	U	50.0	45.4		ug/L		91	73 - 128	2	20
1,1-Dichloroethene	0.71	J M	50.0	52.3		ug/L		103	71 - 131	5	20
1,2-Dichloroethene, Total	26		100	129		ug/L		103	79 - 121	2	20
1,2-Dichloropropane	1.0	U	50.0	47.8		ug/L		96	78 - 122	2	20
1,3-Dichloropropane	1.0	U	50.0	46.5		ug/L		93	80 - 119	0	20
2,2-Dichloropropane	1.0	U	50.0	48.2		ug/L		96	60 - 139	2	20
1,1-Dichloropropene	1.0	U	50.0	52.4		ug/L		105	79 - 125	0	20
Ethylbenzene	0.50	U	50.0	50.8		ug/L		102	79 - 121	3	20
Ethylene Dibromide	1.0	U	50.0	44.9		ug/L		90	75 - 127	1	20
Hexachlorobutadiene	5.0	U	50.0	53.0		ug/L		106	66 - 134	3	20
2-Hexanone	5.0	U	250	212		ug/L		85	57 - 139	0	20
Isopropylbenzene	1.0	U	50.0	51.7		ug/L		103	72 - 131	3	20
4-Isopropyltoluene	1.0	U	50.0	52.8		ug/L		106	77 - 127	6	20
Methylene Chloride	5.0	U	50.0	50.5		ug/L		101	74 - 124	4	20
4-Methyl-2-pentanone (MIBK)	5.0	U	250	215		ug/L		86	67 - 130	1	20
Methyl tert-butyl ether	0.50	U	50.0	49.3		ug/L		99	71 - 124	4	20
m-Xylene & p-Xylene	1.0	U	50.0	50.3		ug/L		101	80 - 121	2	20
Naphthalene	5.0	U	50.0	42.3		ug/L		85	61 - 128	3	20
n-Butylbenzene	1.0	U	50.0	54.3		ug/L		109	75 - 128	6	20
N-Propylbenzene	1.0	U	50.0	52.1		ug/L		104	76 - 126	3	20
o-Xylene	0.50	U	50.0	50.5		ug/L		101	78 - 122	3	20
sec-Butylbenzene	1.0	U	50.0	55.9		ug/L		112	77 - 126	5	20
Styrene	0.50	U	50.0	51.3		ug/L		103	78 - 123	4	20
tert-Butylbenzene	1.0	U	50.0	54.1		ug/L		108	78 - 124	5	20
1,1,1,2-Tetrachloroethane	1.0	U	50.0	52.1		ug/L		104	78 - 124	6	20
1,1,2,2-Tetrachloroethane	1.0	U	50.0	51.3		ug/L		103	71 - 121	5	20
Tetrachloroethene	40		50.0	86.5		ug/L		94	74 - 129	9	20
Toluene	1.0	U	50.0	49.5		ug/L		99	80 - 121	2	20
trans-1,2-Dichloroethene	0.81	J	50.0	54.5		ug/L		107	75 - 124	4	20
trans-1,3-Dichloropropene	1.0	U	50.0	45.1		ug/L		90	73 - 127	4	20
1,2,3-Trichlorobenzene	5.0	U	50.0	44.3		ug/L		89	69 - 129	4	20
1,2,4-Trichlorobenzene	5.0	U	50.0	42.5		ug/L		85	69 - 130	4	20
1,1,1-Trichloroethane	1.0	U	50.0	49.3		ug/L		99	74 - 131	2	20
1,1,2-Trichloroethane	0.50	U	50.0	48.6		ug/L		97	80 - 119	1	20
Trichloroethene	40		50.0	85.4		ug/L		90	79 - 123	4	20
Trichlorofluoromethane	1.0	U	50.0	60.2		ug/L		120	65 - 141	9	20
1,2,3-Trichloropropane	1.0	U	50.0	50.1		ug/L		100	73 - 122	5	20
1,2,4-Trimethylbenzene	1.0	U	50.0	50.3		ug/L		101	76 - 124	4	20

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

Lab Sample ID: 680-144476-3 MSD
Matrix: Water
Analysis Batch: 500216

Client Sample ID: G6M-13-04X
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	0.50	U	50.0	51.5		ug/L		103	75 - 124	3	20
Vinyl acetate	2.0	U	100	82.9		ug/L		83	54 - 146	1	20
Vinyl chloride	33		50.0	87.8		ug/L		111	58 - 137	5	20
Xylenes, Total	0.50	U	100	101		ug/L		101	79 - 121	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*85 - 114*
Dibromofluoromethane (Surr)	*94*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*87*		*81 - 118*
Toluene-d8 (Surr)	*104*		*89 - 112*

Lab Sample ID: MB 680-500485/9
Matrix: Water
Analysis Batch: 500485

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/30/17 11:55	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 11:55	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 11:55	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 11:55	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/30/17 11:55	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/30/17 11:55	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 11:55	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/30/17 11:55	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 11:55	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/30/17 11:55	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 11:55	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 11:55	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 11:55	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 11:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/30/17 11:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/30/17 11:55	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/30/17 11:55	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 11:55	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 11:55	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/30/17 11:55	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/30/17 11:55	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 11:55	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/30/17 11:55	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 11:55	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 11:55	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/30/17 11:55	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/30/17 11:55	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/30/17 11:55	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 11:55	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 11:55	1

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

Lab Sample ID: MB 680-500485/9
Matrix: Water
Analysis Batch: 500485

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/30/17 11:55	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 11:55	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/30/17 11:55	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/30/17 11:55	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 11:55	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 11:55	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/30/17 11:55	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/30/17 11:55	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/30/17 11:55	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 11:55	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/30/17 11:55	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/30/17 11:55	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 11:55	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/30/17 11:55	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/30/17 11:55	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 11:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/30/17 11:55	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/30/17 11:55	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 11:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 11:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 11:55	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/30/17 11:55	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/30/17 11:55	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/30/17 11:55	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/30/17 11:55	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/30/17 11:55	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/30/17 11:55	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/30/17 11:55	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/30/17 11:55	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/30/17 11:55	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/30/17 11:55	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/30/17 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*85 - 114*		*10/30/17 11:55*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/30/17 11:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*10/30/17 11:55*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*10/30/17 11:55*	*1*

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

Lab Sample ID: LCS 680-500485/4
Matrix: Water
Analysis Batch: 500485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	232		ug/L		93	39 - 160
Benzene	50.0	51.0		ug/L		102	79 - 120
Bromobenzene	50.0	50.3		ug/L		101	80 - 120
Bromoform	50.0	56.3		ug/L		113	66 - 130
Bromomethane	50.0	49.4		ug/L		99	53 - 141
2-Butanone (MEK)	250	236		ug/L		95	56 - 143
Carbon disulfide	50.0	48.7		ug/L		97	64 - 133
Carbon tetrachloride	50.0	53.6		ug/L		107	72 - 136
Chlorobenzene	50.0	49.4		ug/L		99	82 - 118
Chlorobromomethane	50.0	51.3		ug/L		103	78 - 123
Chlorodibromomethane	50.0	50.4		ug/L		101	74 - 126
Chloroethane	50.0	51.8		ug/L		104	60 - 138
Chloroform	50.0	50.0		ug/L		100	79 - 124
Chloromethane	50.0	42.1		ug/L		84	50 - 139
2-Chlorotoluene	50.0	50.6		ug/L		101	79 - 122
4-Chlorotoluene	50.0	50.7		ug/L		101	78 - 122
cis-1,2-Dichloroethene	50.0	51.3		ug/L		103	78 - 123
cis-1,3-Dichloropropene	50.0	55.5		ug/L		111	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	50.6		ug/L		101	62 - 128
Dibromomethane	50.0	50.2		ug/L		100	79 - 123
1,2-Dichlorobenzene	50.0	47.3		ug/L		95	80 - 119
1,3-Dichlorobenzene	50.0	47.2		ug/L		94	80 - 119
1,4-Dichlorobenzene	50.0	47.1		ug/L		94	79 - 118
Dichlorobromomethane	50.0	55.1		ug/L		110	79 - 125
Dichlorodifluoromethane	50.0	30.7		ug/L		61	32 - 152
1,1-Dichloroethane	50.0	50.3		ug/L		101	77 - 125
1,2-Dichloroethane	50.0	47.6		ug/L		95	73 - 128
1,1-Dichloroethene	50.0	49.1		ug/L		98	71 - 131
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121
1,2-Dichloropropane	50.0	51.6		ug/L		103	78 - 122
1,3-Dichloropropane	50.0	47.6		ug/L		95	80 - 119
2,2-Dichloropropane	50.0	57.4		ug/L		115	60 - 139
1,1-Dichloropropene	50.0	53.8		ug/L		108	79 - 125
Ethylbenzene	50.0	50.6		ug/L		101	79 - 121
Ethylene Dibromide	50.0	50.2		ug/L		100	75 - 127
Hexachlorobutadiene	50.0	70.5	Q	ug/L		141	66 - 134
2-Hexanone	250	249		ug/L		100	57 - 139
Isopropylbenzene	50.0	52.5		ug/L		105	72 - 131
4-Isopropyltoluene	50.0	51.6		ug/L		103	77 - 127
Methylene Chloride	50.0	51.1		ug/L		102	74 - 124
4-Methyl-2-pentanone (MIBK)	250	252		ug/L		101	67 - 130
Methyl tert-butyl ether	50.0	48.7		ug/L		97	71 - 124
m-Xylene & p-Xylene	50.0	51.0		ug/L		102	80 - 121
Naphthalene	50.0	46.7		ug/L		93	61 - 128
n-Butylbenzene	50.0	55.0		ug/L		110	75 - 128
N-Propylbenzene	50.0	53.6		ug/L		107	76 - 126
o-Xylene	50.0	50.9		ug/L		102	78 - 122
sec-Butylbenzene	50.0	55.0		ug/L		110	77 - 126

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

Lab Sample ID: LCS 680-500485/4
Matrix: Water
Analysis Batch: 500485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	49.9		ug/L		100	78 - 123
tert-Butylbenzene	50.0	53.6		ug/L		107	78 - 124
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/L		105	78 - 124
1,1,2,2-Tetrachloroethane	50.0	45.2		ug/L		90	71 - 121
Tetrachloroethene	50.0	53.2		ug/L		106	74 - 129
Toluene	50.0	51.0		ug/L		102	80 - 121
trans-1,2-Dichloroethene	50.0	53.8		ug/L		108	75 - 124
trans-1,3-Dichloropropene	50.0	53.4		ug/L		107	73 - 127
1,2,3-Trichlorobenzene	50.0	56.2		ug/L		112	69 - 129
1,2,4-Trichlorobenzene	50.0	50.1		ug/L		100	69 - 130
1,1,1-Trichloroethane	50.0	53.0		ug/L		106	74 - 131
1,1,2-Trichloroethane	50.0	49.1		ug/L		98	80 - 119
Trichloroethene	50.0	51.1		ug/L		102	79 - 123
Trichlorofluoromethane	50.0	52.8		ug/L		106	65 - 141
1,2,3-Trichloropropane	50.0	51.1		ug/L		102	73 - 122
1,2,4-Trimethylbenzene	50.0	52.1		ug/L		104	76 - 124
1,3,5-Trimethylbenzene	50.0	53.2		ug/L		106	75 - 124
Vinyl acetate	100	124		ug/L		124	54 - 146
Vinyl chloride	50.0	46.5		ug/L		93	58 - 137
Xylenes, Total	100	102		ug/L		102	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*
Toluene-d8 (Surr)	*96*		*89 - 112*

Lab Sample ID: LCSD 680-500485/5
Matrix: Water
Analysis Batch: 500485

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	250	247		ug/L		99	39 - 160	6	20
Benzene	50.0	51.2		ug/L		102	79 - 120	0	20
Bromobenzene	50.0	51.6		ug/L		103	80 - 120	3	20
Bromoform	50.0	61.2		ug/L		122	66 - 130	8	20
Bromomethane	50.0	49.0		ug/L		98	53 - 141	1	20
2-Butanone (MEK)	250	255		ug/L		102	56 - 143	8	20
Carbon disulfide	50.0	49.0		ug/L		98	64 - 133	1	20
Carbon tetrachloride	50.0	53.8		ug/L		108	72 - 136	0	20
Chlorobenzene	50.0	49.9		ug/L		100	82 - 118	1	20
Chlorobromomethane	50.0	53.1		ug/L		106	78 - 123	4	20
Chlorodibromomethane	50.0	53.9		ug/L		108	74 - 126	7	20
Chloroethane	50.0	50.7		ug/L		101	60 - 138	2	20
Chloroform	50.0	50.5		ug/L		101	79 - 124	1	20
Chloromethane	50.0	39.9		ug/L		80	50 - 139	6	20
2-Chlorotoluene	50.0	51.0		ug/L		102	79 - 122	1	20
4-Chlorotoluene	50.0	51.3		ug/L		103	78 - 122	1	20

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

Lab Sample ID: LCSD 680-500485/5
Matrix: Water
Analysis Batch: 500485

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	50.0	51.0		ug/L		102	78 - 123	0	20
cis-1,3-Dichloropropene	50.0	57.9		ug/L		116	75 - 124	4	20
1,2-Dibromo-3-Chloropropane	50.0	55.0		ug/L		110	62 - 128	8	20
Dibromomethane	50.0	52.5		ug/L		105	79 - 123	4	20
1,2-Dichlorobenzene	50.0	47.5		ug/L		95	80 - 119	0	20
1,3-Dichlorobenzene	50.0	47.1		ug/L		94	80 - 119	0	20
1,4-Dichlorobenzene	50.0	47.2		ug/L		94	79 - 118	0	20
Dichlorobromomethane	50.0	57.4		ug/L		115	79 - 125	4	20
Dichlorodifluoromethane	50.0	27.9		ug/L		56	32 - 152	9	20
1,1-Dichloroethane	50.0	51.1		ug/L		102	77 - 125	2	20
1,2-Dichloroethane	50.0	50.1		ug/L		100	73 - 128	5	20
1,1-Dichloroethene	50.0	47.9		ug/L		96	71 - 131	2	20
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121	1	20
1,2-Dichloropropane	50.0	52.0		ug/L		104	78 - 122	1	20
1,3-Dichloropropane	50.0	49.5		ug/L		99	80 - 119	4	20
2,2-Dichloropropane	50.0	56.2		ug/L		112	60 - 139	2	20
1,1-Dichloropropene	50.0	52.8		ug/L		106	79 - 125	2	20
Ethylbenzene	50.0	49.8		ug/L		100	79 - 121	2	20
Ethylene Dibromide	50.0	52.3		ug/L		105	75 - 127	4	20
Hexachlorobutadiene	50.0	71.7	Q	ug/L		143	66 - 134	2	20
2-Hexanone	250	267		ug/L		107	57 - 139	7	20
Isopropylbenzene	50.0	52.2		ug/L		104	72 - 131	1	20
4-Isopropyltoluene	50.0	50.6		ug/L		101	77 - 127	2	20
Methylene Chloride	50.0	51.5		ug/L		103	74 - 124	1	20
4-Methyl-2-pentanone (MIBK)	250	269		ug/L		108	67 - 130	6	20
Methyl tert-butyl ether	50.0	51.7		ug/L		103	71 - 124	6	20
m-Xylene & p-Xylene	50.0	51.0		ug/L		102	80 - 121	0	20
Naphthalene	50.0	49.1		ug/L		98	61 - 128	5	20
n-Butylbenzene	50.0	54.3		ug/L		109	75 - 128	1	20
N-Propylbenzene	50.0	53.1		ug/L		106	76 - 126	1	20
o-Xylene	50.0	50.9		ug/L		102	78 - 122	0	20
sec-Butylbenzene	50.0	54.4		ug/L		109	77 - 126	1	20
Styrene	50.0	50.7		ug/L		101	78 - 123	2	20
tert-Butylbenzene	50.0	53.1		ug/L		106	78 - 124	1	20
1,1,1,2-Tetrachloroethane	50.0	54.5		ug/L		109	78 - 124	4	20
1,1,2,2-Tetrachloroethane	50.0	47.3		ug/L		95	71 - 121	4	20
Tetrachloroethene	50.0	52.2		ug/L		104	74 - 129	2	20
Toluene	50.0	50.4		ug/L		101	80 - 121	1	20
trans-1,2-Dichloroethene	50.0	52.7		ug/L		105	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	55.7		ug/L		111	73 - 127	4	20
1,2,3-Trichlorobenzene	50.0	58.9		ug/L		118	69 - 129	5	20
1,2,4-Trichlorobenzene	50.0	51.3		ug/L		103	69 - 130	2	20
1,1,1-Trichloroethane	50.0	52.8		ug/L		106	74 - 131	0	20
1,1,2-Trichloroethane	50.0	51.0		ug/L		102	80 - 119	4	20
Trichloroethene	50.0	51.2		ug/L		102	79 - 123	0	20
Trichlorofluoromethane	50.0	50.8		ug/L		102	65 - 141	4	20
1,2,3-Trichloropropane	50.0	54.2		ug/L		108	73 - 122	6	20
1,2,4-Trimethylbenzene	50.0	52.6		ug/L		105	76 - 124	1	20

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

Lab Sample ID: LCSD 680-500485/5
Matrix: Water
Analysis Batch: 500485

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
1,3,5-Trimethylbenzene			50.0	53.2		ug/L		106	75 - 124	0	20
Vinyl acetate			100	131		ug/L		131	54 - 146	5	20
Vinyl chloride			50.0	44.7		ug/L		89	58 - 137	4	20
Xylenes, Total			100	102		ug/L		102	79 - 121	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
Toluene-d8 (Surr)	*97*		*89 - 112*

Lab Sample ID: MB 680-500795/9
Matrix: Water
Analysis Batch: 500795

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		10/31/17 19:49	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		10/31/17 19:49	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 19:49	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		10/31/17 19:49	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		10/31/17 19:49	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		10/31/17 19:49	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		10/31/17 19:49	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		10/31/17 19:49	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		10/31/17 19:49	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		10/31/17 19:49	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 19:49	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		10/31/17 19:49	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		10/31/17 19:49	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		10/31/17 19:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		10/31/17 19:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		10/31/17 19:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		10/31/17 19:49	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		10/31/17 19:49	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 19:49	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		10/31/17 19:49	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		10/31/17 19:49	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		10/31/17 19:49	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		10/31/17 19:49	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		10/31/17 19:49	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 19:49	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		10/31/17 19:49	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		10/31/17 19:49	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		10/31/17 19:49	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		10/31/17 19:49	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 19:49	1

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

Lab Sample ID: MB 680-500795/9
Matrix: Water
Analysis Batch: 500795

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		10/31/17 19:49	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		10/31/17 19:49	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		10/31/17 19:49	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		10/31/17 19:49	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		10/31/17 19:49	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		10/31/17 19:49	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		10/31/17 19:49	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		10/31/17 19:49	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		10/31/17 19:49	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/31/17 19:49	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		10/31/17 19:49	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		10/31/17 19:49	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		10/31/17 19:49	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		10/31/17 19:49	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		10/31/17 19:49	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 19:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		10/31/17 19:49	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		10/31/17 19:49	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		10/31/17 19:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 19:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		10/31/17 19:49	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		10/31/17 19:49	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		10/31/17 19:49	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		10/31/17 19:49	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		10/31/17 19:49	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		10/31/17 19:49	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		10/31/17 19:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		10/31/17 19:49	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		10/31/17 19:49	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		10/31/17 19:49	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		10/31/17 19:49	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		10/31/17 19:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*10/31/17 19:49*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*10/31/17 19:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*		*10/31/17 19:49*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*10/31/17 19:49*	*1*

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

Lab Sample ID: LCS 680-500795/3
Matrix: Water
Analysis Batch: 500795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	268		ug/L		107	39 - 160
Benzene	50.0	53.3		ug/L		107	79 - 120
Bromobenzene	50.0	51.6		ug/L		103	80 - 120
Bromoform	50.0	43.6		ug/L		87	66 - 130
Bromomethane	50.0	46.6		ug/L		93	53 - 141
2-Butanone (MEK)	250	260		ug/L		104	56 - 143
Carbon disulfide	50.0	49.9		ug/L		100	64 - 133
Carbon tetrachloride	50.0	48.3		ug/L		97	72 - 136
Chlorobenzene	50.0	53.1		ug/L		106	82 - 118
Chlorobromomethane	50.0	54.6		ug/L		109	78 - 123
Chlorodibromomethane	50.0	48.4		ug/L		97	74 - 126
Chloroethane	50.0	51.5		ug/L		103	60 - 138
Chloroform	50.0	51.8		ug/L		104	79 - 124
Chloromethane	50.0	50.1		ug/L		100	50 - 139
2-Chlorotoluene	50.0	54.0		ug/L		108	79 - 122
4-Chlorotoluene	50.0	53.8		ug/L		108	78 - 122
cis-1,2-Dichloroethene	50.0	53.2		ug/L		106	78 - 123
cis-1,3-Dichloropropene	50.0	55.7		ug/L		111	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	46.6		ug/L		93	62 - 128
Dibromomethane	50.0	53.3		ug/L		107	79 - 123
1,2-Dichlorobenzene	50.0	51.9		ug/L		104	80 - 119
1,3-Dichlorobenzene	50.0	53.5		ug/L		107	80 - 119
1,4-Dichlorobenzene	50.0	52.0		ug/L		104	79 - 118
Dichlorobromomethane	50.0	49.1		ug/L		98	79 - 125
Dichlorodifluoromethane	50.0	47.2		ug/L		94	32 - 152
1,1-Dichloroethane	50.0	53.1		ug/L		106	77 - 125
1,2-Dichloroethane	50.0	51.3		ug/L		103	73 - 128
1,1-Dichloroethene	50.0	48.0		ug/L		96	71 - 131
1,2-Dichloroethene, Total	100	106		ug/L		106	79 - 121
1,2-Dichloropropane	50.0	50.1		ug/L		100	78 - 122
1,3-Dichloropropane	50.0	51.8		ug/L		104	80 - 119
2,2-Dichloropropane	50.0	56.1		ug/L		112	60 - 139
1,1-Dichloropropene	50.0	53.2		ug/L		106	79 - 125
Ethylbenzene	50.0	53.6		ug/L		107	79 - 121
Ethylene Dibromide	50.0	52.0		ug/L		104	75 - 127
Hexachlorobutadiene	50.0	57.9		ug/L		116	66 - 134
2-Hexanone	250	249		ug/L		100	57 - 139
Isopropylbenzene	50.0	55.8		ug/L		112	72 - 131
4-Isopropyltoluene	50.0	59.2		ug/L		118	77 - 127
Methylene Chloride	50.0	53.6		ug/L		107	74 - 124
4-Methyl-2-pentanone (MIBK)	250	253		ug/L		101	67 - 130
Methyl tert-butyl ether	50.0	52.1		ug/L		104	71 - 124
m-Xylene & p-Xylene	50.0	53.5		ug/L		107	80 - 121
Naphthalene	50.0	44.7		ug/L		89	61 - 128
n-Butylbenzene	50.0	58.5		ug/L		117	75 - 128
N-Propylbenzene	50.0	56.0		ug/L		112	76 - 126
o-Xylene	50.0	53.7		ug/L		107	78 - 122
sec-Butylbenzene	50.0	52.6		ug/L		105	77 - 126

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

Lab Sample ID: LCS 680-500795/3
Matrix: Water
Analysis Batch: 500795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	54.1		ug/L		108	78 - 123
tert-Butylbenzene	50.0	57.0		ug/L		114	78 - 124
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	78 - 124
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/L		95	71 - 121
Tetrachloroethene	50.0	55.5		ug/L		111	74 - 129
Toluene	50.0	54.1		ug/L		108	80 - 121
trans-1,2-Dichloroethene	50.0	52.6		ug/L		105	75 - 124
trans-1,3-Dichloropropene	50.0	54.7		ug/L		109	73 - 127
1,2,3-Trichlorobenzene	50.0	59.1		ug/L		118	69 - 129
1,2,4-Trichlorobenzene	50.0	55.7		ug/L		111	69 - 130
1,1,1-Trichloroethane	50.0	53.4		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	52.9		ug/L		106	80 - 119
Trichloroethene	50.0	54.3		ug/L		109	79 - 123
Trichlorofluoromethane	50.0	46.2		ug/L		92	65 - 141
1,2,3-Trichloropropane	50.0	43.9		ug/L		88	73 - 122
1,2,4-Trimethylbenzene	50.0	56.1		ug/L		112	76 - 124
1,3,5-Trimethylbenzene	50.0	57.4		ug/L		115	75 - 124
Vinyl acetate	100	103		ug/L		103	54 - 146
Vinyl chloride	50.0	49.4		ug/L		99	58 - 137
Xylenes, Total	100	107		ug/L		107	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*106*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
Toluene-d8 (Surr)	*107*		*89 - 112*

Lab Sample ID: LCSD 680-500795/4
Matrix: Water
Analysis Batch: 500795

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	250	256		ug/L		103	39 - 160	5	20
Benzene	50.0	52.9		ug/L		106	79 - 120	1	20
Bromobenzene	50.0	51.5		ug/L		103	80 - 120	0	20
Bromoform	50.0	44.4		ug/L		89	66 - 130	2	20
Bromomethane	50.0	47.7		ug/L		95	53 - 141	2	20
2-Butanone (MEK)	250	252		ug/L		101	56 - 143	3	20
Carbon disulfide	50.0	50.0		ug/L		100	64 - 133	0	20
Carbon tetrachloride	50.0	47.4		ug/L		95	72 - 136	2	20
Chlorobenzene	50.0	52.1		ug/L		104	82 - 118	2	20
Chlorobromomethane	50.0	52.9		ug/L		106	78 - 123	3	20
Chlorodibromomethane	50.0	47.1		ug/L		94	74 - 126	3	20
Chloroethane	50.0	51.4		ug/L		103	60 - 138	0	20
Chloroform	50.0	51.6		ug/L		103	79 - 124	0	20
Chloromethane	50.0	50.7		ug/L		101	50 - 139	1	20
2-Chlorotoluene	50.0	54.3		ug/L		109	79 - 122	1	20
4-Chlorotoluene	50.0	54.3		ug/L		109	78 - 122	1	20

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

Lab Sample ID: LCSD 680-500795/4
Matrix: Water
Analysis Batch: 500795

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	50.0	52.8		ug/L		106	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	54.2		ug/L		108	75 - 124	3	20
1,2-Dibromo-3-Chloropropane	50.0	45.7		ug/L		91	62 - 128	2	20
Dibromomethane	50.0	52.1		ug/L		104	79 - 123	2	20
1,2-Dichlorobenzene	50.0	52.8		ug/L		106	80 - 119	2	20
1,3-Dichlorobenzene	50.0	53.2		ug/L		106	80 - 119	0	20
1,4-Dichlorobenzene	50.0	52.2		ug/L		104	79 - 118	0	20
Dichlorobromomethane	50.0	48.5		ug/L		97	79 - 125	1	20
Dichlorodifluoromethane	50.0	45.0		ug/L		90	32 - 152	5	20
1,1-Dichloroethane	50.0	52.7		ug/L		105	77 - 125	1	20
1,2-Dichloroethane	50.0	51.5		ug/L		103	73 - 128	0	20
1,1-Dichloroethene	50.0	47.7		ug/L		95	71 - 131	1	20
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121	1	20
1,2-Dichloropropane	50.0	49.6		ug/L		99	78 - 122	1	20
1,3-Dichloropropane	50.0	51.0		ug/L		102	80 - 119	2	20
2,2-Dichloropropane	50.0	55.1		ug/L		110	60 - 139	2	20
1,1-Dichloropropene	50.0	52.3		ug/L		105	79 - 125	2	20
Ethylbenzene	50.0	54.0		ug/L		108	79 - 121	1	20
Ethylene Dibromide	50.0	51.2		ug/L		102	75 - 127	2	20
Hexachlorobutadiene	50.0	58.2		ug/L		116	66 - 134	1	20
2-Hexanone	250	245		ug/L		98	57 - 139	2	20
Isopropylbenzene	50.0	56.3		ug/L		113	72 - 131	1	20
4-Isopropyltoluene	50.0	58.9		ug/L		118	77 - 127	0	20
Methylene Chloride	50.0	53.1		ug/L		106	74 - 124	1	20
4-Methyl-2-pentanone (MIBK)	250	246		ug/L		98	67 - 130	3	20
Methyl tert-butyl ether	50.0	51.1		ug/L		102	71 - 124	2	20
m-Xylene & p-Xylene	50.0	53.7		ug/L		107	80 - 121	0	20
Naphthalene	50.0	44.5		ug/L		89	61 - 128	0	20
n-Butylbenzene	50.0	58.5		ug/L		117	75 - 128	0	20
N-Propylbenzene	50.0	56.6		ug/L		113	76 - 126	1	20
o-Xylene	50.0	54.0		ug/L		108	78 - 122	1	20
sec-Butylbenzene	50.0	52.9		ug/L		106	77 - 126	1	20
Styrene	50.0	54.1		ug/L		108	78 - 123	0	20
tert-Butylbenzene	50.0	57.6		ug/L		115	78 - 124	1	20
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/L		102	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/L		95	71 - 121	0	20
Tetrachloroethene	50.0	54.5		ug/L		109	74 - 129	2	20
Toluene	50.0	53.4		ug/L		107	80 - 121	1	20
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	75 - 124	1	20
trans-1,3-Dichloropropene	50.0	53.7		ug/L		107	73 - 127	2	20
1,2,3-Trichlorobenzene	50.0	58.4		ug/L		117	69 - 129	1	20
1,2,4-Trichlorobenzene	50.0	57.2		ug/L		114	69 - 130	3	20
1,1,1-Trichloroethane	50.0	52.6		ug/L		105	74 - 131	1	20
1,1,2-Trichloroethane	50.0	52.6		ug/L		105	80 - 119	1	20
Trichloroethene	50.0	53.6		ug/L		107	79 - 123	1	20
Trichlorofluoromethane	50.0	44.8		ug/L		90	65 - 141	3	20
1,2,3-Trichloropropane	50.0	44.1		ug/L		88	73 - 122	0	20
1,2,4-Trimethylbenzene	50.0	56.6		ug/L		113	76 - 124	1	20

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

Lab Sample ID: LCSD 680-500795/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500795

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	50.0	57.3		ug/L		115	75 - 124	0	20
Vinyl acetate	100	99.7		ug/L		100	54 - 146	3	20
Vinyl chloride	50.0	48.5		ug/L		97	58 - 137	2	20
Xylenes, Total	100	108		ug/L		108	79 - 121	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*104*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*
Toluene-d8 (Surr)	*106*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-499824/59 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499824

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/25/17 22:53	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/25/17 22:53	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/25/17 22:53	1
Methane (TCD)	77	U	390	77	39	ug/L		10/25/17 22:53	1

Lab Sample ID: LCS 680-499824/54 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1610		ug/L		84	75 - 125

Lab Sample ID: LCS 680-499824/56 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	303		ug/L		105	75 - 125
Ethylene	269	274		ug/L		102	75 - 125
Methane	154	165		ug/L		107	75 - 125

Lab Sample ID: LCSD 680-499824/55 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1820		ug/L		95	75 - 125	12	30

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

Lab Sample ID: LCSD 680-499824/57 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	302		ug/L		105	75 - 125	0	30
Ethylene	269	270		ug/L		100	75 - 125	1	30
Methane	154	164		ug/L		107	75 - 125	1	30

Lab Sample ID: MB 680-500082/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/26/17 12:18	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/26/17 12:18	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/26/17 12:18	1
Methane (TCD)	77	U	390	77	39	ug/L		10/26/17 12:18	1

Lab Sample ID: LCS 680-500082/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1930		ug/L		100	75 - 125

Lab Sample ID: LCS 680-500082/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	323		ug/L		112	75 - 125
Ethylene	269	294		ug/L		109	75 - 125
Methane	154	166		ug/L		108	75 - 125

Lab Sample ID: LCSD 680-500082/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2000		ug/L		104	75 - 125	3	30

Lab Sample ID: LCSD 680-500082/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	326		ug/L		113	75 - 125	1	30
Ethylene	269	297		ug/L		110	75 - 125	1	30
Methane	154	169		ug/L		110	75 - 125	2	30

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

Lab Sample ID: 680-144476-3 MS — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	1.5		288	321		ug/L		111	75 - 125
Ethylene	7.6		269	297		ug/L		107	75 - 125

Lab Sample ID: 680-144476-3 MSD — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	1.5		288	323		ug/L		111	75 - 125	1	30
Ethylene	7.6		269	296		ug/L		107	75 - 125	0	30

Lab Sample ID: MB 680-500221/12 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500221

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		10/27/17 11:52	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		10/27/17 11:52	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		10/27/17 11:52	1
Methane (TCD)	77	U	390	77	39	ug/L		10/27/17 11:52	1

Lab Sample ID: LCS 680-500221/10 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500221

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	290		ug/L		100	75 - 125
Ethylene	269	265		ug/L		99	75 - 125
Methane	154	137		ug/L		89	75 - 125

Lab Sample ID: LCS 680-500221/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500221

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	2000		ug/L		104	75 - 125

Lab Sample ID: LCSD 680-500221/11 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500221

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	329		ug/L		114	75 - 125	13	30
Ethylene	269	301		ug/L		112	75 - 125	13	30
Methane	154	166		ug/L		108	75 - 125	20	30

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

Lab Sample ID: LCSD 680-500221/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500221

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)			1920	1980		ug/L		103	75 - 125	1	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-499517/36 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/23/17 19:33	1

Lab Sample ID: LCS 680-499517/37 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.85		mg/L		98	87 - 112		

Lab Sample ID: LCSD 680-499517/38 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			10.0	9.97		mg/L		100	87 - 112	1	15

Lab Sample ID: 680-144476-3 MS — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	4.1	M	10.0	14.4	M	mg/L		103	87 - 112		

Lab Sample ID: 680-144476-3 MSD — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	4.1	M	10.0	14.4	M	mg/L		103	87 - 112	0	15

Lab Sample ID: 680-144476-4 DU — **Client Sample ID: G6M-04-07X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	7.6	M		7.66	M	mg/L				0.9	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-499310/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 499696 — **Prep Batch: 499310**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/23/17 14:17	1
Iron	75	U	100	75	25	ug/L		10/23/17 14:17	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/23/17 14:17	1

Lab Sample ID: LCS 680-499310/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 499696 — **Prep Batch: 499310**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	100		ug/L		100	84 - 116
Iron	5000	5380		ug/L		108	87 - 118
Manganese	500	544		ug/L		109	87 - 115

Lab Sample ID: 680-144476-3 MS — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 499696 — **Prep Batch: 499310**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	340	J	100	440		ug/L		104	84 - 116
Iron	27000	J	5000	32400	4	ug/L		108	87 - 118
Manganese	7100	J	500	7710	4	ug/L		120	87 - 115

Lab Sample ID: 680-144476-3 MSD — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 499696 — **Prep Batch: 499310**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	340	J	100	411	J	ug/L		76	84 - 116	7	20
Iron	27000	J	5000	30100	4	ug/L		62	87 - 118	7	20
Manganese	7100	J	500	7170	4	ug/L		11	87 - 115	7	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-392445/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/23/17 18:01	1

Lab Sample ID: LCS 280-392445/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	4.90		mg/L		98	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 680-144476-3 MS — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	0.050	U J	4.00	3.44	J	mg/L		86	90 - 110

Lab Sample ID: 680-144476-3 MSD — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite-N	0.050	U J	4.00	3.33	J	mg/L		83	90 - 110	3	10

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-499241/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 08:01	1

Lab Sample ID: LCS 680-499241/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.32		mg/L		93	75 - 125

Lab Sample ID: LCSD 680-499241/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	9.32		mg/L		93	75 - 125	0	30

Lab Sample ID: 680-144476-3 MS — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.0	U	10.0	9.84		mg/L		98	75 - 125

Lab Sample ID: 680-144476-3 MSD — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499241

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.0	U	10.0	9.73		mg/L		97	75 - 125	1	30

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: MB 680-499253/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499253

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/20/17 09:15	1

Lab Sample ID: LCS 680-499253/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.82		mg/L		98	75 - 125

Lab Sample ID: LCSD 680-499253/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	9.73		mg/L		97	75 - 125	1	30

Lab Sample ID: 680-144476-11 DU — **Client Sample ID: G6M-02-08X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499253

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	1.6		1.62		mg/L		2	30

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

Lab Sample ID: MB 280-392531/37 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392531

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.237	J	1.0	0.50	0.16	mg/L		10/24/17 01:58	1

Lab Sample ID: LCS 280-392531/35 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	26.2		mg/L		105	88 - 112

Lab Sample ID: LCSD 280-392531/36 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392531

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	25.0	24.8		mg/L		99	88 - 112	6	15

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

Lab Sample ID: 680-144476-3 MS — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates	1.8		25.0	27.3		mg/L		102	88 - 112		

Lab Sample ID: 680-144476-3 MSD — **Client Sample ID: G6M-13-04X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392531

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1.8		25.0	26.2		mg/L		97	88 - 112	4	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-392443/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392443

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.56	J	5.0	3.2	1.1	mg/L		10/23/17 14:33	1

Lab Sample ID: LCS 280-392443/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			200	190		mg/L		95	90 - 110		

Lab Sample ID: 680-144476-7 DU — **Client Sample ID: G6M-04-05X**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392443

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	31	B		31.4		mg/L				0.1	10

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

GC/MS VOA

Analysis Batch: 500216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-1	G6M-02-04X	Total/NA	Water	8260B	
680-144476-2	G6M-13-01X	Total/NA	Water	8260B	
680-144476-3	G6M-13-04X	Total/NA	Water	8260B	
680-144476-8	Trip Blank	Total/NA	Water	8260B	
MB 680-500216/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500216/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500216/4	Lab Control Sample Dup	Total/NA	Water	8260B	
680-144476-3 MS	G6M-13-04X	Total/NA	Water	8260B	
680-144476-3 MSD	G6M-13-04X	Total/NA	Water	8260B	

Analysis Batch: 500485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-4	G6M-04-07X	Total/NA	Water	8260B	
680-144476-5	G6M-04-06X	Total/NA	Water	8260B	
680-144476-6	G6M-03-09X	Total/NA	Water	8260B	
680-144476-7	G6M-04-05X	Total/NA	Water	8260B	
MB 680-500485/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500485/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500485/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 500795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-9	G6M-13-03X-Fall17	Total/NA	Water	8260B	
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	8260B	
MB 680-500795/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500795/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500795/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 499824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-4	G6M-04-07X	Total/NA	Water	RSK-175	
680-144476-5	G6M-04-06X	Total/NA	Water	RSK-175	
680-144476-6	G6M-03-09X	Total/NA	Water	RSK-175	
680-144476-7	G6M-04-05X	Total/NA	Water	RSK-175	
MB 680-499824/59	Method Blank	Total/NA	Water	RSK-175	
LCS 680-499824/54	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-499824/56	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-499824/55	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-499824/57	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 500082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3	G6M-13-04X	Total/NA	Water	RSK-175	
MB 680-500082/10	Method Blank	Total/NA	Water	RSK-175	
LCS 680-500082/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-500082/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-500082/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-500082/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 500082 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3 MS	G6M-13-04X	Total/NA	Water	RSK-175	
680-144476-3 MSD	G6M-13-04X	Total/NA	Water	RSK-175	

Analysis Batch: 500221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	RSK-175	
MB 680-500221/12	Method Blank	Total/NA	Water	RSK-175	
LCS 680-500221/10	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-500221/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-500221/11	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-500221/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 499517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3	G6M-13-04X	Total/NA	Water	9056A	
680-144476-4	G6M-04-07X	Total/NA	Water	9056A	
680-144476-5	G6M-04-06X	Total/NA	Water	9056A	
680-144476-6	G6M-03-09X	Total/NA	Water	9056A	
680-144476-7	G6M-04-05X	Total/NA	Water	9056A	
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	9056A	
MB 680-499517/36	Method Blank	Total/NA	Water	9056A	
LCS 680-499517/37	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-499517/38	Lab Control Sample Dup	Total/NA	Water	9056A	
680-144476-3 MS	G6M-13-04X	Total/NA	Water	9056A	
680-144476-3 MSD	G6M-13-04X	Total/NA	Water	9056A	
680-144476-4 DU	G6M-04-07X	Total/NA	Water	9056A	

Metals

Prep Batch: 499310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-1	G6M-02-04X	Dissolved	Water	3005A	
680-144476-2	G6M-13-01X	Dissolved	Water	3005A	
680-144476-3	G6M-13-04X	Dissolved	Water	3005A	
680-144476-4	G6M-04-07X	Dissolved	Water	3005A	
680-144476-5	G6M-04-06X	Dissolved	Water	3005A	
680-144476-6	G6M-03-09X	Dissolved	Water	3005A	
680-144476-7	G6M-04-05X	Dissolved	Water	3005A	
680-144476-9	G6M-13-03X-Fall17	Dissolved	Water	3005A	
680-144476-10	G6M-04-22X-Fall17	Dissolved	Water	3005A	
680-144476-11	G6M-02-08X-Fall17	Dissolved	Water	3005A	
MB 680-499310/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-499310/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-144476-3 MS	G6M-13-04X	Dissolved	Water	3005A	
680-144476-3 MSD	G6M-13-04X	Dissolved	Water	3005A	

Metals (Continued)

Analysis Batch: 499696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-1	G6M-02-04X	Dissolved	Water	6020A	499310
680-144476-2	G6M-13-01X	Dissolved	Water	6020A	499310
680-144476-3	G6M-13-04X	Dissolved	Water	6020A	499310
680-144476-4	G6M-04-07X	Dissolved	Water	6020A	499310
680-144476-5	G6M-04-06X	Dissolved	Water	6020A	499310
680-144476-6	G6M-03-09X	Dissolved	Water	6020A	499310
680-144476-7	G6M-04-05X	Dissolved	Water	6020A	499310
680-144476-9	G6M-13-03X-Fall17	Dissolved	Water	6020A	499310
680-144476-10	G6M-04-22X-Fall17	Dissolved	Water	6020A	499310
680-144476-11	G6M-02-08X-Fall17	Dissolved	Water	6020A	499310
MB 680-499310/1-A	Method Blank	Total Recoverable	Water	6020A	499310
LCS 680-499310/2-A	Lab Control Sample	Total Recoverable	Water	6020A	499310
680-144476-3 MS	G6M-13-04X	Dissolved	Water	6020A	499310
680-144476-3 MSD	G6M-13-04X	Dissolved	Water	6020A	499310

Analysis Batch: 500692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-11	G6M-02-08X-Fall17	Dissolved	Water	6020A	499310

General Chemistry

Analysis Batch: 392443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3	G6M-13-04X	Total/NA	Water	SM 2320B	
680-144476-4	G6M-04-07X	Total/NA	Water	SM 2320B	
680-144476-5	G6M-04-06X	Total/NA	Water	SM 2320B	
680-144476-6	G6M-03-09X	Total/NA	Water	SM 2320B	
680-144476-7	G6M-04-05X	Total/NA	Water	SM 2320B	
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	SM 2320B	
MB 280-392443/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-392443/4	Lab Control Sample	Total/NA	Water	SM 2320B	
680-144476-7 DU	G6M-04-05X	Total/NA	Water	SM 2320B	

Analysis Batch: 392445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3	G6M-13-04X	Total/NA	Water	353.2	
680-144476-4	G6M-04-07X	Total/NA	Water	353.2	
680-144476-5	G6M-04-06X	Total/NA	Water	353.2	
680-144476-6	G6M-03-09X	Total/NA	Water	353.2	
680-144476-7	G6M-04-05X	Total/NA	Water	353.2	
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	353.2	
MB 280-392445/22	Method Blank	Total/NA	Water	353.2	
LCS 280-392445/21	Lab Control Sample	Total/NA	Water	353.2	
680-144476-3 MS	G6M-13-04X	Total/NA	Water	353.2	
680-144476-3 MSD	G6M-13-04X	Total/NA	Water	353.2	

Analysis Batch: 392531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3	G6M-13-04X	Total/NA	Water	9060A	
680-144476-4	G6M-04-07X	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 392531 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-5	G6M-04-06X	Total/NA	Water	9060A	
680-144476-6	G6M-03-09X	Total/NA	Water	9060A	
680-144476-7	G6M-04-05X	Total/NA	Water	9060A	
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	9060A	
MB 280-392531/37	Method Blank	Total/NA	Water	9060A	
LCS 280-392531/35	Lab Control Sample	Total/NA	Water	9060A	
LCSD 280-392531/36	Lab Control Sample Dup	Total/NA	Water	9060A	
680-144476-3 MS	G6M-13-04X	Total/NA	Water	9060A	
680-144476-3 MSD	G6M-13-04X	Total/NA	Water	9060A	

Analysis Batch: 499241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-3	G6M-13-04X	Total/NA	Water	9034	
680-144476-4	G6M-04-07X	Total/NA	Water	9034	
680-144476-5	G6M-04-06X	Total/NA	Water	9034	
680-144476-6	G6M-03-09X	Total/NA	Water	9034	
680-144476-7	G6M-04-05X	Total/NA	Water	9034	
MB 680-499241/1	Method Blank	Total/NA	Water	9034	
LCS 680-499241/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-499241/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-144476-3 MS	G6M-13-04X	Total/NA	Water	9034	
680-144476-3 MSD	G6M-13-04X	Total/NA	Water	9034	

Analysis Batch: 499253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144476-11	G6M-02-08X-Fall17	Total/NA	Water	9034	
MB 680-499253/1	Method Blank	Total/NA	Water	9034	
LCS 680-499253/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-499253/3	Lab Control Sample Dup	Total/NA	Water	9034	
680-144476-11 DU	G6M-02-08X-Fall17	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-02-04X — Lab Sample ID: 680-144476-1

Date Collected: 10/16/17 08:40 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500216	10/27/17 15:56	CMB	TAL SAV
	Instrument ID: CMSP2									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 15:31	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: G6M-13-01X — Lab Sample ID: 680-144476-2

Date Collected: 10/16/17 10:55 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500216	10/27/17 16:20	CMB	TAL SAV
	Instrument ID: CMSP2									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 14:52	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: G6M-13-04X — Lab Sample ID: 680-144476-3

Date Collected: 10/16/17 13:00 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500216	10/27/17 17:10	CMB	TAL SAV
	Instrument ID: CMSP2									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	500082	10/26/17 15:47	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/23/17 23:54	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 14:26	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 18:03	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	499241	10/20/17 08:01	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			392531	10/24/17 08:02	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			392443	10/23/17 14:50	A1D	TAL DEN
	Instrument ID: WC_AT2									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-04-07X

Lab Sample ID: 680-144476-4

Date Collected: 10/17/17 09:30
Matrix: Water
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500485	10/30/17 12:39	CMB	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499824	10/26/17 01:51	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/24/17 00:47	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 15:26	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 18:09	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	499241	10/20/17 08:09	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			392531	10/24/17 08:53	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392443	10/23/17 15:02	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Client Sample ID: G6M-04-06X

Lab Sample ID: 680-144476-5

Date Collected: 10/17/17 11:00
Matrix: Water
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500485	10/30/17 13:01	CMB	TAL SAV
	Instrument ID:	CMSB								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499824	10/26/17 02:04	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/24/17 01:21	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 14:56	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 18:11	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	499241	10/20/17 08:09	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			392531	10/24/17 09:12	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392443	10/23/17 14:56	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-03-09X

Lab Sample ID: 680-144476-6

Date Collected: 10/17/17 12:55
Matrix: Water
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500485	10/30/17 13:23	CMB	TAL SAV
	Instrument ID: CMSB									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499824	10/26/17 02:17	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/24/17 01:39	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 15:09	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 18:13	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	499241	10/20/17 08:09	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			392531	10/24/17 10:05	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			392443	10/23/17 15:18	A1D	TAL DEN
	Instrument ID: WC_AT2									

Client Sample ID: G6M-04-05X

Lab Sample ID: 680-144476-7

Date Collected: 10/17/17 14:45
Matrix: Water
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500485	10/30/17 13:45	CMB	TAL SAV
	Instrument ID: CMSB									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	499824	10/26/17 02:29	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/24/17 01:56	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 15:18	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 18:15	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	499241	10/20/17 08:09	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			392531	10/24/17 10:22	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			392443	10/23/17 14:38	A1D	TAL DEN
	Instrument ID: WC_AT2									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: Trip Blank — Lab Sample ID: 680-144476-8

Date Collected: 10/16/17 08:00 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500216	10/27/17 15:31	CMB	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: G6M-13-03X-Fall17 — Lab Sample ID: 680-144476-9

Date Collected: 10/18/17 09:15 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500795	10/31/17 21:28	CMB	TAL SAV
	Instrument ID: CMSO2									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 15:13	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: G6M-04-22X-Fall17 — Lab Sample ID: 680-144476-10

Date Collected: 10/18/17 11:35 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 15:22	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: G6M-02-08X-Fall17 — Lab Sample ID: 680-144476-11

Date Collected: 10/18/17 13:20 — **Matrix: Water**
Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	500795	10/31/17 21:52	CMB	TAL SAV
	Instrument ID: CMSO2									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	500221	10/27/17 15:49	DAS	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		2	5 mL	5 mL	499517	10/24/17 02:14	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499696	10/23/17 14:47	BWR	TAL SAV
	Instrument ID: ICPMSC									
Dissolved	Prep	3005A			50 mL	250 mL	499310	10/20/17 13:09	AJR	TAL SAV
Dissolved	Analysis	6020A		10			500692	10/30/17 20:36	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 18:17	SVC	TAL DEN
	Instrument ID: WC_Alp 2									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Client Sample ID: G6M-02-08X-Fall17

Lab Sample ID: 680-144476-11

Date Collected: 10/18/17 13:20

Matrix: Water

Date Received: 10/19/17 09:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9034		1	250 mL	250 mL	499253	10/20/17 09:15	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		7.69			392531	10/24/17 10:50	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392443	10/23/17 15:13	A1D	TAL DEN
	Instrument ID:	WC_AT2								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

PO #	17-636	Devens - AOC50 Fall 2017 1024-011	**Chain of Custody Record**	Page: 1 of: 2

Company	KOMAN GS, LLC		Laboratory: Test America - Savannah
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752		Address: 510 LaRoche Ave Savannah, GA 31404
Phone:	508-366-7442	Fax: 508-366-7445	Contact: Jerry Lanier
Sampled by [Print Name(s)]/Affiliation	Kevin Arlein		Regulatory Facility No.
Sampler(s) Signature(s)			Project Name: Devens Fall 2017 LTM
			Sampling QAP No.:
			Approval Date:
			TAT Routine
			Other:

Preservatives (see codes): H H I S O I S N

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	**Dissolved Metals*-** SW6010/6020 1-250 ml poly (HNO3)			Remarks	Lab. No.
66M-02-04X	10/16	840	P	GW	4	✓							✓				
66M-13-01X	10/16	1055	P	GW	4	✓							✓				
66M-13-04X	10/16	1300	P	GW	39 ~~[illegible]~~	✓	✓	✓	✓	✓	✓	✓	✓			MS/MSD	
66M-04-07X	10/17	930	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-04-06X	10/17	1100	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-03-09X	10/17	1255	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-04-05X	10/17	1445	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
Trip Blank	10/16	800	O	O	2	X											
Shipping Details			courier pick up		0	← Total Number of Containers											

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
Returned:	Via:		Jerry Lanier	10/18/17	1650	Jerry Lanier	10/18/17	1405
Additional Comments:						Jessica Elcock	10/19/17	0921

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:

lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

3.3(F+0.3)3.6

680-144476-01 Chain of Custody

MATRIX CODES: A = Air GW = Groundwat SE = Sediment SP = Soil SW = Surface Water

PRESERVATIVE CODES: H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol

COLLECTION METHOD CODE C = Composite G=Grab P= Pumping O = Other

PO #	17-636	Devens - AOC50 Fall 2017 1024-011	**Chain of Custody Record**	Page: 2 of: 2

Company	KOMAN GS, LLC
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752
Phone:	508-366-7442
Fax:	508-366-7445
Sampled by [Print Name(s)]/Affilliation	Kevin G. Anderson
Sampler(s) Signature(s)	[signature]

Laboratory:	Test America - Savannah
Address:	510 LaRoche Ave Savannah, GA 31404
Contact:	Jerry Lanier
Regulatory Facility No.	
Project Name:	Devens Fall 2017 LTM
Sampling QAP No.:	
Approval Date:	
TAT	Routine
Other:	

Preservatives (see codes) / Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	H: VOCs/SW8260 3-40-ml VOA vials (HCl)	H: RSK175 3-40-ml VOA vials (HCl)	I: Sulfate-SW9056 1-125-ml poly	S: Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	O: Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	I: Alkalinity/SM2320B 1-250-ml poly	S: TOC/SW9060 1-500-ml amber glass (H2SO4)	N: **Dissolved Metals*-** SW6010/6020 1-250 ml poly (HNO3)	Dissolved Metals As only*		Remarks	Lab. No.
GGM-13-03X-Fall17	10/18	915	P	GW	4	✓							✓				
GGM-04-22X-Fall17	10/18	1135	P	GW	1									✓			
GGM-02-08X-Fall17	10/18	1320	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
			P	GW													
			P	GW													
			P	GW													
			P	GW													
Trip Blank			O	O		X											
Shipping Details			courier pick up		0	← Total Number of Containers											

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature]	10/18/17			[signature]	10/18/17	1405
Additional Comments:			[signature]	10-18-17	1620				
* = Dissolved Metals include: Fe, Mn (6010); As (6020)							[signature]	10/19/17	0921
								10/19	

email logins and results to:

lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced

☐ NJ Full

☐ Full CLP

☐ Disk Deliverable

☐ Other (Specify)

3.3(C)(2)(.3) 3.6

MATRIX CODES: A = Air	GW = Groundwat	SE = Sediment	SP = Soil	SW = Surface Water	W = Water (Blanks)	O = Other
PRESERVATIVE CODES:	H = HCL + Ice	I = Ice Only	N = Nitric Acid + Ice	S = Sulfuric Acid + Ice	M = Methanol	O = Other
COLLECTION METHOD CODE	C = Composite	G=Grab	P= Pumping			O = Other

360-Westfield

PO #	17-636	Devens - AOC50 Fall 2017 1024-011	**Chain of Custody Record**	Page: 1 of: 2

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation: Kevin G. Arlesin

Sampler(s) Signature(s): [signature]

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	**Dissolved Metals*-** SW6010/6020 1-250 ml poly (HNO3)			Remarks	Lab. No.
66M-02-04X	10/16	840	P	GW	4	✓							✓				
66M-13-01X	10/16	1055	P	GW	4	✓							✓				
66M-13-04X	10/16	1300	P	GW	39 ~~13~~	✓	✓	✓	✓	✓	✓	✓	✓			MS/MSD	
66M-04-07X	10/17	930	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-04-06X	10/17	1100	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-03-09X	10/17	1255	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-04-05X	10/17	1445	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
Trip Blank	10/16	800	O	O	2	X											
Shipping Details			courier pick up		0	← Total Number of Containers											

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature]	10/18/17			[signature]		10/18/17 1405
Additional Comments:			[signature]	10/18/17	1630		[signature]		10-19-17 0840

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature 1.3 C
IR#7+0.1

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

680-144476 Chain of Custody

MATRIX CODES: A = Air GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES: H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD CODE C = Composite G=Grab P= Pumping O = Other

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 2 of: 2

Company	KOMAN GS, LLC
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752
Phone:	508-366-7442
Fax:	508-366-7445
Sampled by [Print Name(s)]/Affilliation	Kevin Anderson
Sampler(s) Signature(s)	

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	Dissolved Metals*-SW6010/6020 1-250 ml poly (HNO3)	Dissolved Metals		Remarks	Lab. No.
66M-13-03X-F1117	10/18	915	P	GW	4	✓							✓				
66M-04-22X-F1117	10/18	1135	P	GW	1								✓	✓			
66M-02-08X-F1117	10/18	1320	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
			P	GW													
			P	GW													
			P	GW													
			P	GW													
Trip Blank			O	O		X											

Analyses Requested

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:			10/18/17				10/18/17	0805
Additional Comments:				10-18-17	0620			10-19-17	0840

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

MATRIX CODES: A = Air	GW = Groundwat	SE = Sediment	SP = Soil	SW = Surface Water	W = Water (Blanks)	O = Other
PRESERVATIVE CODES:	H = HCL + Ice	I = Ice Only	N = Nitric Acid + Ice	S = Sulfuric Acid + Ice	M = Methanol	O = Other
COLLECTION METHOD CODE	C = Composite	G=Grab	P= Pumping			O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-144476-1

Login Number: 144476

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17 *
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17 *
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-17 *
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17 *
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144476-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17 *

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144569-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
293 Boston Post Road
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Marlborough, Massachusetts 01752

Attn: Laurie Ekes

Authorized for release by:
11/8/2017 8:48:10 AM

Jerry Lanier, Project Manager I
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LINKS

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 6
Method Summary 7
Definitions/Glossary 8
Client Sample Results 10
Surrogate Summary 28
QC Sample Results 29
QC Association Summary 46
Lab Chronicle 50
Chain of Custody 55
Receipt Checklists 59
Certification Summary 60

Job ID: 680-144569-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-144569-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 10/21/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.1º C and 2.9º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-02-06X-Fall17 (680-144569-4), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7), Trip Blank (680-144569-8) and RB-02-Fall17 (680-144569-9) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/01/2017 and 11/02/2017.

Sample G6M-04-02X-Fall17 (680-144569-7)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-500963.

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

DISSOLVED GASES
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7) and RB-02-Fall17 (680-144569-9) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 11/01/2017 and 11/03/2017.

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

METALS (ICPMS) - DISSOLVED
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-02-06X-Fall17 (680-144569-4), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6) and G6M-04-02X-Fall17 (680-144569-7) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared on 10/23/2017 and 10/25/2017 and analyzed on 10/25/2017.

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

Manganese failed the recovery criteria high for the MS of sample 680-144574-2 in batch 680-499870.

Refer to the QC report for details.

Job ID: 680-144569-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

METALS
Sample RB-02-Fall17 (680-144569-9) was analyzed for Metals in accordance with EPA SW-846 Method 6020. The samples were prepared on 10/23/2017 and analyzed on 10/25/2017.

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

ALKALINITY
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7) and RB-02-Fall17 (680-144569-9) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 10/25/2017.

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

NITRATE-NITRITE AS NITROGEN
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7) and RB-02-Fall17 (680-144569-9) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 10/23/2017.

Nitrate/Nitrite-N failed the recovery criteria low for the MS of sample G6M-04-02X-Fall17MS (680-144569-7) in batch 280-392445.

Nitrate/Nitrite-N failed the recovery criteria low for the MSD of sample G6M-04-02X-Fall17MSD (680-144569-7) in batch 280-392445.

Refer to the QC report for details.

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

SULFIDE
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7) and RB-02-Fall17 (680-144569-9) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 10/24/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7) and RB-02-Fall17 (680-144569-9) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 10/23/2017.

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

TOTAL ORGANIC CARBON
Samples G6M-02-13X-Fall17 (680-144569-1), G6M-13-02X-Fall17 (680-144569-2), G6M-02-11X-Fall17 (680-144569-3), G6M-04-04X-Fall17 (680-144569-5), G6M-04-03X-Fall17 (680-144569-6), G6M-04-02X-Fall17 (680-144569-7) and RB-02-Fall17 (680-144569-9) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 10/24/2017 and 10/25/2017.

Total Organic Carbon - Duplicates was detected in method blank MB 280-392670/37 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Total Organic Carbon - Duplicates was detected in method blank MB 280-392670/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Job ID: 680-144569-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144569-1	G6M-02-13X-Fall17	Water	10/19/17 07:25	10/21/17 10:00
680-144569-2	G6M-13-02X-Fall17	Water	10/19/17 09:25	10/21/17 10:00
680-144569-3	G6M-02-11X-Fall17	Water	10/19/17 11:30	10/21/17 10:00
680-144569-4	G6M-02-06X-Fall17	Water	10/19/17 13:25	10/21/17 10:00
680-144569-5	G6M-04-04X-Fall17	Water	10/20/17 07:05	10/21/17 10:00
680-144569-6	G6M-04-03X-Fall17	Water	10/20/17 08:30	10/21/17 10:00
680-144569-7	G6M-04-02X-Fall17	Water	10/20/17 10:50	10/21/17 10:00
680-144569-8	Trip Blank	Water	10/19/17 08:00	10/21/17 10:00
680-144569-9	RB-02-Fall17	Water	10/20/17 12:15	10/21/17 10:00

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.

GC VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.
D	The reported value is from a dilution.

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-13X-Fall17

Lab Sample ID: 680-144569-1

Date Collected: 10/19/17 07:25

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 16:14	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 16:14	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 16:14	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 16:14	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 16:14	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 16:14	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 16:14	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 16:14	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 16:14	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 16:14	1
Chloroethane	**3.0**	**J**	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 16:14	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 16:14	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 16:14	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 16:14	1
cis-1,2-Dichloroethene	**57**		1.0	1.0	0.41	ug/L		11/01/17 16:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 16:14	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 16:14	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 16:14	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:14	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 16:14	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 16:14	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 16:14	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 16:14	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 16:14	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 16:14	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 16:14	1
1,2-Dichloroethene, Total	**58**		2.0	1.0	0.74	ug/L		11/01/17 16:14	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 16:14	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 16:14	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:14	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 16:14	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 16:14	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 16:14	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 16:14	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 16:14	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 16:14	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 16:14	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 16:14	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 16:14	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 16:14	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 16:14	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 16:14	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 16:14	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 16:14	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-13X-Fall17

Date Collected: 10/19/17 07:25
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-1

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 16:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 16:14	1
Tetrachloroethene	**3.3**		1.0	1.0	0.74	ug/L		11/01/17 16:14	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 16:14	1
trans-1,2-Dichloroethene	**0.47**	**J**	1.0	1.0	0.37	ug/L		11/01/17 16:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 16:14	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:14	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:14	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 16:14	1
Trichloroethene	**21**		1.0	1.0	0.48	ug/L		11/01/17 16:14	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 16:14	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 16:14	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 16:14	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 16:14	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 16:14	1
Vinyl chloride	**17**		1.0	1.0	0.50	ug/L		11/01/17 16:14	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*85 - 114*		*11/01/17 16:14*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*11/01/17 16:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*11/01/17 16:14*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*11/01/17 16:14*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**0.73**	**J**	1.1	1.1	0.55	ug/L		11/01/17 20:51	1
Ethylene	**5.9**		1.0	1.0	0.50	ug/L		11/01/17 20:51	1
Methane (TCD)	**1500**		390	77	39	ug/L		11/01/17 20:51	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**3.0**	**M**	1.0	1.0	0.40	mg/L		10/23/17 18:24	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**120**		3.0	3.0	1.5	ug/L		10/25/17 21:05	1
Iron	**6400**		100	75	25	ug/L		10/25/17 21:05	1
Manganese	**8500**		5.0	5.0	1.8	ug/L		10/25/17 21:05	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/23/17 19:06	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 08:23	1
Total Organic Carbon - Duplicates	**1.8**		1.0	0.50	0.16	mg/L		10/24/17 23:59	1
Alkalinity	**180**		5.0	3.2	1.1	mg/L		10/25/17 01:03	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-13-02X-Fall17

Lab Sample ID: 680-144569-2

Date Collected: 10/19/17 09:25
Matrix: Water
Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 16:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 16:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 16:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 16:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 16:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 16:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 16:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 16:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 16:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 16:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 16:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 16:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 16:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 16:39	1
cis-1,2-Dichloroethene	**13**		1.0	1.0	0.41	ug/L		11/01/17 16:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 16:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 16:39	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 16:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 16:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 16:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 16:39	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 16:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 16:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 16:39	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 16:39	1
1,2-Dichloroethene, Total	**13**		2.0	1.0	0.74	ug/L		11/01/17 16:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 16:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 16:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:39	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 16:39	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 16:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 16:39	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 16:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 16:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 16:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 16:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 16:39	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 16:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 16:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 16:39	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 16:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 16:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 16:39	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-13-02X-Fall17

Date Collected: 10/19/17 09:25
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 16:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 16:39	1
Tetrachloroethene	**65**		1.0	1.0	0.74	ug/L		11/01/17 16:39	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 16:39	1
trans-1,2-Dichloroethene	**0.50**	**J**	1.0	1.0	0.37	ug/L		11/01/17 16:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 16:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 16:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 16:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 16:39	1
Trichloroethene	**15**		1.0	1.0	0.48	ug/L		11/01/17 16:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 16:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 16:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 16:39	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 16:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 16:39	1
Vinyl chloride	**0.99**	**J**	1.0	1.0	0.50	ug/L		11/01/17 16:39	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*		*11/01/17 16:39*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*11/01/17 16:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*		*11/01/17 16:39*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*11/01/17 16:39*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/01/17 21:04	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 21:04	1
Methane (TCD)	**4100**		390	77	39	ug/L		11/01/17 21:04	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**12**	**M**	1.0	1.0	0.40	mg/L		10/23/17 18:58	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**1.5**	**J**	3.0	3.0	1.5	ug/L		10/25/17 04:25	1
Iron	**230**		100	75	25	ug/L		10/25/17 04:25	1
Manganese	**50**		5.0	5.0	1.8	ug/L		10/25/17 04:25	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.47**		0.10	0.050	0.019	mg/L		10/23/17 19:08	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 08:23	1
Total Organic Carbon - Duplicates	**2.2**		1.0	0.50	0.16	mg/L		10/25/17 00:18	1
Alkalinity	**75**		5.0	3.2	1.1	mg/L		10/25/17 01:16	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-11X-Fall17

Lab Sample ID: 680-144569-3

Date Collected: 10/19/17 11:30

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 17:04	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 17:04	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 17:04	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 17:04	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 17:04	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 17:04	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 17:04	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 17:04	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 17:04	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 17:04	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 17:04	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 17:04	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 17:04	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 17:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/01/17 17:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 17:04	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 17:04	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 17:04	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 17:04	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 17:04	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 17:04	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 17:04	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 17:04	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 17:04	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 17:04	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 17:04	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/01/17 17:04	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 17:04	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 17:04	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 17:04	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 17:04	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 17:04	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 17:04	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 17:04	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 17:04	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 17:04	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 17:04	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 17:04	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 17:04	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 17:04	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 17:04	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 17:04	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 17:04	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 17:04	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-11X-Fall17

Date Collected: 10/19/17 11:30
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 17:04	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 17:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 17:04	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 17:04	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 17:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 17:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 17:04	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 17:04	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 17:04	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 17:04	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 17:04	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 17:04	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 17:04	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 17:04	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 17:04	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 17:04	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 17:04	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*		*11/01/17 17:04*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 119*		*11/01/17 17:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*11/01/17 17:04*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*11/01/17 17:04*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**5.2**		1.1	1.1	0.55	ug/L		11/01/17 21:17	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 21:17	1
Methane (TCD)	**6500**		390	77	39	ug/L		11/01/17 21:17	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/23/17 20:25	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**530**		3.0	3.0	1.5	ug/L		10/25/17 04:46	1
Iron	**33000**		100	75	25	ug/L		10/25/17 04:46	1
Manganese	**7300**		5.0	5.0	1.8	ug/L		10/25/17 04:46	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.026**	**J**	0.10	0.050	0.019	mg/L		10/23/17 19:10	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 09:07	1
Total Organic Carbon - Duplicates	**3.9**		1.0	0.50	0.16	mg/L		10/25/17 00:32	1
Alkalinity	**190**		5.0	3.2	1.1	mg/L		10/25/17 00:53	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-06X-Fall17

Lab Sample ID: 680-144569-4

Date Collected: 10/19/17 13:25
Matrix: Water
Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/02/17 01:42	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/02/17 01:42	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 01:42	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/02/17 01:42	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/02/17 01:42	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/02/17 01:42	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/02/17 01:42	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/02/17 01:42	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/02/17 01:42	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/02/17 01:42	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 01:42	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/02/17 01:42	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/02/17 01:42	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/02/17 01:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/02/17 01:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/02/17 01:42	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/02/17 01:42	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/02/17 01:42	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 01:42	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/02/17 01:42	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/02/17 01:42	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/02/17 01:42	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/02/17 01:42	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/02/17 01:42	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 01:42	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/02/17 01:42	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/02/17 01:42	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/02/17 01:42	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/02/17 01:42	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 01:42	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/02/17 01:42	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/02/17 01:42	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/02/17 01:42	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/02/17 01:42	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/02/17 01:42	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/02/17 01:42	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/02/17 01:42	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/02/17 01:42	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/02/17 01:42	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/02/17 01:42	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/02/17 01:42	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/02/17 01:42	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/02/17 01:42	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/02/17 01:42	1

Client Sample ID: G6M-02-06X-Fall17

Lab Sample ID: 680-144569-4

Date Collected: 10/19/17 13:25

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/02/17 01:42	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 01:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/02/17 01:42	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/02/17 01:42	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/02/17 01:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 01:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/02/17 01:42	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 01:42	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 01:42	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/02/17 01:42	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/02/17 01:42	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/02/17 01:42	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/02/17 01:42	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/02/17 01:42	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/02/17 01:42	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/02/17 01:42	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 01:42	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/02/17 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*		*11/02/17 01:42*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*11/02/17 01:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*11/02/17 01:42*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*11/02/17 01:42*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/25/17 05:21	1
Iron	75	U	100	75	25	ug/L		10/25/17 05:21	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/25/17 05:21	1

Client Sample ID: G6M-04-04X-Fall17

Lab Sample ID: 680-144569-5

Date Collected: 10/20/17 07:05

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 22:50	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 22:50	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 22:50	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 22:50	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 22:50	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 22:50	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 22:50	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 22:50	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 22:50	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 22:50	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1

Client Sample ID: G6M-04-04X-Fall17
Date Collected: 10/20/17 07:05
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 22:50	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 22:50	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 22:50	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 22:50	1
cis-1,2-Dichloroethene	**0.51**	**J**	1.0	1.0	0.41	ug/L		11/01/17 22:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 22:50	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 22:50	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 22:50	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 22:50	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 22:50	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 22:50	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 22:50	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 22:50	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 22:50	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 22:50	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 22:50	1
1,2-Dichloroethene, Total	**1.9**	**J**	2.0	1.0	0.74	ug/L		11/01/17 22:50	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 22:50	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 22:50	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 22:50	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 22:50	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 22:50	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 22:50	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 22:50	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 22:50	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 22:50	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 22:50	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 22:50	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 22:50	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 22:50	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 22:50	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 22:50	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 22:50	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 22:50	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 22:50	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 22:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 22:50	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 22:50	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 22:50	1
trans-1,2-Dichloroethene	**1.4**		1.0	1.0	0.37	ug/L		11/01/17 22:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 22:50	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 22:50	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 22:50	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 22:50	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 22:50	1

Client Sample ID: G6M-04-04X-Fall17

Lab Sample ID: 680-144569-5

Date Collected: 10/20/17 07:05

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 22:50	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 22:50	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 22:50	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 22:50	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 22:50	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 22:50	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*11/01/17 22:50*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*11/01/17 22:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*11/01/17 22:50*	*1*
Toluene-d8 (Surr)	*103*		*89 - 112*		*11/01/17 22:50*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**3.8**		1.1	1.1	0.55	ug/L		11/03/17 18:24	1
Ethylene	**39**		1.0	1.0	0.50	ug/L		11/03/17 18:24	1
Methane (TCD)	**19000**		390	77	39	ug/L		11/03/17 18:24	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**0.72**	**J M**	1.0	1.0	0.40	mg/L		10/23/17 21:00	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**600**		3.0	3.0	1.5	ug/L		10/25/17 04:20	1
Iron	**170000**		100	75	25	ug/L		10/25/17 04:20	1
Manganese	**17000**		5.0	5.0	1.8	ug/L		10/25/17 04:20	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.11**		0.10	0.050	0.019	mg/L		10/23/17 19:12	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 09:07	1
Total Organic Carbon - Duplicates	**11**		1.0	0.50	0.16	mg/L		10/25/17 00:47	1
Alkalinity	**250**		5.0	3.2	1.1	mg/L		10/25/17 01:07	1

Client Sample ID: G6M-04-03X-Fall17

Lab Sample ID: 680-144569-6

Date Collected: 10/20/17 08:30

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 23:14	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 23:14	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:14	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 23:14	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 23:14	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 23:14	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 23:14	1

Client Sample ID: G6M-04-03X-Fall17
Date Collected: 10/20/17 08:30
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 23:14	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 23:14	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 23:14	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:14	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 23:14	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 23:14	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 23:14	1
cis-1,2-Dichloroethene	**2.2**		1.0	1.0	0.41	ug/L		11/01/17 23:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 23:14	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 23:14	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 23:14	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:14	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 23:14	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 23:14	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 23:14	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 23:14	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 23:14	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:14	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 23:14	1
1,2-Dichloroethene, Total	**2.2**		2.0	1.0	0.74	ug/L		11/01/17 23:14	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 23:14	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 23:14	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:14	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 23:14	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 23:14	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 23:14	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 23:14	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 23:14	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 23:14	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 23:14	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 23:14	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 23:14	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 23:14	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 23:14	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 23:14	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 23:14	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 23:14	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 23:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 23:14	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 23:14	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 23:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 23:14	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1

Client Sample ID: G6M-04-03X-Fall17

Lab Sample ID: 680-144569-6

Date Collected: 10/20/17 08:30

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:14	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:14	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 23:14	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 23:14	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 23:14	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 23:14	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 23:14	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 23:14	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 23:14	1
Vinyl chloride	**1.6**		1.0	1.0	0.50	ug/L		11/01/17 23:14	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*11/01/17 23:14*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*11/01/17 23:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*11/01/17 23:14*	*1*
Toluene-d8 (Surr)	*103*		*89 - 112*		*11/01/17 23:14*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 18:37	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 18:37	1
Methane (TCD)	**9100**		390	77	39	ug/L		11/03/17 18:37	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**19**	**M**	1.0	1.0	0.40	mg/L		10/23/17 21:18	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**260**		3.0	3.0	1.5	ug/L		10/25/17 05:34	1
Iron	**85000**		100	75	25	ug/L		10/25/17 05:34	1
Manganese	**20000**	**D**	50	50	18	ug/L		10/25/17 19:44	10

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.064**	**J**	0.10	0.050	0.019	mg/L		10/23/17 19:14	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 09:07	1
Total Organic Carbon - Duplicates	**5.1**		1.0	0.50	0.16	mg/L		10/25/17 02:02	1
Alkalinity	**160**		5.0	3.2	1.1	mg/L		10/25/17 01:30	1

Client Sample ID: G6M-04-02X-Fall17

Lab Sample ID: 680-144569-7

Date Collected: 10/20/17 10:50

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	20	U	20	20	14	ug/L		11/02/17 01:17	2
Benzene	2.0	U	2.0	2.0	0.86	ug/L		11/02/17 01:17	2
Bromobenzene	2.0	U	2.0	2.0	1.0	ug/L		11/02/17 01:17	2
Bromoform	2.0	U	2.0	2.0	0.86	ug/L		11/02/17 01:17	2

Client Sample ID: G6M-04-02X-Fall17
Date Collected: 10/20/17 10:50
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromomethane	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
2-Butanone (MEK)	20	U	20	20	6.8	ug/L		11/02/17 01:17	2
Carbon disulfide	4.0	U	4.0	4.0	0.86	ug/L		11/02/17 01:17	2
Carbon tetrachloride	1.0	U	2.0	1.0	0.66	ug/L		11/02/17 01:17	2
Chlorobenzene	1.0	U	2.0	1.0	0.52	ug/L		11/02/17 01:17	2
Chlorobromomethane	2.0	U	2.0	2.0	0.90	ug/L		11/02/17 01:17	2
Chlorodibromomethane	1.0	U	2.0	1.0	0.64	ug/L		11/02/17 01:17	2
Chloroethane	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
Chloroform	2.0	U	2.0	2.0	1.0	ug/L		11/02/17 01:17	2
Chloromethane	2.0	U	2.0	2.0	0.80	ug/L		11/02/17 01:17	2
2-Chlorotoluene	1.0	U	2.0	1.0	0.54	ug/L		11/02/17 01:17	2
4-Chlorotoluene	2.0	U	2.0	2.0	0.90	ug/L		11/02/17 01:17	2
cis-1,2-Dichloroethene	**13**	**D**	2.0	2.0	0.82	ug/L		11/02/17 01:17	2
cis-1,3-Dichloropropene	2.0	U	2.0	2.0	0.80	ug/L		11/02/17 01:17	2
1,2-Dibromo-3-Chloropropane	4.0	U	10	4.0	2.2	ug/L		11/02/17 01:17	2
Dibromomethane	2.0	U	2.0	2.0	0.70	ug/L		11/02/17 01:17	2
1,2-Dichlorobenzene	2.0	U	2.0	2.0	0.74	ug/L		11/02/17 01:17	2
1,3-Dichlorobenzene	2.0	U	2.0	2.0	0.86	ug/L		11/02/17 01:17	2
1,4-Dichlorobenzene	2.0	U	2.0	2.0	0.92	ug/L		11/02/17 01:17	2
Dichlorobromomethane	2.0	U	2.0	2.0	0.88	ug/L		11/02/17 01:17	2
Dichlorodifluoromethane	2.0	U	2.0	2.0	1.2	ug/L		11/02/17 01:17	2
1,1-Dichloroethane	2.0	U	2.0	2.0	0.76	ug/L		11/02/17 01:17	2
1,2-Dichloroethane	2.0	U	2.0	2.0	1.0	ug/L		11/02/17 01:17	2
1,1-Dichloroethene	2.0	U	2.0	2.0	0.72	ug/L		11/02/17 01:17	2
1,2-Dichloroethene, Total	**13**	**D**	4.0	2.0	1.5	ug/L		11/02/17 01:17	2
1,2-Dichloropropane	2.0	U	2.0	2.0	1.3	ug/L		11/02/17 01:17	2
1,3-Dichloropropane	2.0	U	2.0	2.0	0.68	ug/L		11/02/17 01:17	2
2,2-Dichloropropane	2.0	U	2.0	2.0	0.74	ug/L		11/02/17 01:17	2
1,1-Dichloropropene	2.0	U	2.0	2.0	0.68	ug/L		11/02/17 01:17	2
Ethylbenzene	1.0	U	2.0	1.0	0.66	ug/L		11/02/17 01:17	2
Ethylene Dibromide	2.0	U	2.0	2.0	0.88	ug/L		11/02/17 01:17	2
Hexachlorobutadiene	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
2-Hexanone	10	U	20	10	4.0	ug/L		11/02/17 01:17	2
Isopropylbenzene	2.0	U	2.0	2.0	0.70	ug/L		11/02/17 01:17	2
4-Isopropyltoluene	2.0	U	2.0	2.0	0.96	ug/L		11/02/17 01:17	2
Methylene Chloride	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
4-Methyl-2-pentanone (MIBK)	10	U	20	10	4.2	ug/L		11/02/17 01:17	2
Methyl tert-butyl ether	1.0	U	20	1.0	0.60	ug/L		11/02/17 01:17	2
m-Xylene & p-Xylene	2.0	U	2.0	2.0	0.70	ug/L		11/02/17 01:17	2
Naphthalene	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
n-Butylbenzene	2.0	U	2.0	2.0	0.94	ug/L		11/02/17 01:17	2
N-Propylbenzene	2.0	U	2.0	2.0	0.76	ug/L		11/02/17 01:17	2
o-Xylene	1.0	U	2.0	1.0	0.46	ug/L		11/02/17 01:17	2
sec-Butylbenzene	2.0	U	2.0	2.0	0.84	ug/L		11/02/17 01:17	2
Styrene	1.0	U	2.0	1.0	0.54	ug/L		11/02/17 01:17	2
tert-Butylbenzene	2.0	U	2.0	2.0	0.90	ug/L		11/02/17 01:17	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	2.0	0.74	ug/L		11/02/17 01:17	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	2.0	1.2	ug/L		11/02/17 01:17	2
Tetrachloroethene	**97**	**D**	2.0	2.0	1.5	ug/L		11/02/17 01:17	2

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-04-02X-Fall17

Lab Sample ID: 680-144569-7

Date Collected: 10/20/17 10:50
Matrix: Water
Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Toluene	2.0	U	2.0	2.0	0.96	ug/L		11/02/17 01:17	2
trans-1,2-Dichloroethene	2.0	U	2.0	2.0	0.74	ug/L		11/02/17 01:17	2
trans-1,3-Dichloropropene	2.0	U	2.0	2.0	0.84	ug/L		11/02/17 01:17	2
1,2,3-Trichlorobenzene	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
1,2,4-Trichlorobenzene	10	U	10	10	5.0	ug/L		11/02/17 01:17	2
1,1,1-Trichloroethane	2.0	U	2.0	2.0	0.74	ug/L		11/02/17 01:17	2
1,1,2-Trichloroethane	1.0	U	2.0	1.0	0.66	ug/L		11/02/17 01:17	2
Trichloroethene	**26**	**D**	2.0	2.0	0.96	ug/L		11/02/17 01:17	2
Trichlorofluoromethane	2.0	U	2.0	2.0	0.84	ug/L		11/02/17 01:17	2
1,2,3-Trichloropropane	2.0	U	2.0	2.0	0.78	ug/L		11/02/17 01:17	2
1,2,4-Trimethylbenzene	2.0	U	2.0	2.0	0.94	ug/L		11/02/17 01:17	2
1,3,5-Trimethylbenzene	1.0	U	2.0	1.0	0.62	ug/L		11/02/17 01:17	2
Vinyl acetate	4.0	U	4.0	4.0	1.6	ug/L		11/02/17 01:17	2
Vinyl chloride	**1.8**	**J D**	2.0	2.0	1.0	ug/L		11/02/17 01:17	2
Xylenes, Total	1.0	U	4.0	1.0	0.46	ug/L		11/02/17 01:17	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*11/02/17 01:17*	*2*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*11/02/17 01:17*	*2*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*		*11/02/17 01:17*	*2*
Toluene-d8 (Surr)	*99*		*89 - 112*		*11/02/17 01:17*	*2*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 18:50	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 18:50	1
Methane (TCD)	**16000**		390	77	39	ug/L		11/03/17 18:50	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**6.2**	**M**	1.0	1.0	0.40	mg/L		10/23/17 21:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**260**		3.0	3.0	1.5	ug/L		10/25/17 04:42	1
Iron	**66000**		100	75	25	ug/L		10/25/17 04:42	1
Manganese	**10000**		5.0	5.0	1.8	ug/L		10/25/17 04:42	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.080**	**J**	0.10	0.050	0.019	mg/L		10/23/17 19:32	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 09:07	1
Total Organic Carbon - Duplicates	**3.3**		1.0	0.50	0.16	mg/L		10/25/17 02:46	1
Alkalinity	**160**		5.0	3.2	1.1	mg/L		10/25/17 01:26	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144569-8

Date Collected: 10/19/17 08:00

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 12:57	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 12:57	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 12:57	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 12:57	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 12:57	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 12:57	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 12:57	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 12:57	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 12:57	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 12:57	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 12:57	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 12:57	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 12:57	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 12:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/01/17 12:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 12:57	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 12:57	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 12:57	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 12:57	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 12:57	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 12:57	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 12:57	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 12:57	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 12:57	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 12:57	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 12:57	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/01/17 12:57	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 12:57	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 12:57	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 12:57	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 12:57	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 12:57	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 12:57	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 12:57	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 12:57	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 12:57	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 12:57	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 12:57	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 12:57	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 12:57	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 12:57	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 12:57	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 12:57	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 12:57	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144569-8

Date Collected: 10/19/17 08:00

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 12:57	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 12:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 12:57	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 12:57	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 12:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 12:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 12:57	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 12:57	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 12:57	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 12:57	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 12:57	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 12:57	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 12:57	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 12:57	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 12:57	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 12:57	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 12:57	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*		*11/01/17 12:57*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 119*		*11/01/17 12:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*11/01/17 12:57*	*1*
Toluene-d8 (Surr)	*107*		*89 - 112*		*11/01/17 12:57*	*1*

Client Sample ID: RB-02-Fall17

Lab Sample ID: 680-144569-9

Date Collected: 10/20/17 12:15

Matrix: Water

Date Received: 10/21/17 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**19**		10	10	7.0	ug/L		11/01/17 23:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 23:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 23:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 23:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 23:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 23:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 23:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 23:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 23:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 23:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 23:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 23:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/01/17 23:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 23:39	1

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: RB-02-Fall17
Date Collected: 10/20/17 12:15
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-9
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 23:39	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 23:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 23:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 23:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 23:39	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 23:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 23:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:39	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 23:39	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/01/17 23:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 23:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 23:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:39	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 23:39	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 23:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 23:39	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 23:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 23:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 23:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 23:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 23:39	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 23:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 23:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 23:39	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 23:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 23:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 23:39	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 23:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 23:39	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 23:39	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 23:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 23:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 23:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 23:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 23:39	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 23:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 23:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 23:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 23:39	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 23:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 23:39	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 23:39	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: RB-02-Fall17

Date Collected: 10/20/17 12:15
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-9

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*11/01/17 23:39*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*11/01/17 23:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*11/01/17 23:39*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*11/01/17 23:39*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 19:03	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 19:03	1
Methane	**0.68**		0.58	0.58	0.29	ug/L		11/03/17 19:03	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/23/17 22:10	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/25/17 06:52	1
Iron	75	U	100	75	25	ug/L		10/25/17 06:52	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/25/17 06:52	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/23/17 19:38	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 09:07	1
Total Organic Carbon - Duplicates	**0.71**	**J**	1.0	0.50	0.16	mg/L		10/25/17 03:01	1
Alkalinity	**1.1**	**J**	5.0	3.2	1.1	mg/L		10/25/17 01:11	1

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-144569-1	G6M-02-13X-Fall17	104	104	98	106
680-144569-2	G6M-13-02X-Fall17	108	104	100	107
680-144569-3	G6M-02-11X-Fall17	102	105	98	106
680-144569-4	G6M-02-06X-Fall17	108	102	101	102
680-144569-5	G6M-04-04X-Fall17	100	102	96	103
680-144569-6	G6M-04-03X-Fall17	99	104	98	103
680-144569-7	G6M-04-02X-Fall17	97	99	95	99
680-144569-8	Trip Blank	102	106	98	107
680-144569-9	RB-02-Fall17	100	102	98	104
LCS 680-500832/4	Lab Control Sample	100	102	97	105
LCS 680-500963/3	Lab Control Sample	101	106	101	108
LCSD 680-500832/5	Lab Control Sample Dup	100	103	97	106
LCSD 680-500963/4	Lab Control Sample Dup	106	108	104	111
MB 680-500832/9	Method Blank	101	103	96	102
MB 680-500963/9	Method Blank	100	100	95	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-500832/9
Matrix: Water
Analysis Batch: 500832

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 11:18	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 11:18	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 11:18	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 11:18	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 11:18	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 11:18	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 11:18	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 11:18	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 11:18	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 11:18	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 11:18	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 11:18	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 11:18	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 11:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/01/17 11:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 11:18	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 11:18	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 11:18	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 11:18	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 11:18	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 11:18	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 11:18	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 11:18	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 11:18	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 11:18	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 11:18	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/01/17 11:18	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 11:18	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 11:18	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 11:18	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 11:18	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 11:18	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 11:18	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 11:18	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 11:18	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 11:18	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 11:18	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 11:18	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 11:18	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 11:18	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 11:18	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 11:18	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 11:18	1

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

Lab Sample ID: MB 680-500832/9
Matrix: Water
Analysis Batch: 500832

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 11:18	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 11:18	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 11:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 11:18	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 11:18	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 11:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 11:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 11:18	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 11:18	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 11:18	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 11:18	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 11:18	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 11:18	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 11:18	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 11:18	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 11:18	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 11:18	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 11:18	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*		*11/01/17 11:18*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*11/01/17 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*		*11/01/17 11:18*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*11/01/17 11:18*	*1*

Lab Sample ID: LCS 680-500832/4
Matrix: Water
Analysis Batch: 500832

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	243		ug/L		97	39 - 160
Benzene	50.0	52.1		ug/L		104	79 - 120
Bromobenzene	50.0	51.1		ug/L		102	80 - 120
Bromoform	50.0	42.8		ug/L		86	66 - 130
Bromomethane	50.0	50.4		ug/L		101	53 - 141
2-Butanone (MEK)	250	243		ug/L		97	56 - 143
Carbon disulfide	50.0	48.8		ug/L		98	64 - 133
Carbon tetrachloride	50.0	47.9		ug/L		96	72 - 136
Chlorobenzene	50.0	51.8		ug/L		104	82 - 118
Chlorobromomethane	50.0	52.4		ug/L		105	78 - 123
Chlorodibromomethane	50.0	46.4		ug/L		93	74 - 126
Chloroethane	50.0	51.8		ug/L		104	60 - 138
Chloroform	50.0	50.6		ug/L		101	79 - 124
Chloromethane	50.0	51.6		ug/L		103	50 - 139
2-Chlorotoluene	50.0	53.5		ug/L		107	79 - 122
4-Chlorotoluene	50.0	53.3		ug/L		107	78 - 122

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

Lab Sample ID: LCS 680-500832/4
Matrix: Water
Analysis Batch: 500832

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	50.0	52.1		ug/L		104	78 - 123
cis-1,3-Dichloropropene	50.0	53.0		ug/L		106	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	44.1		ug/L		88	62 - 128
Dibromomethane	50.0	51.3		ug/L		103	79 - 123
1,2-Dichlorobenzene	50.0	51.9		ug/L		104	80 - 119
1,3-Dichlorobenzene	50.0	53.1		ug/L		106	80 - 119
1,4-Dichlorobenzene	50.0	52.1		ug/L		104	79 - 118
Dichlorobromomethane	50.0	46.8		ug/L		94	79 - 125
Dichlorodifluoromethane	50.0	57.4		ug/L		115	32 - 152
1,1-Dichloroethane	50.0	51.6		ug/L		103	77 - 125
1,2-Dichloroethane	50.0	49.7		ug/L		99	73 - 128
1,1-Dichloroethene	50.0	48.1		ug/L		96	71 - 131
1,2-Dichloroethene, Total	100	104		ug/L		104	79 - 121
1,2-Dichloropropane	50.0	49.2		ug/L		98	78 - 122
1,3-Dichloropropane	50.0	50.1		ug/L		100	80 - 119
2,2-Dichloropropane	50.0	54.5		ug/L		109	60 - 139
1,1-Dichloropropene	50.0	53.2		ug/L		106	79 - 125
Ethylbenzene	50.0	53.0		ug/L		106	79 - 121
Ethylene Dibromide	50.0	51.0		ug/L		102	75 - 127
Hexachlorobutadiene	50.0	57.5		ug/L		115	66 - 134
2-Hexanone	250	237		ug/L		95	57 - 139
Isopropylbenzene	50.0	56.2		ug/L		112	72 - 131
4-Isopropyltoluene	50.0	58.4		ug/L		117	77 - 127
Methylene Chloride	50.0	52.1		ug/L		104	74 - 124
4-Methyl-2-pentanone (MIBK)	250	239		ug/L		96	67 - 130
Methyl tert-butyl ether	50.0	50.5		ug/L		101	71 - 124
m-Xylene & p-Xylene	50.0	53.9		ug/L		108	80 - 121
Naphthalene	50.0	44.2		ug/L		88	61 - 128
n-Butylbenzene	50.0	57.2		ug/L		114	75 - 128
N-Propylbenzene	50.0	55.6		ug/L		111	76 - 126
o-Xylene	50.0	52.5		ug/L		105	78 - 122
sec-Butylbenzene	50.0	52.9		ug/L		106	77 - 126
Styrene	50.0	52.8		ug/L		106	78 - 123
tert-Butylbenzene	50.0	57.3		ug/L		115	78 - 124
1,1,1,2-Tetrachloroethane	50.0	49.0		ug/L		98	78 - 124
1,1,2,2-Tetrachloroethane	50.0	47.3		ug/L		95	71 - 121
Tetrachloroethene	50.0	55.0		ug/L		110	74 - 129
Toluene	50.0	52.3		ug/L		105	80 - 121
trans-1,2-Dichloroethene	50.0	51.7		ug/L		103	75 - 124
trans-1,3-Dichloropropene	50.0	52.6		ug/L		105	73 - 127
1,2,3-Trichlorobenzene	50.0	57.6		ug/L		115	69 - 129
1,2,4-Trichlorobenzene	50.0	55.6		ug/L		111	69 - 130
1,1,1-Trichloroethane	50.0	52.8		ug/L		106	74 - 131
1,1,2-Trichloroethane	50.0	51.0		ug/L		102	80 - 119
Trichloroethene	50.0	52.9		ug/L		106	79 - 123
Trichlorofluoromethane	50.0	46.8		ug/L		94	65 - 141
1,2,3-Trichloropropane	50.0	43.6		ug/L		87	73 - 122
1,2,4-Trimethylbenzene	50.0	55.5		ug/L		111	76 - 124

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

Lab Sample ID: LCS 680-500832/4
Matrix: Water
Analysis Batch: 500832

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	57.1		ug/L		114	75 - 124
Vinyl acetate	100	94.9		ug/L		95	54 - 146
Vinyl chloride	50.0	50.7		ug/L		101	58 - 137
Xylenes, Total	100	106		ug/L		106	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*102*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*
Toluene-d8 (Surr)	*105*		*89 - 112*

Lab Sample ID: LCSD 680-500832/5
Matrix: Water
Analysis Batch: 500832

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	250	239		ug/L		96	39 - 160	2	20
Benzene	50.0	52.1		ug/L		104	79 - 120	0	20
Bromobenzene	50.0	51.2		ug/L		102	80 - 120	0	20
Bromoform	50.0	42.4		ug/L		85	66 - 130	1	20
Bromomethane	50.0	51.4		ug/L		103	53 - 141	2	20
2-Butanone (MEK)	250	243		ug/L		97	56 - 143	0	20
Carbon disulfide	50.0	49.5		ug/L		99	64 - 133	1	20
Carbon tetrachloride	50.0	48.2		ug/L		96	72 - 136	1	20
Chlorobenzene	50.0	51.8		ug/L		104	82 - 118	0	20
Chlorobromomethane	50.0	52.3		ug/L		105	78 - 123	0	20
Chlorodibromomethane	50.0	45.7		ug/L		91	74 - 126	2	20
Chloroethane	50.0	51.8		ug/L		104	60 - 138	0	20
Chloroform	50.0	50.4		ug/L		101	79 - 124	0	20
Chloromethane	50.0	50.8		ug/L		102	50 - 139	2	20
2-Chlorotoluene	50.0	53.8		ug/L		108	79 - 122	1	20
4-Chlorotoluene	50.0	54.2		ug/L		108	78 - 122	2	20
cis-1,2-Dichloroethene	50.0	51.7		ug/L		103	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	52.5		ug/L		105	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/L		87	62 - 128	2	20
Dibromomethane	50.0	50.4		ug/L		101	79 - 123	2	20
1,2-Dichlorobenzene	50.0	51.3		ug/L		103	80 - 119	1	20
1,3-Dichlorobenzene	50.0	52.7		ug/L		105	80 - 119	1	20
1,4-Dichlorobenzene	50.0	50.5		ug/L		101	79 - 118	3	20
Dichlorobromomethane	50.0	47.2		ug/L		94	79 - 125	1	20
Dichlorodifluoromethane	50.0	57.9		ug/L		116	32 - 152	1	20
1,1-Dichloroethane	50.0	51.4		ug/L		103	77 - 125	0	20
1,2-Dichloroethane	50.0	49.7		ug/L		99	73 - 128	0	20
1,1-Dichloroethene	50.0	48.3		ug/L		97	71 - 131	0	20
1,2-Dichloroethene, Total	100	102		ug/L		102	79 - 121	1	20
1,2-Dichloropropane	50.0	49.0		ug/L		98	78 - 122	0	20
1,3-Dichloropropane	50.0	49.9		ug/L		100	80 - 119	0	20
2,2-Dichloropropane	50.0	53.8		ug/L		108	60 - 139	1	20

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

Lab Sample ID: LCSD 680-500832/5
Matrix: Water
Analysis Batch: 500832

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-Dichloropropene	50.0	52.4		ug/L		105	79 - 125	2	20
Ethylbenzene	50.0	53.3		ug/L		107	79 - 121	1	20
Ethylene Dibromide	50.0	49.6		ug/L		99	75 - 127	3	20
Hexachlorobutadiene	50.0	57.9		ug/L		116	66 - 134	1	20
2-Hexanone	250	233		ug/L		93	57 - 139	2	20
Isopropylbenzene	50.0	56.8		ug/L		114	72 - 131	1	20
4-Isopropyltoluene	50.0	58.3		ug/L		117	77 - 127	0	20
Methylene Chloride	50.0	52.2		ug/L		104	74 - 124	0	20
4-Methyl-2-pentanone (MIBK)	250	235		ug/L		94	67 - 130	2	20
Methyl tert-butyl ether	50.0	49.5		ug/L		99	71 - 124	2	20
m-Xylene & p-Xylene	50.0	53.9		ug/L		108	80 - 121	0	20
Naphthalene	50.0	43.7		ug/L		87	61 - 128	1	20
n-Butylbenzene	50.0	57.2		ug/L		114	75 - 128	0	20
N-Propylbenzene	50.0	56.6		ug/L		113	76 - 126	2	20
o-Xylene	50.0	53.4		ug/L		107	78 - 122	2	20
sec-Butylbenzene	50.0	53.2		ug/L		106	77 - 126	0	20
Styrene	50.0	54.0		ug/L		108	78 - 123	2	20
tert-Butylbenzene	50.0	57.2		ug/L		114	78 - 124	0	20
1,1,1,2-Tetrachloroethane	50.0	49.6		ug/L		99	78 - 124	1	20
1,1,2,2-Tetrachloroethane	50.0	46.4		ug/L		93	71 - 121	2	20
Tetrachloroethene	50.0	54.5		ug/L		109	74 - 129	1	20
Toluene	50.0	52.1		ug/L		104	80 - 121	0	20
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	52.1		ug/L		104	73 - 127	1	20
1,2,3-Trichlorobenzene	50.0	56.9		ug/L		114	69 - 129	1	20
1,2,4-Trichlorobenzene	50.0	54.4		ug/L		109	69 - 130	2	20
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	74 - 131	1	20
1,1,2-Trichloroethane	50.0	50.0		ug/L		100	80 - 119	2	20
Trichloroethene	50.0	52.9		ug/L		106	79 - 123	0	20
Trichlorofluoromethane	50.0	46.6		ug/L		93	65 - 141	0	20
1,2,3-Trichloropropane	50.0	43.8		ug/L		88	73 - 122	0	20
1,2,4-Trimethylbenzene	50.0	55.2		ug/L		110	76 - 124	1	20
1,3,5-Trimethylbenzene	50.0	57.1		ug/L		114	75 - 124	0	20
Vinyl acetate	100	93.1		ug/L		93	54 - 146	2	20
Vinyl chloride	50.0	50.5		ug/L		101	58 - 137	0	20
Xylenes, Total	100	107		ug/L		107	79 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*
Dibromofluoromethane (Surr)	*103*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*
Toluene-d8 (Surr)	*106*		*89 - 112*

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

Lab Sample ID: MB 680-500963/9
Matrix: Water
Analysis Batch: 500963

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/01/17 21:36	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 21:36	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 21:36	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 21:36	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/01/17 21:36	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/01/17 21:36	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 21:36	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/01/17 21:36	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 21:36	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/01/17 21:36	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 21:36	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 21:36	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 21:36	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 21:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/01/17 21:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/01/17 21:36	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/01/17 21:36	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 21:36	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 21:36	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/01/17 21:36	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/01/17 21:36	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 21:36	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/01/17 21:36	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 21:36	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 21:36	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/01/17 21:36	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/01/17 21:36	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/01/17 21:36	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 21:36	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 21:36	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/01/17 21:36	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 21:36	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/01/17 21:36	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/01/17 21:36	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 21:36	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 21:36	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/01/17 21:36	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/01/17 21:36	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/01/17 21:36	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 21:36	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/01/17 21:36	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/01/17 21:36	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 21:36	1

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

Lab Sample ID: MB 680-500963/9
Matrix: Water
Analysis Batch: 500963

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/01/17 21:36	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/01/17 21:36	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 21:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/01/17 21:36	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/01/17 21:36	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 21:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 21:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 21:36	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/01/17 21:36	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/01/17 21:36	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/01/17 21:36	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/01/17 21:36	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/01/17 21:36	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/01/17 21:36	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/01/17 21:36	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/01/17 21:36	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/01/17 21:36	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 21:36	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/01/17 21:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*85 - 114*		*11/01/17 21:36*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*11/01/17 21:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*		*11/01/17 21:36*	*1*
Toluene-d8 (Surr)	*103*		*89 - 112*		*11/01/17 21:36*	*1*

Lab Sample ID: LCS 680-500963/3
Matrix: Water
Analysis Batch: 500963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	251		ug/L		100	39 - 160
Benzene	50.0	53.3		ug/L		107	79 - 120
Bromobenzene	50.0	51.1		ug/L		102	80 - 120
Bromoform	50.0	42.1		ug/L		84	66 - 130
Bromomethane	50.0	52.7		ug/L		105	53 - 141
2-Butanone (MEK)	250	254		ug/L		101	56 - 143
Carbon disulfide	50.0	50.5		ug/L		101	64 - 133
Carbon tetrachloride	50.0	49.0		ug/L		98	72 - 136
Chlorobenzene	50.0	52.7		ug/L		105	82 - 118
Chlorobromomethane	50.0	53.8		ug/L		108	78 - 123
Chlorodibromomethane	50.0	47.0		ug/L		94	74 - 126
Chloroethane	50.0	53.8		ug/L		108	60 - 138
Chloroform	50.0	51.4		ug/L		103	79 - 124
Chloromethane	50.0	57.0		ug/L		114	50 - 139
2-Chlorotoluene	50.0	54.5		ug/L		109	79 - 122
4-Chlorotoluene	50.0	54.4		ug/L		109	78 - 122

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

Lab Sample ID: LCS 680-500963/3
Matrix: Water
Analysis Batch: 500963

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	50.0	52.5		ug/L		105	78 - 123
cis-1,3-Dichloropropene	50.0	54.1		ug/L		108	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	44.0		ug/L		88	62 - 128
Dibromomethane	50.0	52.0		ug/L		104	79 - 123
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	80 - 119
1,3-Dichlorobenzene	50.0	53.0		ug/L		106	80 - 119
1,4-Dichlorobenzene	50.0	51.3		ug/L		103	79 - 118
Dichlorobromomethane	50.0	48.3		ug/L		97	79 - 125
Dichlorodifluoromethane	50.0	62.0		ug/L		124	32 - 152
1,1-Dichloroethane	50.0	53.4		ug/L		107	77 - 125
1,2-Dichloroethane	50.0	51.2		ug/L		102	73 - 128
1,1-Dichloroethene	50.0	49.2		ug/L		98	71 - 131
1,2-Dichloroethene, Total	100	105		ug/L		105	79 - 121
1,2-Dichloropropane	50.0	49.9		ug/L		100	78 - 122
1,3-Dichloropropane	50.0	51.2		ug/L		102	80 - 119
2,2-Dichloropropane	50.0	52.7		ug/L		105	60 - 139
1,1-Dichloropropene	50.0	54.4		ug/L		109	79 - 125
Ethylbenzene	50.0	54.0		ug/L		108	79 - 121
Ethylene Dibromide	50.0	51.6		ug/L		103	75 - 127
Hexachlorobutadiene	50.0	56.0		ug/L		112	66 - 134
2-Hexanone	250	245		ug/L		98	57 - 139
Isopropylbenzene	50.0	56.6		ug/L		113	72 - 131
4-Isopropyltoluene	50.0	57.7		ug/L		115	77 - 127
Methylene Chloride	50.0	53.9		ug/L		108	74 - 124
4-Methyl-2-pentanone (MIBK)	250	247		ug/L		99	67 - 130
Methyl tert-butyl ether	50.0	51.5		ug/L		103	71 - 124
m-Xylene & p-Xylene	50.0	54.2		ug/L		108	80 - 121
Naphthalene	50.0	43.8		ug/L		88	61 - 128
n-Butylbenzene	50.0	56.2		ug/L		112	75 - 128
N-Propylbenzene	50.0	56.1		ug/L		112	76 - 126
o-Xylene	50.0	53.7		ug/L		107	78 - 122
sec-Butylbenzene	50.0	52.9		ug/L		106	77 - 126
Styrene	50.0	54.0		ug/L		108	78 - 123
tert-Butylbenzene	50.0	57.2		ug/L		114	78 - 124
1,1,1,2-Tetrachloroethane	50.0	50.6		ug/L		101	78 - 124
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	71 - 121
Tetrachloroethene	50.0	54.6		ug/L		109	74 - 129
Toluene	50.0	53.6		ug/L		107	80 - 121
trans-1,2-Dichloroethene	50.0	52.4		ug/L		105	75 - 124
trans-1,3-Dichloropropene	50.0	53.6		ug/L		107	73 - 127
1,2,3-Trichlorobenzene	50.0	58.2		ug/L		116	69 - 129
1,2,4-Trichlorobenzene	50.0	54.1		ug/L		108	69 - 130
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	52.1		ug/L		104	80 - 119
Trichloroethene	50.0	54.1		ug/L		108	79 - 123
Trichlorofluoromethane	50.0	48.9		ug/L		98	65 - 141
1,2,3-Trichloropropane	50.0	42.8		ug/L		86	73 - 122
1,2,4-Trimethylbenzene	50.0	56.0		ug/L		112	76 - 124

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

Lab Sample ID: LCS 680-500963/3
Matrix: Water
Analysis Batch: 500963

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	57.9		ug/L		116	75 - 124
Vinyl acetate	100	94.1		ug/L		94	54 - 146
Vinyl chloride	50.0	53.4		ug/L		107	58 - 137
Xylenes, Total	100	108		ug/L		108	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*
Dibromofluoromethane (Surr)	*106*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
Toluene-d8 (Surr)	*108*		*89 - 112*

Lab Sample ID: LCSD 680-500963/4
Matrix: Water
Analysis Batch: 500963

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	250	256		ug/L		102	39 - 160	2	20
Benzene	50.0	54.8		ug/L		110	79 - 120	3	20
Bromobenzene	50.0	52.8		ug/L		106	80 - 120	3	20
Bromoform	50.0	43.7		ug/L		87	66 - 130	4	20
Bromomethane	50.0	55.0		ug/L		110	53 - 141	4	20
2-Butanone (MEK)	250	262		ug/L		105	56 - 143	3	20
Carbon disulfide	50.0	53.2		ug/L		106	64 - 133	5	20
Carbon tetrachloride	50.0	50.2		ug/L		100	72 - 136	3	20
Chlorobenzene	50.0	53.1		ug/L		106	82 - 118	1	20
Chlorobromomethane	50.0	55.1		ug/L		110	78 - 123	2	20
Chlorodibromomethane	50.0	47.8		ug/L		96	74 - 126	2	20
Chloroethane	50.0	55.2		ug/L		110	60 - 138	3	20
Chloroform	50.0	53.7		ug/L		107	79 - 124	4	20
Chloromethane	50.0	54.9		ug/L		110	50 - 139	4	20
2-Chlorotoluene	50.0	55.4		ug/L		111	79 - 122	2	20
4-Chlorotoluene	50.0	55.5		ug/L		111	78 - 122	2	20
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	78 - 123	4	20
cis-1,3-Dichloropropene	50.0	56.4		ug/L		113	75 - 124	4	20
1,2-Dibromo-3-Chloropropane	50.0	46.3		ug/L		93	62 - 128	5	20
Dibromomethane	50.0	53.5		ug/L		107	79 - 123	3	20
1,2-Dichlorobenzene	50.0	54.6		ug/L		109	80 - 119	5	20
1,3-Dichlorobenzene	50.0	55.8		ug/L		112	80 - 119	5	20
1,4-Dichlorobenzene	50.0	54.2		ug/L		108	79 - 118	5	20
Dichlorobromomethane	50.0	49.5		ug/L		99	79 - 125	3	20
Dichlorodifluoromethane	50.0	63.8		ug/L		128	32 - 152	3	20
1,1-Dichloroethane	50.0	54.7		ug/L		109	77 - 125	2	20
1,2-Dichloroethane	50.0	53.1		ug/L		106	73 - 128	4	20
1,1-Dichloroethene	50.0	50.9		ug/L		102	71 - 131	3	20
1,2-Dichloroethene, Total	100	109		ug/L		109	79 - 121	3	20
1,2-Dichloropropane	50.0	51.7		ug/L		103	78 - 122	4	20
1,3-Dichloropropane	50.0	53.1		ug/L		106	80 - 119	4	20
2,2-Dichloropropane	50.0	54.6		ug/L		109	60 - 139	4	20

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

Lab Sample ID: LCSD 680-500963/4
Matrix: Water
Analysis Batch: 500963

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-Dichloropropene	50.0	55.1		ug/L		110	79 - 125	1	20
Ethylbenzene	50.0	54.6		ug/L		109	79 - 121	1	20
Ethylene Dibromide	50.0	52.7		ug/L		105	75 - 127	2	20
Hexachlorobutadiene	50.0	58.6		ug/L		117	66 - 134	4	20
2-Hexanone	250	253		ug/L		101	57 - 139	3	20
Isopropylbenzene	50.0	57.3		ug/L		115	72 - 131	1	20
4-Isopropyltoluene	50.0	60.9		ug/L		122	77 - 127	5	20
Methylene Chloride	50.0	55.5		ug/L		111	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	250	255		ug/L		102	67 - 130	3	20
Methyl tert-butyl ether	50.0	53.3		ug/L		107	71 - 124	3	20
m-Xylene & p-Xylene	50.0	55.2		ug/L		110	80 - 121	2	20
Naphthalene	50.0	46.7		ug/L		93	61 - 128	6	20
n-Butylbenzene	50.0	59.2		ug/L		118	75 - 128	5	20
N-Propylbenzene	50.0	57.3		ug/L		115	76 - 126	2	20
o-Xylene	50.0	55.3		ug/L		111	78 - 122	3	20
sec-Butylbenzene	50.0	53.4		ug/L		107	77 - 126	1	20
Styrene	50.0	55.5		ug/L		111	78 - 123	3	20
tert-Butylbenzene	50.0	58.7		ug/L		117	78 - 124	3	20
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	78 - 124	2	20
1,1,2,2-Tetrachloroethane	50.0	48.2		ug/L		96	71 - 121	3	20
Tetrachloroethene	50.0	57.2		ug/L		114	74 - 129	5	20
Toluene	50.0	54.9		ug/L		110	80 - 121	2	20
trans-1,2-Dichloroethene	50.0	54.1		ug/L		108	75 - 124	3	20
trans-1,3-Dichloropropene	50.0	55.2		ug/L		110	73 - 127	3	20
1,2,3-Trichlorobenzene	50.0	59.3		ug/L		119	69 - 129	2	20
1,2,4-Trichlorobenzene	50.0	56.9		ug/L		114	69 - 130	5	20
1,1,1-Trichloroethane	50.0	54.9		ug/L		110	74 - 131	3	20
1,1,2-Trichloroethane	50.0	53.7		ug/L		107	80 - 119	3	20
Trichloroethene	50.0	56.1		ug/L		112	79 - 123	4	20
Trichlorofluoromethane	50.0	49.0		ug/L		98	65 - 141	0	20
1,2,3-Trichloropropane	50.0	44.2		ug/L		88	73 - 122	3	20
1,2,4-Trimethylbenzene	50.0	56.3		ug/L		113	76 - 124	1	20
1,3,5-Trimethylbenzene	50.0	58.1		ug/L		116	75 - 124	0	20
Vinyl acetate	100	97.2		ug/L		97	54 - 146	3	20
Vinyl chloride	50.0	55.5		ug/L		111	58 - 137	4	20
Xylenes, Total	100	111		ug/L		111	79 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*85 - 114*
Dibromofluoromethane (Surr)	*108*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*104*		*81 - 118*
Toluene-d8 (Surr)	*111*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-500968/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500968

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/01/17 19:09	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/01/17 19:09	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		11/01/17 19:09	1
Methane (TCD)	77	U	390	77	39	ug/L		11/01/17 19:09	1

Lab Sample ID: LCS 680-500968/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500968

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1850		ug/L		96	75 - 125

Lab Sample ID: LCS 680-500968/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500968

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	273		ug/L		95	75 - 125
Ethylene	269	252		ug/L		94	75 - 125
Methane	154	144		ug/L		94	75 - 125

Lab Sample ID: LCSD 680-500968/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500968

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1440		ug/L		75	75 - 125	25	30

Lab Sample ID: LCSD 680-500968/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500968

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	237		ug/L		82	75 - 125	14	30
Ethylene	269	221		ug/L		82	75 - 125	13	30
Methane	154	124		ug/L		80	75 - 125	15	30

Lab Sample ID: MB 680-501263/11 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 14:33	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 14:33	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		11/03/17 14:33	1
Methane (TCD)	77	U	390	77	39	ug/L		11/03/17 14:33	1

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

Lab Sample ID: LCS 680-501263/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1860		ug/L		97	75 - 125

Lab Sample ID: LCS 680-501263/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	284		ug/L		98	75 - 125
Ethylene	269	262		ug/L		97	75 - 125
Methane	154	150		ug/L		98	75 - 125

Lab Sample ID: LCSD 680-501263/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	284		ug/L		98	75 - 125	0	30
Ethylene	269	260		ug/L		97	75 - 125	1	30
Methane	154	150		ug/L		97	75 - 125	0	30

Lab Sample ID: LCSD 680-501263/9 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1900		ug/L		99	75 - 125	2	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-499484/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499484

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/23/17 09:41	1

Lab Sample ID: LCS 680-499484/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.85		mg/L		98	87 - 112

Lab Sample ID: LCSD 680-499484/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499484

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	9.88		mg/L		99	87 - 112	0	15

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 680-144569-1 DU — **Client Sample ID: G6M-02-13X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499484

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	3.0	M		2.96	M	mg/L				0.8	15

Lab Sample ID: MB 680-499517/36 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/23/17 19:33	1

Lab Sample ID: LCS 680-499517/37 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10.0	9.85		mg/L		98	87 - 112		

Lab Sample ID: LCSD 680-499517/38 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			10.0	9.97		mg/L		100	87 - 112	1	15

Lab Sample ID: 680-144569-9 MS — **Client Sample ID: RB-02-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	1.0	U	10.0	10.4		mg/L		104	87 - 112		

Lab Sample ID: 680-144569-9 MSD — **Client Sample ID: RB-02-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.0	U	10.0	10.7		mg/L		107	87 - 112	3	15

Lab Sample ID: 680-144569-3 DU — **Client Sample ID: G6M-02-11X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499517

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	1.0	U		1.0	U	mg/L				NC	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-499596/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499871 — **Prep Batch: 499596**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/25/17 05:51	1
Iron	75	U	100	75	25	ug/L		10/25/17 05:51	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/25/17 05:51	1

Lab Sample ID: LCS 680-499596/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499871 — **Prep Batch: 499596**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	102		ug/L		102	84 - 116
Iron	5000	5180		ug/L		104	87 - 118
Manganese	500	516		ug/L		103	87 - 115

Lab Sample ID: MB 680-499579/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 499870 — **Prep Batch: 499579**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/25/17 03:50	1
Iron	75	U	100	75	25	ug/L		10/25/17 03:50	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/25/17 03:50	1

Lab Sample ID: LCS 680-499579/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 499870 — **Prep Batch: 499579**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	104		ug/L		104	84 - 116
Iron	5000	5200		ug/L		104	87 - 118
Manganese	500	517		ug/L		103	87 - 115

Lab Sample ID: MB 680-499869/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 500079 — **Prep Batch: 499869**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/25/17 20:39	1
Iron	75	U	100	75	25	ug/L		10/25/17 20:39	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/25/17 20:39	1

Lab Sample ID: LCS 680-499869/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 500079 — **Prep Batch: 499869**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	97.9		ug/L		98	84 - 116
Iron	5000	5150		ug/L		103	87 - 118
Manganese	500	494		ug/L		99	87 - 115

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-392445/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/23/17 18:01	1

Lab Sample ID: MB 280-392445/66 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/23/17 19:30	1

Lab Sample ID: LCS 280-392445/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	4.90		mg/L		98	90 - 110

Lab Sample ID: LCS 280-392445/65 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	4.98		mg/L		100	90 - 110

Lab Sample ID: 680-144569-7 MS — **Client Sample ID: G6M-04-02X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	0.080	J	4.00	2.65	J	mg/L		64	90 - 110

Lab Sample ID: 680-144569-7 MSD — **Client Sample ID: G6M-04-02X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate/Nitrite-N	0.080	J	4.00	2.66	J	mg/L		65	90 - 110	0	10

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-499658/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499658

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 08:23	1

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 680-499658/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.5		mg/L		105	75 - 125

Lab Sample ID: LCSD 680-499658/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499658

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	10.8		mg/L		108	75 - 125	3	30

Lab Sample ID: MB 680-499688/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499688

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/24/17 09:07	1

Lab Sample ID: LCS 680-499688/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499688

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.8		mg/L		108	75 - 125

Lab Sample ID: LCSD 680-499688/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 499688

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	10.6		mg/L		106	75 - 125	2	30

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

Lab Sample ID: MB 280-392670/37 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392670

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.197	J	1.0	0.50	0.16	mg/L		10/25/17 01:33	1

Lab Sample ID: MB 280-392670/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392670

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.171	J	1.0	0.50	0.16	mg/L		10/24/17 17:29	1

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

Lab Sample ID: LCS 280-392670/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	24.5		mg/L		98	88 - 112

Lab Sample ID: LCS 280-392670/35 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	24.0		mg/L		96	88 - 112

Lab Sample ID: LCSD 280-392670/36 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392670

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	25.0	24.1		mg/L		96	88 - 112	0	15

Lab Sample ID: LCSD 280-392670/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392670

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	25.0	24.1		mg/L		96	88 - 112	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-392630/55 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392630

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.2	U	5.0	3.2	1.1	mg/L		10/25/17 00:48	1

Lab Sample ID: LCS 280-392630/54 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	200		mg/L		100	90 - 110

Lab Sample ID: 680-144569-3 DU — **Client Sample ID: G6M-02-11X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392630

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	190		193		mg/L		0.3	10

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

GC/MS VOA

Analysis Batch: 500832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	8260B	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	8260B	
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	8260B	
680-144569-8	Trip Blank	Total/NA	Water	8260B	
MB 680-500832/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500832/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500832/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 500963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-4	G6M-02-06X-Fall17	Total/NA	Water	8260B	
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	8260B	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	8260B	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	8260B	
680-144569-9	RB-02-Fall17	Total/NA	Water	8260B	
MB 680-500963/9	Method Blank	Total/NA	Water	8260B	
LCS 680-500963/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-500963/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 500968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	RSK-175	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	RSK-175	
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	RSK-175	
MB 680-500968/10	Method Blank	Total/NA	Water	RSK-175	
LCS 680-500968/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-500968/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-500968/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-500968/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 501263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	RSK-175	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	RSK-175	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	RSK-175	
680-144569-9	RB-02-Fall17	Total/NA	Water	RSK-175	
MB 680-501263/11	Method Blank	Total/NA	Water	RSK-175	
LCS 680-501263/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-501263/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-501263/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-501263/9	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 499484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	9056A	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 499484 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 680-499484/2	Method Blank	Total/NA	Water	9056A	
LCS 680-499484/3	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-499484/4	Lab Control Sample Dup	Total/NA	Water	9056A	
680-144569-1 DU	G6M-02-13X-Fall17	Total/NA	Water	9056A	

Analysis Batch: 499517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	9056A	
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	9056A	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	9056A	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	9056A	
680-144569-9	RB-02-Fall17	Total/NA	Water	9056A	
MB 680-499517/36	Method Blank	Total/NA	Water	9056A	
LCS 680-499517/37	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-499517/38	Lab Control Sample Dup	Total/NA	Water	9056A	
680-144569-9 MS	RB-02-Fall17	Total/NA	Water	9056A	
680-144569-9 MSD	RB-02-Fall17	Total/NA	Water	9056A	
680-144569-3 DU	G6M-02-11X-Fall17	Total/NA	Water	9056A	

Metals

Prep Batch: 499579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-2	G6M-13-02X-Fall17	Dissolved	Water	3005A	
680-144569-3	G6M-02-11X-Fall17	Dissolved	Water	3005A	
680-144569-4	G6M-02-06X-Fall17	Dissolved	Water	3005A	
680-144569-5	G6M-04-04X-Fall17	Dissolved	Water	3005A	
680-144569-6	G6M-04-03X-Fall17	Dissolved	Water	3005A	
680-144569-7	G6M-04-02X-Fall17	Dissolved	Water	3005A	
MB 680-499579/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-499579/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 499596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-9	RB-02-Fall17	Total/NA	Water	3010A	
MB 680-499596/1-A	Method Blank	Total/NA	Water	3010A	
LCS 680-499596/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 499869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Dissolved	Water	3005A	
MB 680-499869/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-499869/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 499870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-2	G6M-13-02X-Fall17	Dissolved	Water	6020A	499579
680-144569-3	G6M-02-11X-Fall17	Dissolved	Water	6020A	499579
680-144569-4	G6M-02-06X-Fall17	Dissolved	Water	6020A	499579
680-144569-5	G6M-04-04X-Fall17	Dissolved	Water	6020A	499579

Metals (Continued)

Analysis Batch: 499870 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-6	G6M-04-03X-Fall17	Dissolved	Water	6020A	499579
680-144569-7	G6M-04-02X-Fall17	Dissolved	Water	6020A	499579
MB 680-499579/1-A	Method Blank	Total Recoverable	Water	6020A	499579
LCS 680-499579/2-A	Lab Control Sample	Total Recoverable	Water	6020A	499579

Analysis Batch: 499871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-9	RB-02-Fall17	Total/NA	Water	6020A	499596
MB 680-499596/1-A	Method Blank	Total/NA	Water	6020A	499596
LCS 680-499596/2-A	Lab Control Sample	Total/NA	Water	6020A	499596

Analysis Batch: 500079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Dissolved	Water	6020A	499869
680-144569-6	G6M-04-03X-Fall17	Dissolved	Water	6020A	499579
MB 680-499869/1-A	Method Blank	Total Recoverable	Water	6020A	499869
LCS 680-499869/2-A	Lab Control Sample	Total Recoverable	Water	6020A	499869

General Chemistry

Analysis Batch: 392445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	353.2	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	353.2	
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	353.2	
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	353.2	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	353.2	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	353.2	
680-144569-9	RB-02-Fall17	Total/NA	Water	353.2	
MB 280-392445/22	Method Blank	Total/NA	Water	353.2	
MB 280-392445/66	Method Blank	Total/NA	Water	353.2	
LCS 280-392445/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-392445/65	Lab Control Sample	Total/NA	Water	353.2	
680-144569-7 MS	G6M-04-02X-Fall17	Total/NA	Water	353.2	
680-144569-7 MSD	G6M-04-02X-Fall17	Total/NA	Water	353.2	

Analysis Batch: 392630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	SM 2320B	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	SM 2320B	
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	SM 2320B	
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	SM 2320B	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	SM 2320B	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	SM 2320B	
680-144569-9	RB-02-Fall17	Total/NA	Water	SM 2320B	
MB 280-392630/55	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-392630/54	Lab Control Sample	Total/NA	Water	SM 2320B	
680-144569-3 DU	G6M-02-11X-Fall17	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 392670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	9060A	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	9060A	
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	9060A	
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	9060A	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	9060A	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	9060A	
680-144569-9	RB-02-Fall17	Total/NA	Water	9060A	
MB 280-392670/37	Method Blank	Total/NA	Water	9060A	
MB 280-392670/5	Method Blank	Total/NA	Water	9060A	
LCS 280-392670/3	Lab Control Sample	Total/NA	Water	9060A	
LCS 280-392670/35	Lab Control Sample	Total/NA	Water	9060A	
LCSD 280-392670/36	Lab Control Sample Dup	Total/NA	Water	9060A	
LCSD 280-392670/4	Lab Control Sample Dup	Total/NA	Water	9060A	

Analysis Batch: 499658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-1	G6M-02-13X-Fall17	Total/NA	Water	9034	
680-144569-2	G6M-13-02X-Fall17	Total/NA	Water	9034	
MB 680-499658/1	Method Blank	Total/NA	Water	9034	
LCS 680-499658/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-499658/3	Lab Control Sample Dup	Total/NA	Water	9034	

Analysis Batch: 499688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144569-3	G6M-02-11X-Fall17	Total/NA	Water	9034	
680-144569-5	G6M-04-04X-Fall17	Total/NA	Water	9034	
680-144569-6	G6M-04-03X-Fall17	Total/NA	Water	9034	
680-144569-7	G6M-04-02X-Fall17	Total/NA	Water	9034	
680-144569-9	RB-02-Fall17	Total/NA	Water	9034	
MB 680-499688/1	Method Blank	Total/NA	Water	9034	
LCS 680-499688/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-499688/3	Lab Control Sample Dup	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-13X-Fall17

Lab Sample ID: 680-144569-1

Date Collected: 10/19/17 07:25

Matrix: Water

Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500832	11/01/17 16:14	CMB	TAL SAV
	Instrument ID:	CMSO2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	500968	11/01/17 20:51	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	499484	10/23/17 18:24	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	499869	10/25/17 11:11	BCB	TAL SAV
Dissolved	Analysis	6020A		1			500079	10/25/17 21:05	BJB	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:06	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	499658	10/24/17 08:23	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			392670	10/24/17 23:59	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 01:03	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Client Sample ID: G6M-13-02X-Fall17

Lab Sample ID: 680-144569-2

Date Collected: 10/19/17 09:25

Matrix: Water

Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500832	11/01/17 16:39	CMB	TAL SAV
	Instrument ID:	CMSO2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	500968	11/01/17 21:04	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	499484	10/23/17 18:58	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499870	10/25/17 04:25	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:08	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	499658	10/24/17 08:23	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			392670	10/25/17 00:18	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 01:16	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-02-11X-Fall17

Lab Sample ID: 680-144569-3
Date Collected: 10/19/17 11:30
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500832	11/01/17 17:04	CMB	TAL SAV
	Instrument ID: CMSO2									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	500968	11/01/17 21:17	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/23/17 20:25	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499870	10/25/17 04:46	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:10	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	499688	10/24/17 09:07	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			392670	10/25/17 00:32	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 00:53	A1D	TAL DEN
	Instrument ID: WC-AT3									

Client Sample ID: G6M-02-06X-Fall17

Lab Sample ID: 680-144569-4
Date Collected: 10/19/17 13:25
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500963	11/02/17 01:42	CMB	TAL SAV
	Instrument ID: CMSO2									
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499870	10/25/17 05:21	BWR	TAL SAV
	Instrument ID: ICPMSC									

Client Sample ID: G6M-04-04X-Fall17

Lab Sample ID: 680-144569-5
Date Collected: 10/20/17 07:05
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500963	11/01/17 22:50	CMB	TAL SAV
	Instrument ID: CMSO2									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501263	11/03/17 18:24	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/23/17 21:00	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499870	10/25/17 04:20	BWR	TAL SAV
	Instrument ID: ICPMSC									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-04-04X-Fall17

Lab Sample ID: 680-144569-5
Date Collected: 10/20/17 07:05
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:12	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	499688	10/24/17 09:07	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			392670	10/25/17 00:47	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 01:07	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Client Sample ID: G6M-04-03X-Fall17

Lab Sample ID: 680-144569-6
Date Collected: 10/20/17 08:30
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500963	11/01/17 23:14	CMB	TAL SAV
	Instrument ID:	CMSO2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501263	11/03/17 18:37	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/23/17 21:18	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499870	10/25/17 05:34	BWR	TAL SAV
	Instrument ID:	ICPMSC								
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		10			500079	10/25/17 19:44	BJB	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:14	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	499688	10/24/17 09:07	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			392670	10/25/17 02:02	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 01:30	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Client Sample ID: G6M-04-02X-Fall17

Lab Sample ID: 680-144569-7
Date Collected: 10/20/17 10:50
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	500963	11/02/17 01:17	CMB	TAL SAV
	Instrument ID:	CMSO2								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: G6M-04-02X-Fall17

Lab Sample ID: 680-144569-7

Date Collected: 10/20/17 10:50
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501263	11/03/17 18:50	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/23/17 21:53	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	499579	10/23/17 14:38	AJR	TAL SAV
Dissolved	Analysis	6020A		1			499870	10/25/17 04:42	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:32	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	499688	10/24/17 09:07	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			392670	10/25/17 02:46	CCJ	TAL DEN
	Instrument ID: WC_SHI2									
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 01:26	A1D	TAL DEN
	Instrument ID: WC-AT3									

Client Sample ID: Trip Blank

Lab Sample ID: 680-144569-8

Date Collected: 10/19/17 08:00
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500832	11/01/17 12:57	CMB	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: RB-02-Fall17

Lab Sample ID: 680-144569-9

Date Collected: 10/20/17 12:15
Matrix: Water
Date Received: 10/21/17 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	500963	11/01/17 23:39	CMB	TAL SAV
	Instrument ID: CMSO2									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501263	11/03/17 19:03	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	499517	10/23/17 22:10	UI	TAL SAV
	Instrument ID: CICK									
Total/NA	Prep	3010A			50 mL	250 mL	499596	10/23/17 15:56	AJR	TAL SAV
Total/NA	Analysis	6020A		1			499871	10/25/17 06:52	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Analysis	353.2		1	100 mL	100 mL	392445	10/23/17 19:38	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	499688	10/24/17 09:07	DAM	TAL SAV
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Client Sample ID: RB-02-Fall17

Date Collected: 10/20/17 12:15
Date Received: 10/21/17 10:00

Lab Sample ID: 680-144569-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1			392670	10/25/17 03:01	CCJ	TAL DEN
	Instrument ID:	WC_SHI2								
Total/NA	Analysis	SM 2320B		1			392630	10/25/17 01:11	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

360-Westfield

PO #	17-636	Devens - AOC50 Fall 2017 1024-011	**Chain of Custody Record**	Page: 1 of: 2

Company	KOMAN GS, LLC
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752
Phone:	508-366-7442
Fax:	508-366-7445
Sampled by [Print Name(s)]/Affilliation	Kevin G. Anderson
Sampler(s) Signature(s)	[signature]

Laboratory:	Test America - Savannah
Address:	510 LaRoche Ave Savannah, GA 31404
Contact:	Jerry Lanier
Regulatory Facility No.	
Project Name:	Devens Fall 2017 LTM
Sampling QAP No.:	
Approval Date:	
TAT	Routine
Other:	

Preservatives (see codes)

Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	H: VOCs/SW8260 3-40-ml VOA vials (HCl)	H: RSK175 3-40-ml VOA vials (HCl)	I: Sulfate-SW9056 1-125-ml poly	S: Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	O: Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	I: Alkalinity/SM2320B 1-250-ml poly	S: TOC/SW9060 1-500-ml amber glass (H2SO4)	N: **Dissolved Metals*-** SW6010/6020 1-250 ml poly (HNO3)			Remark
66M-02-13X-Fall17	10/19	725	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓			
66M-13-02X-Fall17	10/19	925	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓			
66M-02-11X-Fall17	10/19	1130	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓			
66M-02-06X-Fall17	10/19	1325	P	GW	4	✓							✓			
66M-04-04X-Fall17	10/20	705	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓			
66M-04-03X-Fall17	10/20	830	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓			
66M-04-02X-Fall17	10/20	1050	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓			
Trip Blank	10/19	800	O	O	2	X										
Shipping Details			courier pick up		0	← Total Number of Containers										

680-144569-01 Chain of Custody

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature]	10/20/17	1345	[signature]	10/20/17	1340
Additional Comments:			[signature]	10/21/17	1600	[signature]	10/24/17	1000

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:

lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced

☐ NJ Full

☐ Full CLP

☐ Disk Deliverable

☐ Other (Specify)

2.6(CF+0.3)2.9

MATRIX CODES: A = Air	GW = Groundwat	SE = Sediment	SP = Soil	SW = Surface Water	W = Water (Blanks)	O = Other
PRESERVATIVE CODES:	H = HCL + Ice	I = Ice Only	N = Nitric Acid + Ice	S = Sulfuric Acid + Ice	M = Methanol	O = Other
COLLECTION METHOD CODE	C = Composite	G=Grab	P= Pumping			O = Other

360 Westfield

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Page: 2 of: 2

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affiliation

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H H I S O I S N

Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	~~Dissolved Metals*~~ SW6010/6020 1-250 ml poly (HNO3) Total			Remarks	Lab. No.
RB-02-F91117	10/20	1215	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
			P	GW													
			P	GW													
			P	GW													
			P	GW													
			P	GW													
			P	GW													
Trip Blank			O	O		X											

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out: Via:
Returned: Via:
Additional Comments:
* = Dissolved Metals include: Fe, Mn (6010); As (6020)

Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
	[signature]	10/20/17	1345	[signature]	10-20-17	1340
		10-20-17	1600	[signature]	10/20/17	1000

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

2.6(C+0.3)2.9

MATRIX CODES: A = Air GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES: H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD CODE C = Composite G=Grab P= Pumping O = Other

360-Westfield

PO #	17-636	Devens - AOC50 Fall 2017 1024-011	**Chain of Custody Record**	Page: 1 of: 2

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation: [illegible]

Sampler(s) Signature(s): [illegible]

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes): H | H | I | S | O | I | S | N

Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	**Dissolved Metals*-** SW6010/6020 1-250 ml poly (HNO3)			Remarks	Lab. No.
66M-02-13X-Fall17	10/19	725	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-13-02X-Fall17	10/19	925	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-02-11X-Fall17	10/19	1130	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-02-06X-Fall17	10/19	1325	P	GW	4	✓							✓				
66M-04-04X-Fall17	10/20	705	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-04-03X-Fall17	10/20	830	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
66M-04-02X-Fall17	10/20	1050	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
Trip Blank	10/19	800	O	O	2	X											
Shipping Details			courier pick up		0	← Total Number of Containers											

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature]	10/20/17	1345	[signature]	10/20/17	1340
Additional Comments:			[signature]	10 21-17	1600	[signature]	10/21/17	0830

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:
lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature 2.1 °C
IR #7 Transferred by BB 10/21/17

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

680-144569 Chain of Custody

MATRIX CODES: A = Air GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES: H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD CODE C = Composite G=Grab P= Pumping O = Other

360-Westfield

PO #	17-636	Devens - AOC50 Fall 2017 1024-011

Chain of Custody Record

Company: KOMAN GS, LLC

Address: 293 Boston Post Road, Suite 100
Marlborough, MA 01752

Phone: 508-366-7442 Fax: 508-366-7445

Sampled by [Print Name(s)]/Affilliation

Sampler(s) Signature(s)

Laboratory: Test America - Savannah
Address: 510 LaRoche Ave
Savannah, GA 31404
Contact: Jerry Lanier
Regulatory Facility No.
Project Name: Devens Fall 2017 LTM
Sampling QAP No.:
Approval Date:
TAT Routine
Other:

Preservatives (see codes)

Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl) (H)	RSK175 3-40-ml VOA vials (HCl) (H)	Sulfate-SW9056 1-125-ml poly (I)	Nitrate/Nitrite-E353 2 1-500 ml amber glass (H2SO4) (S)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH) (O)	Alkalinity/SM2320B 1-250-ml poly (I)	TOC/SW9060 1-500-ml amber glass (H2SO4) (S)	~~Dissolved Metals*~~ SW6010/6020 1-250 ml poly (HNO3) (N) Total			Remarks	Lab. No.
RB-02-Fall17	10/20	1215	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
			P	GW													
			P	GW													
			P	GW													
			P	GW													
			P	GW													
			P	GW													
Trip Blank			O	O		X											

Shipping Details: courier pick up — 0 ← Total Number of Containers

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature]	10/20/17	1345	[signature]	10-20-17	1340
Additional Comments:			[signature]	10-20-17	1600	[signature]	10-21-17	0830

* = Dissolved Metals include: Fe, Mn (6010); As (6020)

email logins and results to:

lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐
On ICE ☐
Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

MATRIX CODES: A = Air GW = Groundwat SE = Sediment SP = Soil SW = Surface Water W = Water (Blanks) O = Other
PRESERVATIVE CODES: H = HCL + Ice I = Ice Only N = Nitric Acid + Ice S = Sulfuric Acid + Ice M = Methanol O = Other
COLLECTION METHOD CODE C = Composite G=Grab P= Pumping O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-144569-1

Login Number: 144569

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17 *
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17 *
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17 *
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144569-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-19 *

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-144777-1
Client Project/Site: Fort Devens / AOC 50

For:
KOMAN Government Solutions, LLC
293 Boston Post Road
Suite 100
Marlborough, Massachusetts 01752

Attn: Laurie Ekes

Authorized for release by:
11/9/2017 2:55:18 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Method Summary 6
Definitions/Glossary 7
Client Sample Results 8
Surrogate Summary 21
QC Sample Results 22
QC Association Summary 41
Lab Chronicle 44
Chain of Custody 47
Receipt Checklists 48
Certification Summary 49

Job ID: 680-144777-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: KOMAN Government Solutions, LLC

Project: Fort Devens / AOC 50

Report Number: 680-144777-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 10/26/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.2º C and 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples G6M-03-07X-Fall17 (680-144777-1), XSA-12-98X-Fall17 (680-144777-2), G6M-02-07X-Fall17 (680-144777-3), G6M-03-10X-Fall17 (680-144777-4), G6M-02-12X-Fall17 (680-144777-5), G6M-04-09X-Fall17 (680-144777-6) and Trip Blank (680-144777-7) were analyzed for Volatile Organic Compounds (GC/MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/03/2017 and 11/06/2017.

The surrogate recovery for the method blank (MB) associated with analytical batch 680-501154 was outside the upper control limits. The sample surrogate recoveries met acceptance criteria; therefore, the data has been qualified and reported.

The surrogate recovery for the laboratory control sample duplicate (LCSD) associated with analytical batch 680-501154 was outside the upper control limits. The sample surrogate recoveries met acceptance criteria; therefore, the data has been qualified and reported. (LCSD 680-501154/4)

The continuing calibration verification (CCV) associated with batch 680-501404 recovered above the upper control limits. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 680-501404 recovered outside control limits for the following analytes: 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, hexachlorobutadiene, and napthalene. These analytes were biased high in the LCS/D and were not detected in the associated samples; therefore, the data have been reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 680-501154 were outside control limits for 1,2,3-trichloropropane. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/D) recovery was within acceptance limits.

Refer to the QC report for details.

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

DISSOLVED GASES
Samples G6M-03-07X-Fall17 (680-144777-1), G6M-03-10X-Fall17 (680-144777-4) and G6M-02-12X-Fall17 (680-144777-5) were analyzed for dissolved gases in accordance with RSK-175. The samples were analyzed on 11/03/2017.

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

Job ID: 680-144777-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

METALS (ICPMS) - DISSOLVED
Samples G6M-03-07X-Fall17 (680-144777-1), XSA-12-98X-Fall17 (680-144777-2), G6M-02-07X-Fall17 (680-144777-3), G6M-03-10X-Fall17 (680-144777-4), G6M-02-12X-Fall17 (680-144777-5) and G6M-04-09X-Fall17 (680-144777-6) were analyzed for Metals (ICPMS) - Dissolved in accordance with EPA SW-846 Method 6020A. The samples were prepared and analyzed on 10/27/2017.

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

ALKALINITY
Samples G6M-03-07X-Fall17 (680-144777-1), G6M-03-10X-Fall17 (680-144777-4) and G6M-02-12X-Fall17 (680-144777-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 10/30/2017.

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

NITRATE-NITRITE AS NITROGEN
Samples G6M-03-07X-Fall17 (680-144777-1), G6M-03-10X-Fall17 (680-144777-4) and G6M-02-12X-Fall17 (680-144777-5) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 10/30/2017.

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

SULFIDE
Samples G6M-03-07X-Fall17 (680-144777-1), G6M-03-10X-Fall17 (680-144777-4) and G6M-02-12X-Fall17 (680-144777-5) were analyzed for sulfide in accordance with EPA SW846 Method 9034. The samples were analyzed on 10/29/2017.

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

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples G6M-03-07X-Fall17 (680-144777-1), G6M-03-10X-Fall17 (680-144777-4) and G6M-02-12X-Fall17 (680-144777-5) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with SW 846 9056A. The samples were analyzed on 11/01/2017.

The matrix spike (MS) recovery for analytical batch 680-500766 were outside control limits for sulfate. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Refer to the QC report for details.

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

TOTAL ORGANIC CARBON
Samples G6M-03-07X-Fall17 (680-144777-1), G6M-03-10X-Fall17 (680-144777-4), G6M-02-12X-Fall17 (680-144777-5) and G6M-04-09X-Fall17 (680-144777-6) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/02/2017.

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

Sample Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-144777-1	G6M-03-07X-Fall17	Water	10/23/17 08:15	10/26/17 09:20
680-144777-2	XSA-12-98X-Fall17	Water	10/23/17 10:05	10/26/17 09:20
680-144777-3	G6M-02-07X-Fall17	Water	10/23/17 11:35	10/26/17 09:20
680-144777-4	G6M-03-10X-Fall17	Water	10/23/17 13:25	10/26/17 09:20
680-144777-5	G6M-02-12X-Fall17	Water	10/23/17 15:25	10/26/17 09:20
680-144777-6	G6M-04-09X-Fall17	Water	10/23/17 17:25	10/26/17 09:20
680-144777-7	Trip Blank	Water	10/23/17 08:00	10/26/17 09:20

Method Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
9056A	Anions, Ion Chromatography	SW846	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL SAV
9060A	Organic Carbon, Total (TOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN

Protocol References:

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

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

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.

GC VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
M	Manual integrated compound.

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Glossary

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

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-03-07X-Fall17

Lab Sample ID: 680-144777-1

Date Collected: 10/23/17 08:15

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/06/17 13:08	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:08	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:08	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:08	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/06/17 13:08	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/06/17 13:08	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:08	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/06/17 13:08	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:08	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/06/17 13:08	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:08	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 13:08	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 13:08	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:08	1
cis-1,2-Dichloroethene	**0.55**	**J**	1.0	1.0	0.41	ug/L		11/06/17 13:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 13:08	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/06/17 13:08	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:08	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:08	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:08	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/06/17 13:08	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 13:08	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/06/17 13:08	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 13:08	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:08	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/06/17 13:08	1
1,2-Dichloroethene, Total	**1.5**	**J**	2.0	1.0	0.74	ug/L		11/06/17 13:08	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/06/17 13:08	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 13:08	1
2,2-Dichloropropane	1.0	U Q	1.0	1.0	0.37	ug/L		11/06/17 13:08	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 13:08	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:08	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 13:08	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/06/17 13:08	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:08	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:08	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/06/17 13:08	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/06/17 13:08	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:08	1
Naphthalene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
n-Butylbenzene	1.0	U Q	1.0	1.0	0.47	ug/L		11/06/17 13:08	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 13:08	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/06/17 13:08	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:08	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 13:08	1

Client Sample ID: G6M-03-07X-Fall17

Lab Sample ID: 680-144777-1

Date Collected: 10/23/17 08:15

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/06/17 13:08	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/06/17 13:08	1
Toluene	**1.0**		1.0	1.0	0.48	ug/L		11/06/17 13:08	1
trans-1,2-Dichloroethene	**0.97**	**J**	1.0	1.0	0.37	ug/L		11/06/17 13:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:08	1
1,2,3-Trichlorobenzene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
1,2,4-Trichlorobenzene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:08	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:08	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:08	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:08	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:08	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/06/17 13:08	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/06/17 13:08	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/06/17 13:08	1
Vinyl acetate	2.0	U Q	2.0	2.0	0.81	ug/L		11/06/17 13:08	1
Vinyl chloride	**0.72**	**J**	1.0	1.0	0.50	ug/L		11/06/17 13:08	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/06/17 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*85 - 114*		*11/06/17 13:08*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 119*		*11/06/17 13:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*11/06/17 13:08*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*11/06/17 13:08*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	**2.7**		1.1	1.1	0.55	ug/L		11/03/17 22:14	1
Ethylene	**14**		1.0	1.0	0.50	ug/L		11/03/17 22:14	1
Methane (TCD)	**21000**		390	77	39	ug/L		11/03/17 22:14	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		11/01/17 02:41	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**450**		3.0	3.0	1.5	ug/L		10/27/17 22:22	1
Iron	**94000**		100	75	25	ug/L		10/27/17 22:22	1
Manganese	**1800**		5.0	5.0	1.8	ug/L		10/27/17 22:22	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.13**		0.10	0.050	0.019	mg/L		10/30/17 21:20	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/29/17 08:15	1
Total Organic Carbon - Duplicates	**24**		1.0	0.50	0.16	mg/L		11/02/17 06:22	1
Alkalinity	**170**		5.0	3.2	1.1	mg/L		10/30/17 14:16	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: XSA-12-98X-Fall17

Lab Sample ID: 680-144777-2

Date Collected: 10/23/17 10:05

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	**10**		10	10	7.0	ug/L		11/06/17 13:30	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:30	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:30	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:30	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/06/17 13:30	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/06/17 13:30	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:30	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/06/17 13:30	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:30	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/06/17 13:30	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:30	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 13:30	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 13:30	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:30	1
cis-1,2-Dichloroethene	**0.69**	**J**	1.0	1.0	0.41	ug/L		11/06/17 13:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 13:30	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/06/17 13:30	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:30	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:30	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:30	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/06/17 13:30	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 13:30	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/06/17 13:30	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 13:30	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:30	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/06/17 13:30	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/06/17 13:30	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/06/17 13:30	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 13:30	1
2,2-Dichloropropane	1.0	U Q	1.0	1.0	0.37	ug/L		11/06/17 13:30	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 13:30	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:30	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 13:30	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/06/17 13:30	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:30	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:30	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/06/17 13:30	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/06/17 13:30	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:30	1
Naphthalene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
n-Butylbenzene	1.0	U Q	1.0	1.0	0.47	ug/L		11/06/17 13:30	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 13:30	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/06/17 13:30	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:30	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 13:30	1

Client Sample ID: XSA-12-98X-Fall17

Lab Sample ID: 680-144777-2

Date Collected: 10/23/17 10:05

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:30	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/06/17 13:30	1
Tetrachloroethene	**5.0**		1.0	1.0	0.74	ug/L		11/06/17 13:30	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:30	1
1,2,3-Trichlorobenzene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
1,2,4-Trichlorobenzene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:30	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:30	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:30	1
Trichloroethene	**0.56**	**J**	1.0	1.0	0.48	ug/L		11/06/17 13:30	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:30	1
1,2,3-Trichloropropane	1.0	U J	1.0	1.0	0.39	ug/L		11/06/17 13:30	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/06/17 13:30	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/06/17 13:30	1
Vinyl acetate	2.0	U Q	2.0	2.0	0.81	ug/L		11/06/17 13:30	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:30	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/06/17 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*85 - 114*		*11/06/17 13:30*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*11/06/17 13:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*11/06/17 13:30*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*11/06/17 13:30*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/27/17 22:00	1
Iron	**88**	**J**	100	75	25	ug/L		10/27/17 22:00	1
Manganese	**2.8**	**J**	5.0	5.0	1.8	ug/L		10/27/17 22:00	1

Client Sample ID: G6M-02-07X-Fall17

Lab Sample ID: 680-144777-3

Date Collected: 10/23/17 11:35

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/06/17 13:52	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:52	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:52	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:52	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:52	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/06/17 13:52	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/06/17 13:52	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:52	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/06/17 13:52	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:52	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/06/17 13:52	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:52	1

Client Sample ID: G6M-02-07X-Fall17
Date Collected: 10/23/17 11:35
Date Received: 10/26/17 09:20

Lab Sample ID: 680-144777-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:52	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 13:52	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 13:52	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/06/17 13:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 13:52	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/06/17 13:52	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:52	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:52	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 13:52	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/06/17 13:52	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 13:52	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/06/17 13:52	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 13:52	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:52	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/06/17 13:52	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/06/17 13:52	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/06/17 13:52	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 13:52	1
2,2-Dichloropropane	1.0	U Q	1.0	1.0	0.37	ug/L		11/06/17 13:52	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 13:52	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:52	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 13:52	1
Hexachlorobutadiene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:52	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/06/17 13:52	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:52	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:52	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 13:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/06/17 13:52	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/06/17 13:52	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 13:52	1
Naphthalene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:52	1
n-Butylbenzene	1.0	U Q	1.0	1.0	0.47	ug/L		11/06/17 13:52	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 13:52	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/06/17 13:52	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:52	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 13:52	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 13:52	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/06/17 13:52	1
Tetrachloroethene	**4.2**		1.0	1.0	0.74	ug/L		11/06/17 13:52	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:52	1
1,2,3-Trichlorobenzene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:52	1
1,2,4-Trichlorobenzene	5.0	U Q	5.0	5.0	2.5	ug/L		11/06/17 13:52	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 13:52	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 13:52	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 13:52	1

Client Sample ID: G6M-02-07X-Fall17

Lab Sample ID: 680-144777-3

Date Collected: 10/23/17 11:35

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 13:52	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/06/17 13:52	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/06/17 13:52	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/06/17 13:52	1
Vinyl acetate	2.0	U Q	2.0	2.0	0.81	ug/L		11/06/17 13:52	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 13:52	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/06/17 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*85 - 114*		*11/06/17 13:52*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 119*		*11/06/17 13:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*11/06/17 13:52*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*11/06/17 13:52*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**1.9**	**J**	3.0	3.0	1.5	ug/L		10/27/17 22:26	1
Iron	**110**		100	75	25	ug/L		10/27/17 22:26	1
Manganese	**12**		5.0	5.0	1.8	ug/L		10/27/17 22:26	1

Client Sample ID: G6M-03-10X-Fall17

Lab Sample ID: 680-144777-4

Date Collected: 10/23/17 13:25

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/03/17 00:19	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 00:19	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:19	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 00:19	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/03/17 00:19	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/03/17 00:19	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 00:19	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/03/17 00:19	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 00:19	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/03/17 00:19	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:19	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 00:19	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 00:19	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 00:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/03/17 00:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 00:19	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/03/17 00:19	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 00:19	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:19	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 00:19	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/03/17 00:19	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 00:19	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-03-10X-Fall17

Lab Sample ID: 680-144777-4

Date Collected: 10/23/17 13:25

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/03/17 00:19	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 00:19	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:19	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/03/17 00:19	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/03/17 00:19	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/03/17 00:19	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 00:19	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:19	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 00:19	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 00:19	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 00:19	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/03/17 00:19	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 00:19	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 00:19	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/03/17 00:19	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/03/17 00:19	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 00:19	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 00:19	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 00:19	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/03/17 00:19	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 00:19	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 00:19	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 00:19	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/03/17 00:19	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/03/17 00:19	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 00:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 00:19	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:19	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:19	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 00:19	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 00:19	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 00:19	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/03/17 00:19	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 00:19	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/03/17 00:19	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/03/17 00:19	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:19	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/03/17 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*85 - 114*		*11/03/17 00:19*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 119*		*11/03/17 00:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*81 - 118*		*11/03/17 00:19*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*11/03/17 00:19*	*1*

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 19:41	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 19:41	1
Methane (TCD)	**6500**		390	77	39	ug/L		11/03/17 19:41	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**5.5**	**M**	1.0	1.0	0.40	mg/L		11/01/17 02:24	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**420**		3.0	3.0	1.5	ug/L		10/27/17 22:30	1
Iron	**62000**		100	75	25	ug/L		10/27/17 22:30	1
Manganese	**2100**		5.0	5.0	1.8	ug/L		10/27/17 22:30	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	**0.070**	**J**	0.10	0.050	0.019	mg/L		10/30/17 20:00	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/29/17 08:15	1
Total Organic Carbon - Duplicates	**1.4**		1.0	0.50	0.16	mg/L		11/02/17 07:07	1
Alkalinity	**62**		5.0	3.2	1.1	mg/L		10/30/17 14:12	1

Client Sample ID: G6M-02-12X-Fall17

Lab Sample ID: 680-144777-5

Date Collected: 10/23/17 15:25

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/03/17 00:44	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 00:44	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:44	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 00:44	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/03/17 00:44	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/03/17 00:44	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 00:44	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/03/17 00:44	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 00:44	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/03/17 00:44	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:44	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 00:44	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 00:44	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 00:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/03/17 00:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 00:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/03/17 00:44	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 00:44	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:44	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 00:44	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/03/17 00:44	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 00:44	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/03/17 00:44	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 00:44	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:44	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-02-12X-Fall17

Lab Sample ID: 680-144777-5

Date Collected: 10/23/17 15:25

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/03/17 00:44	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/03/17 00:44	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/03/17 00:44	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 00:44	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:44	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 00:44	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 00:44	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 00:44	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/03/17 00:44	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 00:44	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 00:44	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/03/17 00:44	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/03/17 00:44	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 00:44	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 00:44	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 00:44	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/03/17 00:44	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 00:44	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 00:44	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 00:44	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/03/17 00:44	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/03/17 00:44	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 00:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 00:44	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 00:44	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 00:44	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 00:44	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 00:44	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 00:44	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/03/17 00:44	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 00:44	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/03/17 00:44	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/03/17 00:44	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 00:44	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/03/17 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*85 - 114*		*11/03/17 00:44*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*11/03/17 00:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*		*11/03/17 00:44*	*1*
Toluene-d8 (Surr)	*110*		*89 - 112*		*11/03/17 00:44*	*1*

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-02-12X-Fall17

Lab Sample ID: 680-144777-5

Date Collected: 10/23/17 15:25
Matrix: Water
Date Received: 10/26/17 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	4.0		1.1	1.1	0.55	ug/L		11/03/17 19:54	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 19:54	1
Methane (TCD)	8000		390	77	39	ug/L		11/03/17 19:54	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		11/01/17 01:14	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	670		3.0	3.0	1.5	ug/L		10/27/17 22:33	1
Iron	41000		100	75	25	ug/L		10/27/17 22:33	1
Manganese	8100		5.0	5.0	1.8	ug/L		10/27/17 22:33	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.055	J	0.10	0.050	0.019	mg/L		10/30/17 20:02	1
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/29/17 08:15	1
Total Organic Carbon - Duplicates	4.3		1.0	0.50	0.16	mg/L		11/02/17 07:21	1
Alkalinity	200		5.0	3.2	1.1	mg/L		10/30/17 14:08	1

Client Sample ID: G6M-04-09X-Fall17

Lab Sample ID: 680-144777-6

Date Collected: 10/23/17 17:25
Matrix: Water
Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/03/17 01:08	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 01:08	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:08	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 01:08	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/03/17 01:08	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/03/17 01:08	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 01:08	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/03/17 01:08	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 01:08	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/03/17 01:08	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:08	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 01:08	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 01:08	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 01:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/03/17 01:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 01:08	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/03/17 01:08	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 01:08	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:08	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 01:08	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/03/17 01:08	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-04-09X-Fall17

Lab Sample ID: 680-144777-6

Date Collected: 10/23/17 17:25

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 01:08	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/03/17 01:08	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 01:08	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:08	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/03/17 01:08	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/03/17 01:08	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/03/17 01:08	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 01:08	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:08	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 01:08	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 01:08	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 01:08	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/03/17 01:08	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 01:08	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 01:08	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/03/17 01:08	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/03/17 01:08	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 01:08	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 01:08	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 01:08	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/03/17 01:08	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 01:08	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 01:08	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 01:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/03/17 01:08	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/03/17 01:08	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 01:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 01:08	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:08	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:08	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 01:08	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 01:08	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 01:08	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/03/17 01:08	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 01:08	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/03/17 01:08	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/03/17 01:08	1
Vinyl chloride	**0.74**	**J**	1.0	1.0	0.50	ug/L		11/03/17 01:08	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/03/17 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*85 - 114*		*11/03/17 01:08*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*11/03/17 01:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*11/03/17 01:08*	*1*

Client Sample ID: G6M-04-09X-Fall17

Lab Sample ID: 680-144777-6

Date Collected: 10/23/17 17:25

Matrix: Water

Date Received: 10/26/17 09:20

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*112*		*89 - 112*		*11/03/17 01:08*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	**370**		3.0	3.0	1.5	ug/L		10/27/17 22:19	1
Iron	**110000**		100	75	25	ug/L		10/27/17 22:19	1
Manganese	**2400**		5.0	5.0	1.8	ug/L		10/27/17 22:19	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**7.8**		1.0	0.50	0.16	mg/L		11/02/17 07:38	1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144777-7

Date Collected: 10/23/17 08:00

Matrix: Water

Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/03/17 01:33	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 01:33	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:33	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 01:33	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/03/17 01:33	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/03/17 01:33	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 01:33	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/03/17 01:33	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 01:33	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/03/17 01:33	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:33	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 01:33	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 01:33	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 01:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/03/17 01:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/03/17 01:33	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/03/17 01:33	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 01:33	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:33	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/03/17 01:33	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/03/17 01:33	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 01:33	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/03/17 01:33	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 01:33	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:33	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/03/17 01:33	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/03/17 01:33	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/03/17 01:33	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 01:33	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:33	1

Client Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-144777-7

Date Collected: 10/23/17 08:00
Matrix: Water
Date Received: 10/26/17 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/03/17 01:33	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 01:33	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/03/17 01:33	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/03/17 01:33	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 01:33	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 01:33	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/03/17 01:33	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/03/17 01:33	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/03/17 01:33	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 01:33	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/03/17 01:33	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/03/17 01:33	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 01:33	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/03/17 01:33	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/03/17 01:33	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/03/17 01:33	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/03/17 01:33	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 01:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 01:33	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/03/17 01:33	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/03/17 01:33	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/03/17 01:33	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/03/17 01:33	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/03/17 01:33	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/03/17 01:33	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/03/17 01:33	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/03/17 01:33	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/03/17 01:33	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 01:33	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/03/17 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*85 - 114*		*11/03/17 01:33*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*11/03/17 01:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*81 - 118*		*11/03/17 01:33*	*1*
Toluene-d8 (Surr)	*106*		*89 - 112*		*11/03/17 01:33*	*1*

Surrogate Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
680-144777-1	G6M-03-07X-Fall17	87	96	91	100
680-144777-2	XSA-12-98X-Fall17	87	97	93	99
680-144777-2 MS	XSA-12-98X-Fall17	114	95	97	104
680-144777-2 MSD	XSA-12-98X-Fall17	101	99	101	113 Q
680-144777-3	G6M-02-07X-Fall17	87	96	91	100
680-144777-4	G6M-03-10X-Fall17	105	91	86	99
680-144777-5	G6M-02-12X-Fall17	105	100	99	110
680-144777-6	G6M-04-09X-Fall17	106	98	98	112
680-144777-7	Trip Blank	105	104	102	106
LCS 680-501154/3	Lab Control Sample	104	99	105	106
LCS 680-501404/4	Lab Control Sample	87	104	99	99
LCSD 680-501154/4	Lab Control Sample Dup	106	101	107	113 Q
LCSD 680-501404/5	Lab Control Sample Dup	87	104	96	101
MB 680-501154/9	Method Blank	104	102	95	115 Q
MB 680-501404/9	Method Blank	88	97	92	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 680-501154/9
Matrix: Water
Analysis Batch: 501154

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/02/17 21:26	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/02/17 21:26	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 21:26	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/02/17 21:26	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/02/17 21:26	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/02/17 21:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/02/17 21:26	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/02/17 21:26	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/02/17 21:26	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/02/17 21:26	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 21:26	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/02/17 21:26	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/02/17 21:26	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/02/17 21:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/02/17 21:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/02/17 21:26	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/02/17 21:26	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/02/17 21:26	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 21:26	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/02/17 21:26	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/02/17 21:26	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/02/17 21:26	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/02/17 21:26	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/02/17 21:26	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 21:26	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/02/17 21:26	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/02/17 21:26	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/02/17 21:26	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/02/17 21:26	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 21:26	1
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/02/17 21:26	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/02/17 21:26	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/02/17 21:26	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/02/17 21:26	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/02/17 21:26	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/02/17 21:26	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/02/17 21:26	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/02/17 21:26	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/02/17 21:26	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/02/17 21:26	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/02/17 21:26	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/02/17 21:26	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/02/17 21:26	1

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

Lab Sample ID: MB 680-501154/9
Matrix: Water
Analysis Batch: 501154

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/02/17 21:26	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/02/17 21:26	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 21:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/02/17 21:26	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/02/17 21:26	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/02/17 21:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 21:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/02/17 21:26	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/02/17 21:26	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/02/17 21:26	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/02/17 21:26	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/02/17 21:26	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/02/17 21:26	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/02/17 21:26	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/02/17 21:26	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/02/17 21:26	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/02/17 21:26	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/02/17 21:26	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/02/17 21:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*85 - 114*		*11/02/17 21:26*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*11/02/17 21:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*		*11/02/17 21:26*	*1*
Toluene-d8 (Surr)	*115*	*Q*	*89 - 112*		*11/02/17 21:26*	*1*

Lab Sample ID: LCS 680-501154/3
Matrix: Water
Analysis Batch: 501154

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	232		ug/L		93	39 - 160
Benzene	50.0	51.8		ug/L		104	79 - 120
Bromobenzene	50.0	50.7		ug/L		101	80 - 120
Bromoform	50.0	41.2		ug/L		82	66 - 130
Bromomethane	50.0	46.8		ug/L		94	53 - 141
2-Butanone (MEK)	250	227		ug/L		91	56 - 143
Carbon disulfide	50.0	49.7		ug/L		99	64 - 133
Carbon tetrachloride	50.0	48.5		ug/L		97	72 - 136
Chlorobenzene	50.0	51.5		ug/L		103	82 - 118
Chlorobromomethane	50.0	50.1		ug/L		100	78 - 123
Chlorodibromomethane	50.0	44.3		ug/L		89	74 - 126
Chloroethane	50.0	53.4		ug/L		107	60 - 138
Chloroform	50.0	49.1		ug/L		98	79 - 124
Chloromethane	50.0	49.1		ug/L		98	50 - 139
2-Chlorotoluene	50.0	54.1		ug/L		108	79 - 122
4-Chlorotoluene	50.0	53.7		ug/L		107	78 - 122

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

Lab Sample ID: LCS 680-501154/3
Matrix: Water
Analysis Batch: 501154

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	50.0	50.1		ug/L		100	78 - 123
cis-1,3-Dichloropropene	50.0	56.3		ug/L		113	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	43.7		ug/L		87	62 - 128
Dibromomethane	50.0	49.5		ug/L		99	79 - 123
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	80 - 119
1,3-Dichlorobenzene	50.0	53.3		ug/L		107	80 - 119
1,4-Dichlorobenzene	50.0	52.0		ug/L		104	79 - 118
Dichlorobromomethane	50.0	48.4		ug/L		97	79 - 125
Dichlorodifluoromethane	50.0	52.4		ug/L		105	32 - 152
1,1-Dichloroethane	50.0	50.6		ug/L		101	77 - 125
1,2-Dichloroethane	50.0	52.5		ug/L		105	73 - 128
1,1-Dichloroethene	50.0	47.1		ug/L		94	71 - 131
1,2-Dichloroethene, Total	100	99.6		ug/L		100	79 - 121
1,2-Dichloropropane	50.0	47.4		ug/L		95	78 - 122
1,3-Dichloropropane	50.0	48.4		ug/L		97	80 - 119
2,2-Dichloropropane	50.0	50.9		ug/L		102	60 - 139
1,1-Dichloropropene	50.0	53.2		ug/L		106	79 - 125
Ethylbenzene	50.0	54.0		ug/L		108	79 - 121
Ethylene Dibromide	50.0	47.7		ug/L		95	75 - 127
Hexachlorobutadiene	50.0	58.1		ug/L		116	66 - 134
2-Hexanone	250	228		ug/L		91	57 - 139
Isopropylbenzene	50.0	56.3		ug/L		113	72 - 131
4-Isopropyltoluene	50.0	57.8		ug/L		116	77 - 127
Methylene Chloride	50.0	51.1		ug/L		102	74 - 124
4-Methyl-2-pentanone (MIBK)	250	231		ug/L		92	67 - 130
Methyl tert-butyl ether	50.0	48.0		ug/L		96	71 - 124
m-Xylene & p-Xylene	50.0	54.4		ug/L		109	80 - 121
Naphthalene	50.0	44.7		ug/L		89	61 - 128
n-Butylbenzene	50.0	54.7		ug/L		109	75 - 128
N-Propylbenzene	50.0	56.0		ug/L		112	76 - 126
o-Xylene	50.0	54.0		ug/L		108	78 - 122
sec-Butylbenzene	50.0	51.7		ug/L		103	77 - 126
Styrene	50.0	53.7		ug/L		107	78 - 123
tert-Butylbenzene	50.0	56.3		ug/L		113	78 - 124
1,1,1,2-Tetrachloroethane	50.0	49.1		ug/L		98	78 - 124
1,1,2,2-Tetrachloroethane	50.0	45.4		ug/L		91	71 - 121
Tetrachloroethene	50.0	52.9		ug/L		106	74 - 129
Toluene	50.0	51.3		ug/L		103	80 - 121
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	75 - 124
trans-1,3-Dichloropropene	50.0	50.1		ug/L		100	73 - 127
1,2,3-Trichlorobenzene	50.0	56.0		ug/L		112	69 - 129
1,2,4-Trichlorobenzene	50.0	52.7		ug/L		105	69 - 130
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	74 - 131
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	80 - 119
Trichloroethene	50.0	54.6		ug/L		109	79 - 123
Trichlorofluoromethane	50.0	47.5		ug/L		95	65 - 141
1,2,3-Trichloropropane	50.0	41.5		ug/L		83	73 - 122
1,2,4-Trimethylbenzene	50.0	53.3		ug/L		107	76 - 124

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

Lab Sample ID: LCS 680-501154/3
Matrix: Water
Analysis Batch: 501154

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	50.0	56.3		ug/L		113	75 - 124
Vinyl acetate	100	88.6		ug/L		89	54 - 146
Vinyl chloride	50.0	49.7		ug/L		99	58 - 137
Xylenes, Total	100	108		ug/L		108	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*105*		*81 - 118*
Toluene-d8 (Surr)	*106*		*89 - 112*

Lab Sample ID: LCSD 680-501154/4
Matrix: Water
Analysis Batch: 501154

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	250	232		ug/L		93	39 - 160	0	20
Benzene	50.0	53.0		ug/L		106	79 - 120	2	20
Bromobenzene	50.0	52.4		ug/L		105	80 - 120	3	20
Bromoform	50.0	42.9		ug/L		86	66 - 130	4	20
Bromomethane	50.0	46.0		ug/L		92	53 - 141	2	20
2-Butanone (MEK)	250	233		ug/L		93	56 - 143	3	20
Carbon disulfide	50.0	50.3		ug/L		101	64 - 133	1	20
Carbon tetrachloride	50.0	47.1		ug/L		94	72 - 136	3	20
Chlorobenzene	50.0	53.2		ug/L		106	82 - 118	3	20
Chlorobromomethane	50.0	51.5		ug/L		103	78 - 123	3	20
Chlorodibromomethane	50.0	44.7		ug/L		89	74 - 126	1	20
Chloroethane	50.0	55.2		ug/L		110	60 - 138	3	20
Chloroform	50.0	50.0		ug/L		100	79 - 124	2	20
Chloromethane	50.0	50.0		ug/L		100	50 - 139	2	20
2-Chlorotoluene	50.0	55.8		ug/L		112	79 - 122	3	20
4-Chlorotoluene	50.0	55.3		ug/L		111	78 - 122	3	20
cis-1,2-Dichloroethene	50.0	51.2		ug/L		102	78 - 123	2	20
cis-1,3-Dichloropropene	50.0	54.4		ug/L		109	75 - 124	3	20
1,2-Dibromo-3-Chloropropane	50.0	44.1		ug/L		88	62 - 128	1	20
Dibromomethane	50.0	52.4		ug/L		105	79 - 123	6	20
1,2-Dichlorobenzene	50.0	52.9		ug/L		106	80 - 119	2	20
1,3-Dichlorobenzene	50.0	54.0		ug/L		108	80 - 119	1	20
1,4-Dichlorobenzene	50.0	52.1		ug/L		104	79 - 118	0	20
Dichlorobromomethane	50.0	48.2		ug/L		96	79 - 125	0	20
Dichlorodifluoromethane	50.0	52.8		ug/L		106	32 - 152	1	20
1,1-Dichloroethane	50.0	51.6		ug/L		103	77 - 125	2	20
1,2-Dichloroethane	50.0	54.2		ug/L		108	73 - 128	3	20
1,1-Dichloroethene	50.0	47.9		ug/L		96	71 - 131	2	20
1,2-Dichloroethene, Total	100	102		ug/L		102	79 - 121	2	20
1,2-Dichloropropane	50.0	49.6		ug/L		99	78 - 122	5	20
1,3-Dichloropropane	50.0	49.6		ug/L		99	80 - 119	3	20
2,2-Dichloropropane	50.0	53.2		ug/L		106	60 - 139	4	20

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

Lab Sample ID: LCSD 680-501154/4
Matrix: Water
Analysis Batch: 501154

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-Dichloropropene	50.0	52.1		ug/L		104	79 - 125	2	20
Ethylbenzene	50.0	55.4		ug/L		111	79 - 121	3	20
Ethylene Dibromide	50.0	49.4		ug/L		99	75 - 127	3	20
Hexachlorobutadiene	50.0	55.0		ug/L		110	66 - 134	5	20
2-Hexanone	250	233		ug/L		93	57 - 139	2	20
Isopropylbenzene	50.0	57.5		ug/L		115	72 - 131	2	20
4-Isopropyltoluene	50.0	57.6		ug/L		115	77 - 127	0	20
Methylene Chloride	50.0	52.4		ug/L		105	74 - 124	3	20
4-Methyl-2-pentanone (MIBK)	250	247		ug/L		99	67 - 130	7	20
Methyl tert-butyl ether	50.0	49.5		ug/L		99	71 - 124	3	20
m-Xylene & p-Xylene	50.0	55.9		ug/L		112	80 - 121	3	20
Naphthalene	50.0	42.8		ug/L		86	61 - 128	4	20
n-Butylbenzene	50.0	54.5		ug/L		109	75 - 128	0	20
N-Propylbenzene	50.0	58.0		ug/L		116	76 - 126	4	20
o-Xylene	50.0	55.0		ug/L		110	78 - 122	2	20
sec-Butylbenzene	50.0	52.9		ug/L		106	77 - 126	2	20
Styrene	50.0	55.5		ug/L		111	78 - 123	3	20
tert-Butylbenzene	50.0	58.0		ug/L		116	78 - 124	3	20
1,1,1,2-Tetrachloroethane	50.0	51.3		ug/L		103	78 - 124	4	20
1,1,2,2-Tetrachloroethane	50.0	46.7		ug/L		93	71 - 121	3	20
Tetrachloroethene	50.0	53.3		ug/L		107	74 - 129	1	20
Toluene	50.0	56.1		ug/L		112	80 - 121	9	20
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	53.8		ug/L		108	73 - 127	7	20
1,2,3-Trichlorobenzene	50.0	57.0		ug/L		114	69 - 129	2	20
1,2,4-Trichlorobenzene	50.0	52.3		ug/L		105	69 - 130	1	20
1,1,1-Trichloroethane	50.0	52.7		ug/L		105	74 - 131	2	20
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 119	2	20
Trichloroethene	50.0	54.8		ug/L		110	79 - 123	0	20
Trichlorofluoromethane	50.0	48.6		ug/L		97	65 - 141	2	20
1,2,3-Trichloropropane	50.0	42.6		ug/L		85	73 - 122	2	20
1,2,4-Trimethylbenzene	50.0	55.1		ug/L		110	76 - 124	3	20
1,3,5-Trimethylbenzene	50.0	58.4		ug/L		117	75 - 124	4	20
Vinyl acetate	100	91.4		ug/L		91	54 - 146	3	20
Vinyl chloride	50.0	49.2		ug/L		98	58 - 137	1	20
Xylenes, Total	100	111		ug/L		111	79 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*107*		*81 - 118*
Toluene-d8 (Surr)	*113*	*Q*	*89 - 112*

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

Lab Sample ID: 680-144777-2 MS
Matrix: Water
Analysis Batch: 501154

Client Sample ID: XSA-12-98X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	10		250	184		ug/L		69	39 - 160
Benzene	1.0	U	50.0	49.2		ug/L		98	79 - 120
Bromobenzene	1.0	U	50.0	43.6		ug/L		87	80 - 120
Bromoform	1.0	U	50.0	35.2		ug/L		70	66 - 130
Bromomethane	5.0	U	50.0	41.4		ug/L		83	53 - 141
2-Butanone (MEK)	10	U	250	186		ug/L		74	56 - 143
Carbon disulfide	2.0	U	50.0	46.8		ug/L		94	64 - 133
Carbon tetrachloride	0.50	U	50.0	51.1		ug/L		102	72 - 136
Chlorobenzene	0.50	U	50.0	49.4		ug/L		99	82 - 118
Chlorobromomethane	1.0	U	50.0	47.5		ug/L		95	78 - 123
Chlorodibromomethane	0.50	U	50.0	43.5		ug/L		87	74 - 126
Chloroethane	5.0	U	50.0	51.4		ug/L		103	60 - 138
Chloroform	1.0	U	50.0	47.3		ug/L		95	79 - 124
Chloromethane	1.0	U	50.0	44.6		ug/L		89	50 - 139
2-Chlorotoluene	0.50	U	50.0	46.8		ug/L		94	79 - 122
4-Chlorotoluene	1.0	U	50.0	46.3		ug/L		93	78 - 122
cis-1,2-Dichloroethene	0.69	J	50.0	46.4		ug/L		91	78 - 123
cis-1,3-Dichloropropene	1.0	U	50.0	46.5		ug/L		93	75 - 124
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	39.2		ug/L		78	62 - 128
Dibromomethane	1.0	U	50.0	45.3		ug/L		91	79 - 123
1,2-Dichlorobenzene	1.0	U	50.0	50.8		ug/L		102	80 - 119
1,3-Dichlorobenzene	1.0	U	50.0	52.7		ug/L		105	80 - 119
1,4-Dichlorobenzene	1.0	U	50.0	51.1		ug/L		102	79 - 118
Dichlorobromomethane	1.0	U	50.0	46.3		ug/L		93	79 - 125
Dichlorodifluoromethane	1.0	U	50.0	43.2		ug/L		86	32 - 152
1,1-Dichloroethane	1.0	U	50.0	47.5		ug/L		95	77 - 125
1,2-Dichloroethane	1.0	U	50.0	47.8		ug/L		96	73 - 128
1,1-Dichloroethene	1.0	U	50.0	45.7		ug/L		91	71 - 131
1,2-Dichloroethene, Total	1.0	U	100	93.3		ug/L		93	79 - 121
1,2-Dichloropropane	1.0	U	50.0	44.4		ug/L		89	78 - 122
1,3-Dichloropropane	1.0	U	50.0	46.1		ug/L		92	80 - 119
2,2-Dichloropropane	1.0	U Q	50.0	43.3		ug/L		87	60 - 139
1,1-Dichloropropene	1.0	U	50.0	55.2		ug/L		110	79 - 125
Ethylbenzene	0.50	U	50.0	53.4		ug/L		107	79 - 121
Ethylene Dibromide	1.0	U	50.0	47.4		ug/L		95	75 - 127
Hexachlorobutadiene	5.0	U Q	50.0	53.8		ug/L		108	66 - 134
2-Hexanone	5.0	U	250	202		ug/L		81	57 - 139
Isopropylbenzene	1.0	U	50.0	52.7		ug/L		105	72 - 131
4-Isopropyltoluene	1.0	U	50.0	57.9		ug/L		116	77 - 127
Methylene Chloride	5.0	U	50.0	45.8		ug/L		92	74 - 124
4-Methyl-2-pentanone (MIBK)	5.0	U	250	208		ug/L		83	67 - 130
Methyl tert-butyl ether	0.50	U	50.0	42.4		ug/L		85	71 - 124
m-Xylene & p-Xylene	1.0	U	50.0	54.6		ug/L		109	80 - 121
Naphthalene	5.0	U Q	50.0	37.9		ug/L		76	61 - 128
n-Butylbenzene	1.0	U Q	50.0	54.4		ug/L		109	75 - 128
N-Propylbenzene	1.0	U	50.0	49.3		ug/L		99	76 - 126
o-Xylene	0.50	U	50.0	50.1		ug/L		100	78 - 122
sec-Butylbenzene	1.0	U	50.0	45.6		ug/L		91	77 - 126

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

Lab Sample ID: 680-144777-2 MS — **Client Sample ID: XSA-12-98X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.50	U	50.0	48.7		ug/L		97	78 - 123
tert-Butylbenzene	1.0	U	50.0	49.4		ug/L		99	78 - 124
1,1,1,2-Tetrachloroethane	1.0	U	50.0	47.7		ug/L		95	78 - 124
1,1,2,2-Tetrachloroethane	1.0	U	50.0	37.5		ug/L		75	71 - 121
Tetrachloroethene	5.0		50.0	56.8		ug/L		104	74 - 129
Toluene	1.0	U	50.0	49.7		ug/L		99	80 - 121
trans-1,2-Dichloroethene	1.0	U	50.0	46.9		ug/L		94	75 - 124
trans-1,3-Dichloropropene	1.0	U	50.0	46.1		ug/L		92	73 - 127
1,2,3-Trichlorobenzene	5.0	U Q	50.0	49.7		ug/L		99	69 - 129
1,2,4-Trichlorobenzene	5.0	U Q	50.0	48.2		ug/L		96	69 - 130
1,1,1-Trichloroethane	1.0	U	50.0	53.3		ug/L		107	74 - 131
1,1,2-Trichloroethane	0.50	U	50.0	46.1		ug/L		92	80 - 119
Trichloroethene	0.56	J	50.0	51.7		ug/L		102	79 - 123
Trichlorofluoromethane	1.0	U	50.0	49.8		ug/L		100	65 - 141
1,2,3-Trichloropropane	1.0	U J	50.0	31.0	J	ug/L		62	73 - 122
1,2,4-Trimethylbenzene	1.0	U	50.0	46.5		ug/L		93	76 - 124
1,3,5-Trimethylbenzene	0.50	U	50.0	48.5		ug/L		97	75 - 124
Vinyl acetate	2.0	U Q	100	72.8		ug/L		73	54 - 146
Vinyl chloride	1.0	U	50.0	45.4		ug/L		91	58 - 137
Xylenes, Total	0.50	U	100	105		ug/L		105	79 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*85 - 114*
Dibromofluoromethane (Surr)	*95*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*
Toluene-d8 (Surr)	*104*		*89 - 112*

Lab Sample ID: 680-144777-2 MSD — **Client Sample ID: XSA-12-98X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501154

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10		250	195		ug/L		74	39 - 160	6	20
Benzene	1.0	U	50.0	52.0		ug/L		104	79 - 120	6	20
Bromobenzene	1.0	U	50.0	45.7		ug/L		91	80 - 120	5	20
Bromoform	1.0	U	50.0	35.8		ug/L		72	66 - 130	2	20
Bromomethane	5.0	U	50.0	45.6		ug/L		91	53 - 141	10	20
2-Butanone (MEK)	10	U	250	194		ug/L		78	56 - 143	4	20
Carbon disulfide	2.0	U	50.0	49.5		ug/L		99	64 - 133	6	20
Carbon tetrachloride	0.50	U	50.0	54.5		ug/L		109	72 - 136	6	20
Chlorobenzene	0.50	U	50.0	49.0		ug/L		98	82 - 118	1	20
Chlorobromomethane	1.0	U	50.0	49.4		ug/L		99	78 - 123	4	20
Chlorodibromomethane	0.50	U	50.0	44.3		ug/L		89	74 - 126	2	20
Chloroethane	5.0	U	50.0	55.2		ug/L		110	60 - 138	7	20
Chloroform	1.0	U	50.0	49.9		ug/L		100	79 - 124	5	20
Chloromethane	1.0	U	50.0	47.7		ug/L		95	50 - 139	7	20
2-Chlorotoluene	0.50	U	50.0	49.2		ug/L		98	79 - 122	5	20
4-Chlorotoluene	1.0	U	50.0	49.1		ug/L		98	78 - 122	6	20

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

Lab Sample ID: 680-144777-2 MSD
Matrix: Water
Analysis Batch: 501154

Client Sample ID: XSA-12-98X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.69	J	50.0	49.0		ug/L		97	78 - 123	6	20
cis-1,3-Dichloropropene	1.0	U	50.0	51.9		ug/L		104	75 - 124	11	20
1,2-Dibromo-3-Chloropropane	2.0	U	50.0	39.6		ug/L		79	62 - 128	1	20
Dibromomethane	1.0	U	50.0	48.4		ug/L		97	79 - 123	6	20
1,2-Dichlorobenzene	1.0	U	50.0	51.6		ug/L		103	80 - 119	2	20
1,3-Dichlorobenzene	1.0	U	50.0	52.5		ug/L		105	80 - 119	0	20
1,4-Dichlorobenzene	1.0	U	50.0	50.6		ug/L		101	79 - 118	1	20
Dichlorobromomethane	1.0	U	50.0	47.7		ug/L		95	79 - 125	3	20
Dichlorodifluoromethane	1.0	U	50.0	46.9		ug/L		94	32 - 152	8	20
1,1-Dichloroethane	1.0	U	50.0	49.3		ug/L		99	77 - 125	4	20
1,2-Dichloroethane	1.0	U	50.0	49.9		ug/L		100	73 - 128	4	20
1,1-Dichloroethene	1.0	U	50.0	48.0		ug/L		96	71 - 131	5	20
1,2-Dichloroethene, Total	1.0	U	100	98.1		ug/L		98	79 - 121	5	20
1,2-Dichloropropane	1.0	U	50.0	47.0		ug/L		94	78 - 122	6	20
1,3-Dichloropropane	1.0	U	50.0	48.2		ug/L		96	80 - 119	4	20
2,2-Dichloropropane	1.0	U Q	50.0	43.8		ug/L		88	60 - 139	1	20
1,1-Dichloropropene	1.0	U	50.0	58.0		ug/L		116	79 - 125	5	20
Ethylbenzene	0.50	U	50.0	52.6		ug/L		105	79 - 121	1	20
Ethylene Dibromide	1.0	U	50.0	47.5		ug/L		95	75 - 127	0	20
Hexachlorobutadiene	5.0	U Q	50.0	54.7		ug/L		109	66 - 134	2	20
2-Hexanone	5.0	U	250	210		ug/L		84	57 - 139	4	20
Isopropylbenzene	1.0	U	50.0	52.2		ug/L		104	72 - 131	1	20
4-Isopropyltoluene	1.0	U	50.0	58.1		ug/L		116	77 - 127	0	20
Methylene Chloride	5.0	U	50.0	48.9		ug/L		98	74 - 124	7	20
4-Methyl-2-pentanone (MIBK)	5.0	U	250	207		ug/L		83	67 - 130	0	20
Methyl tert-butyl ether	0.50	U	50.0	44.4		ug/L		89	71 - 124	5	20
m-Xylene & p-Xylene	1.0	U	50.0	50.2		ug/L		100	80 - 121	8	20
Naphthalene	5.0	U Q	50.0	37.6		ug/L		75	61 - 128	1	20
n-Butylbenzene	1.0	U Q	50.0	55.1		ug/L		110	75 - 128	1	20
N-Propylbenzene	1.0	U	50.0	52.0		ug/L		104	76 - 126	5	20
o-Xylene	0.50	U	50.0	49.0		ug/L		98	78 - 122	2	20
sec-Butylbenzene	1.0	U	50.0	48.6		ug/L		97	77 - 126	6	20
Styrene	0.50	U	50.0	48.3		ug/L		97	78 - 123	1	20
tert-Butylbenzene	1.0	U	50.0	53.3		ug/L		107	78 - 124	8	20
1,1,1,2-Tetrachloroethane	1.0	U	50.0	48.1		ug/L		96	78 - 124	1	20
1,1,2,2-Tetrachloroethane	1.0	U	50.0	39.5		ug/L		79	71 - 121	5	20
Tetrachloroethene	5.0		50.0	61.7		ug/L		113	74 - 129	8	20
Toluene	1.0	U	50.0	57.0		ug/L		114	80 - 121	14	20
trans-1,2-Dichloroethene	1.0	U	50.0	49.1		ug/L		98	75 - 124	5	20
trans-1,3-Dichloropropene	1.0	U	50.0	53.4		ug/L		107	73 - 127	15	20
1,2,3-Trichlorobenzene	5.0	U Q	50.0	49.8		ug/L		100	69 - 129	0	20
1,2,4-Trichlorobenzene	5.0	U Q	50.0	49.7		ug/L		99	69 - 130	3	20
1,1,1-Trichloroethane	1.0	U	50.0	55.7		ug/L		111	74 - 131	5	20
1,1,2-Trichloroethane	0.50	U	50.0	48.8		ug/L		98	80 - 119	6	20
Trichloroethene	0.56	J	50.0	55.2		ug/L		109	79 - 123	7	20
Trichlorofluoromethane	1.0	U	50.0	52.4		ug/L		105	65 - 141	5	20
1,2,3-Trichloropropane	1.0	U J	50.0	34.0	J	ug/L		68	73 - 122	9	20
1,2,4-Trimethylbenzene	1.0	U	50.0	49.2		ug/L		98	76 - 124	6	20

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

Lab Sample ID: 680-144777-2 MSD
Matrix: Water
Analysis Batch: 501154

Client Sample ID: XSA-12-98X-Fall17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	0.50	U	50.0	51.9		ug/L		104	75 - 124	7	20
Vinyl acetate	2.0	U Q	100	77.3		ug/L		77	54 - 146	6	20
Vinyl chloride	1.0	U	50.0	48.1		ug/L		96	58 - 137	6	20
Xylenes, Total	0.50	U	100	99.2		ug/L		99	79 - 121	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
Toluene-d8 (Surr)	*113*	*Q*	*89 - 112*

Lab Sample ID: MB 680-501404/9
Matrix: Water
Analysis Batch: 501404

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	10	U	10	10	7.0	ug/L		11/06/17 11:39	1
Benzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 11:39	1
Bromobenzene	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 11:39	1
Bromoform	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 11:39	1
Bromomethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
2-Butanone (MEK)	10	U	10	10	3.4	ug/L		11/06/17 11:39	1
Carbon disulfide	2.0	U	2.0	2.0	0.43	ug/L		11/06/17 11:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 11:39	1
Chlorobenzene	0.50	U	1.0	0.50	0.26	ug/L		11/06/17 11:39	1
Chlorobromomethane	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 11:39	1
Chlorodibromomethane	0.50	U	1.0	0.50	0.32	ug/L		11/06/17 11:39	1
Chloroethane	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
Chloroform	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 11:39	1
Chloromethane	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 11:39	1
2-Chlorotoluene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 11:39	1
4-Chlorotoluene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 11:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	1.0	0.41	ug/L		11/06/17 11:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	1.0	0.40	ug/L		11/06/17 11:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	5.0	2.0	1.1	ug/L		11/06/17 11:39	1
Dibromomethane	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 11:39	1
1,2-Dichlorobenzene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 11:39	1
1,3-Dichlorobenzene	1.0	U	1.0	1.0	0.43	ug/L		11/06/17 11:39	1
1,4-Dichlorobenzene	1.0	U	1.0	1.0	0.46	ug/L		11/06/17 11:39	1
Dichlorobromomethane	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 11:39	1
Dichlorodifluoromethane	1.0	U	1.0	1.0	0.60	ug/L		11/06/17 11:39	1
1,1-Dichloroethane	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 11:39	1
1,2-Dichloroethane	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 11:39	1
1,1-Dichloroethene	1.0	U	1.0	1.0	0.36	ug/L		11/06/17 11:39	1
1,2-Dichloroethene, Total	1.0	U	2.0	1.0	0.74	ug/L		11/06/17 11:39	1
1,2-Dichloropropane	1.0	U	1.0	1.0	0.67	ug/L		11/06/17 11:39	1
1,3-Dichloropropane	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 11:39	1
2,2-Dichloropropane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 11:39	1

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

Lab Sample ID: MB 680-501404/9
Matrix: Water
Analysis Batch: 501404

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	1.0	0.34	ug/L		11/06/17 11:39	1
Ethylbenzene	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 11:39	1
Ethylene Dibromide	1.0	U	1.0	1.0	0.44	ug/L		11/06/17 11:39	1
Hexachlorobutadiene	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
2-Hexanone	5.0	U	10	5.0	2.0	ug/L		11/06/17 11:39	1
Isopropylbenzene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 11:39	1
4-Isopropyltoluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 11:39	1
Methylene Chloride	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
4-Methyl-2-pentanone (MIBK)	5.0	U	10	5.0	2.1	ug/L		11/06/17 11:39	1
Methyl tert-butyl ether	0.50	U	10	0.50	0.30	ug/L		11/06/17 11:39	1
m-Xylene & p-Xylene	1.0	U	1.0	1.0	0.35	ug/L		11/06/17 11:39	1
Naphthalene	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
n-Butylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/06/17 11:39	1
N-Propylbenzene	1.0	U	1.0	1.0	0.38	ug/L		11/06/17 11:39	1
o-Xylene	0.50	U	1.0	0.50	0.23	ug/L		11/06/17 11:39	1
sec-Butylbenzene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 11:39	1
Styrene	0.50	U	1.0	0.50	0.27	ug/L		11/06/17 11:39	1
tert-Butylbenzene	1.0	U	1.0	1.0	0.45	ug/L		11/06/17 11:39	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 11:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	1.0	0.62	ug/L		11/06/17 11:39	1
Tetrachloroethene	1.0	U	1.0	1.0	0.74	ug/L		11/06/17 11:39	1
Toluene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 11:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 11:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 11:39	1
1,2,3-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
1,2,4-Trichlorobenzene	5.0	U	5.0	5.0	2.5	ug/L		11/06/17 11:39	1
1,1,1-Trichloroethane	1.0	U	1.0	1.0	0.37	ug/L		11/06/17 11:39	1
1,1,2-Trichloroethane	0.50	U	1.0	0.50	0.33	ug/L		11/06/17 11:39	1
Trichloroethene	1.0	U	1.0	1.0	0.48	ug/L		11/06/17 11:39	1
Trichlorofluoromethane	1.0	U	1.0	1.0	0.42	ug/L		11/06/17 11:39	1
1,2,3-Trichloropropane	1.0	U	1.0	1.0	0.39	ug/L		11/06/17 11:39	1
1,2,4-Trimethylbenzene	1.0	U	1.0	1.0	0.47	ug/L		11/06/17 11:39	1
1,3,5-Trimethylbenzene	0.50	U	1.0	0.50	0.31	ug/L		11/06/17 11:39	1
Vinyl acetate	2.0	U	2.0	2.0	0.81	ug/L		11/06/17 11:39	1
Vinyl chloride	1.0	U	1.0	1.0	0.50	ug/L		11/06/17 11:39	1
Xylenes, Total	0.50	U	2.0	0.50	0.23	ug/L		11/06/17 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*85 - 114*		*11/06/17 11:39*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*11/06/17 11:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*11/06/17 11:39*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*11/06/17 11:39*	*1*

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

Lab Sample ID: LCS 680-501404/4
Matrix: Water
Analysis Batch: 501404

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	275		ug/L		110	39 - 160
Benzene	50.0	51.8		ug/L		104	79 - 120
Bromobenzene	50.0	52.2		ug/L		104	80 - 120
Bromoform	50.0	56.4		ug/L		113	66 - 130
Bromomethane	50.0	50.6		ug/L		101	53 - 141
2-Butanone (MEK)	250	271		ug/L		108	56 - 143
Carbon disulfide	50.0	53.3		ug/L		107	64 - 133
Carbon tetrachloride	50.0	52.0		ug/L		104	72 - 136
Chlorobenzene	50.0	50.3		ug/L		101	82 - 118
Chlorobromomethane	50.0	53.2		ug/L		106	78 - 123
Chlorodibromomethane	50.0	51.0		ug/L		102	74 - 126
Chloroethane	50.0	56.5		ug/L		113	60 - 138
Chloroform	50.0	51.9		ug/L		104	79 - 124
Chloromethane	50.0	51.7	M	ug/L		103	50 - 139
2-Chlorotoluene	50.0	51.4		ug/L		103	79 - 122
4-Chlorotoluene	50.0	51.1		ug/L		102	78 - 122
cis-1,2-Dichloroethene	50.0	53.0		ug/L		106	78 - 123
cis-1,3-Dichloropropene	50.0	55.9		ug/L		112	75 - 124
1,2-Dibromo-3-Chloropropane	50.0	53.9		ug/L		108	62 - 128
Dibromomethane	50.0	53.3		ug/L		107	79 - 123
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	80 - 119
1,3-Dichlorobenzene	50.0	49.0		ug/L		98	80 - 119
1,4-Dichlorobenzene	50.0	48.0		ug/L		96	79 - 118
Dichlorobromomethane	50.0	54.1		ug/L		108	79 - 125
Dichlorodifluoromethane	50.0	56.0		ug/L		112	32 - 152
1,1-Dichloroethane	50.0	52.5		ug/L		105	77 - 125
1,2-Dichloroethane	50.0	51.7		ug/L		103	73 - 128
1,1-Dichloroethene	50.0	50.8		ug/L		102	71 - 131
1,2-Dichloroethene, Total	100	107		ug/L		107	79 - 121
1,2-Dichloropropane	50.0	52.3		ug/L		105	78 - 122
1,3-Dichloropropane	50.0	51.2		ug/L		102	80 - 119
2,2-Dichloropropane	50.0	58.1		ug/L		116	60 - 139
1,1-Dichloropropene	50.0	52.2		ug/L		104	79 - 125
Ethylbenzene	50.0	50.3		ug/L		101	79 - 121
Ethylene Dibromide	50.0	53.7		ug/L		107	75 - 127
Hexachlorobutadiene	50.0	87.2	Q	ug/L		174	66 - 134
2-Hexanone	250	291		ug/L		116	57 - 139
Isopropylbenzene	50.0	52.2		ug/L		104	72 - 131
4-Isopropyltoluene	50.0	52.7		ug/L		105	77 - 127
Methylene Chloride	50.0	54.2		ug/L		108	74 - 124
4-Methyl-2-pentanone (MIBK)	250	290		ug/L		116	67 - 130
Methyl tert-butyl ether	50.0	53.1		ug/L		106	71 - 124
m-Xylene & p-Xylene	50.0	51.0		ug/L		102	80 - 121
Naphthalene	50.0	70.2	Q	ug/L		140	61 - 128
n-Butylbenzene	50.0	57.0		ug/L		114	75 - 128
N-Propylbenzene	50.0	52.9		ug/L		106	76 - 126
o-Xylene	50.0	50.7		ug/L		101	78 - 122
sec-Butylbenzene	50.0	56.0		ug/L		112	77 - 126

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

Lab Sample ID: LCS 680-501404/4
Matrix: Water
Analysis Batch: 501404

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	50.0	52.2		ug/L		104	78 - 123
tert-Butylbenzene	50.0	54.0		ug/L		108	78 - 124
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/L		105	78 - 124
1,1,2,2-Tetrachloroethane	50.0	49.5		ug/L		99	71 - 121
Tetrachloroethene	50.0	52.9		ug/L		106	74 - 129
Toluene	50.0	51.4		ug/L		103	80 - 121
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	75 - 124
trans-1,3-Dichloropropene	50.0	56.1		ug/L		112	73 - 127
1,2,3-Trichlorobenzene	50.0	92.3	Q	ug/L		185	69 - 129
1,2,4-Trichlorobenzene	50.0	65.7	Q	ug/L		131	69 - 130
1,1,1-Trichloroethane	50.0	53.5		ug/L		107	74 - 131
1,1,2-Trichloroethane	50.0	51.6		ug/L		103	80 - 119
Trichloroethene	50.0	53.0		ug/L		106	79 - 123
Trichlorofluoromethane	50.0	56.0		ug/L		112	65 - 141
1,2,3-Trichloropropane	50.0	54.0		ug/L		108	73 - 122
1,2,4-Trimethylbenzene	50.0	53.7		ug/L		107	76 - 124
1,3,5-Trimethylbenzene	50.0	53.0		ug/L		106	75 - 124
Vinyl acetate	100	141		ug/L		141	54 - 146
Vinyl chloride	50.0	54.5		ug/L		109	58 - 137
Xylenes, Total	100	102		ug/L		102	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*85 - 114*
Dibromofluoromethane (Surr)	*104*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*
Toluene-d8 (Surr)	*99*		*89 - 112*

Lab Sample ID: LCSD 680-501404/5
Matrix: Water
Analysis Batch: 501404

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	250	256		ug/L		103	39 - 160	7	20
Benzene	50.0	52.0		ug/L		104	79 - 120	0	20
Bromobenzene	50.0	51.6		ug/L		103	80 - 120	1	20
Bromoform	50.0	55.5		ug/L		111	66 - 130	2	20
Bromomethane	50.0	57.7		ug/L		115	53 - 141	13	20
2-Butanone (MEK)	250	258		ug/L		103	56 - 143	5	20
Carbon disulfide	50.0	55.5		ug/L		111	64 - 133	4	20
Carbon tetrachloride	50.0	54.2		ug/L		108	72 - 136	4	20
Chlorobenzene	50.0	50.7		ug/L		101	82 - 118	1	20
Chlorobromomethane	50.0	52.4		ug/L		105	78 - 123	2	20
Chlorodibromomethane	50.0	50.5		ug/L		101	74 - 126	1	20
Chloroethane	50.0	59.4		ug/L		119	60 - 138	5	20
Chloroform	50.0	51.5		ug/L		103	79 - 124	1	20
Chloromethane	50.0	52.1	M	ug/L		104	50 - 139	1	20
2-Chlorotoluene	50.0	52.1		ug/L		104	79 - 122	2	20
4-Chlorotoluene	50.0	51.8		ug/L		104	78 - 122	1	20

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

Lab Sample ID: LCSD 680-501404/5
Matrix: Water
Analysis Batch: 501404

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	50.0	52.6		ug/L		105	78 - 123	1	20
cis-1,3-Dichloropropene	50.0	55.3		ug/L		111	75 - 124	1	20
1,2-Dibromo-3-Chloropropane	50.0	54.2		ug/L		108	62 - 128	0	20
Dibromomethane	50.0	51.4		ug/L		103	79 - 123	4	20
1,2-Dichlorobenzene	50.0	49.5		ug/L		99	80 - 119	0	20
1,3-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 119	1	20
1,4-Dichlorobenzene	50.0	48.7		ug/L		97	79 - 118	1	20
Dichlorobromomethane	50.0	53.8		ug/L		108	79 - 125	1	20
Dichlorodifluoromethane	50.0	58.7		ug/L		117	32 - 152	5	20
1,1-Dichloroethane	50.0	52.7		ug/L		105	77 - 125	0	20
1,2-Dichloroethane	50.0	50.3		ug/L		101	73 - 128	3	20
1,1-Dichloroethene	50.0	53.6		ug/L		107	71 - 131	5	20
1,2-Dichloroethene, Total	100	108		ug/L		108	79 - 121	1	20
1,2-Dichloropropane	50.0	51.5		ug/L		103	78 - 122	2	20
1,3-Dichloropropane	50.0	49.3		ug/L		99	80 - 119	4	20
2,2-Dichloropropane	50.0	58.8		ug/L		118	60 - 139	1	20
1,1-Dichloropropene	50.0	54.1		ug/L		108	79 - 125	4	20
Ethylbenzene	50.0	51.5		ug/L		103	79 - 121	2	20
Ethylene Dibromide	50.0	52.2		ug/L		104	75 - 127	3	20
Hexachlorobutadiene	50.0	92.1	Q	ug/L		184	66 - 134	6	20
2-Hexanone	250	279		ug/L		111	57 - 139	4	20
Isopropylbenzene	50.0	53.5		ug/L		107	72 - 131	3	20
4-Isopropyltoluene	50.0	55.0		ug/L		110	77 - 127	4	20
Methylene Chloride	50.0	53.3		ug/L		107	74 - 124	2	20
4-Methyl-2-pentanone (MIBK)	250	279		ug/L		112	67 - 130	4	20
Methyl tert-butyl ether	50.0	50.8		ug/L		102	71 - 124	4	20
m-Xylene & p-Xylene	50.0	51.8		ug/L		104	80 - 121	2	20
Naphthalene	50.0	70.4	Q	ug/L		141	61 - 128	0	20
n-Butylbenzene	50.0	59.4		ug/L		119	75 - 128	4	20
N-Propylbenzene	50.0	55.1		ug/L		110	76 - 126	4	20
o-Xylene	50.0	51.5		ug/L		103	78 - 122	2	20
sec-Butylbenzene	50.0	58.5		ug/L		117	77 - 126	5	20
Styrene	50.0	52.2		ug/L		104	78 - 123	0	20
tert-Butylbenzene	50.0	56.6		ug/L		113	78 - 124	5	20
1,1,1,2-Tetrachloroethane	50.0	52.4		ug/L		105	78 - 124	0	20
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/L		95	71 - 121	4	20
Tetrachloroethene	50.0	53.6		ug/L		107	74 - 129	1	20
Toluene	50.0	51.9		ug/L		104	80 - 121	1	20
trans-1,2-Dichloroethene	50.0	55.1		ug/L		110	75 - 124	2	20
trans-1,3-Dichloropropene	50.0	54.4		ug/L		109	73 - 127	3	20
1,2,3-Trichlorobenzene	50.0	92.1	Q	ug/L		184	69 - 129	0	20
1,2,4-Trichlorobenzene	50.0	66.5	Q	ug/L		133	69 - 130	1	20
1,1,1-Trichloroethane	50.0	54.8		ug/L		110	74 - 131	2	20
1,1,2-Trichloroethane	50.0	50.0		ug/L		100	80 - 119	3	20
Trichloroethene	50.0	53.4		ug/L		107	79 - 123	1	20
Trichlorofluoromethane	50.0	57.4		ug/L		115	65 - 141	2	20
1,2,3-Trichloropropane	50.0	52.9		ug/L		106	73 - 122	2	20
1,2,4-Trimethylbenzene	50.0	55.0		ug/L		110	76 - 124	2	20

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

Lab Sample ID: LCSD 680-501404/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501404

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	50.0	54.7		ug/L		109	75 - 124	3	20
Vinyl acetate	100	136		ug/L		136	54 - 146	4	20
Vinyl chloride	50.0	56.7		ug/L		113	58 - 137	4	20
Xylenes, Total	100	103		ug/L		103	79 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*85 - 114*
Dibromofluoromethane (Surr)	*104*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*
Toluene-d8 (Surr)	*101*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-501263/11 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 14:33	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 14:33	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		11/03/17 14:33	1
Methane (TCD)	77	U	390	77	39	ug/L		11/03/17 14:33	1

Lab Sample ID: LCS 680-501263/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1860		ug/L		97	75 - 125

Lab Sample ID: LCS 680-501263/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	284		ug/L		98	75 - 125
Ethylene	269	262		ug/L		97	75 - 125
Methane	154	150		ug/L		98	75 - 125

Lab Sample ID: LCSD 680-501263/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	284		ug/L		98	75 - 125	0	30
Ethylene	269	260		ug/L		97	75 - 125	1	30
Methane	154	150		ug/L		97	75 - 125	0	30

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

Lab Sample ID: LCSD 680-501263/9 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1900		ug/L		99	75 - 125	2	30

Lab Sample ID: MB 680-501413/45 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501413

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	1.1	U	1.1	1.1	0.55	ug/L		11/03/17 22:01	1
Ethylene	1.0	U	1.0	1.0	0.50	ug/L		11/03/17 22:01	1
Methane	0.58	U	0.58	0.58	0.29	ug/L		11/03/17 22:01	1
Methane (TCD)	77	U	390	77	39	ug/L		11/03/17 22:01	1

Lab Sample ID: LCS 680-501413/40 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1890		ug/L		98	75 - 125

Lab Sample ID: LCS 680-501413/42 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	276		ug/L		96	75 - 125
Ethylene	269	250		ug/L		93	75 - 125
Methane	154	150		ug/L		97	75 - 125

Lab Sample ID: LCSD 680-501413/41 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501413

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2260		ug/L		118	75 - 125	18	30

Lab Sample ID: LCSD 680-501413/43 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 501413

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	270		ug/L		93	75 - 125	3	30
Ethylene	269	245		ug/L		91	75 - 125	2	30
Methane	154	145		ug/L		95	75 - 125	3	30

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 680-500766/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500766

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.0	1.0	0.40	mg/L		10/31/17 18:34	1

Lab Sample ID: LCS 680-500766/36 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.2		mg/L		102	87 - 112

Lab Sample ID: LCSD 680-500766/37 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500766

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.2		mg/L		102	87 - 112	0	15

Lab Sample ID: 680-144777-5 DU — **Client Sample ID: G6M-02-12X-Fall17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500766

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	1.0	U	1.0	U	mg/L		NC	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-500269/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 500384 — **Prep Batch: 500269**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	3.0	U	3.0	3.0	1.5	ug/L		10/27/17 21:35	1
Iron	75	U	100	75	25	ug/L		10/27/17 21:35	1
Manganese	5.0	U	5.0	5.0	1.8	ug/L		10/27/17 21:35	1

Lab Sample ID: LCS 680-500269/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 500384 — **Prep Batch: 500269**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	100		ug/L		100	84 - 116
Iron	5000	5110		ug/L		102	87 - 118
Manganese	500	515		ug/L		103	87 - 115

Lab Sample ID: 680-144777-2 MS — **Client Sample ID: XSA-12-98X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500384 — **Prep Batch: 500269**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.0	U	100	102		ug/L		102	84 - 116

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-144777-2 MS — **Client Sample ID: XSA-12-98X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500384 — **Prep Batch: 500269**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	88	J	5000	5000		ug/L		98	87 - 118
Manganese	2.8	J	500	500		ug/L		99	87 - 115

Lab Sample ID: 680-144777-2 MSD — **Client Sample ID: XSA-12-98X-Fall17**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 500384 — **Prep Batch: 500269**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.0	U	100	99.3		ug/L		99	84 - 116	3	20
Iron	88	J	5000	4910		ug/L		96	87 - 118	2	20
Manganese	2.8	J	500	491		ug/L		98	87 - 115	2	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-393314/110 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393314

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate/Nitrite-N	0.050	U	0.10	0.050	0.019	mg/L		10/30/17 21:04	1

Lab Sample ID: LCS 280-393314/109 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite-N	5.00	4.98		mg/L		100	90 - 110

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 680-500429/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500429

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	1.0	mg/L		10/29/17 08:15	1

Lab Sample ID: LCS 680-500429/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	10.3		mg/L		103	75 - 125

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCSD 680-500429/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 500429

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	10.0	10.6		mg/L		106	75 - 125	3	30

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

Lab Sample ID: MB 280-393769/37 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393769

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.50	U	1.0	0.50	0.16	mg/L		11/01/17 23:42	1

Lab Sample ID: LCS 280-393769/35 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	24.7		mg/L		99	88 - 112

Lab Sample ID: LCSD 280-393769/36 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393769

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	25.0	24.9		mg/L		100	88 - 112	1	15

Lab Sample ID: MB 280-393770/37 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393770

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.50	U	1.0	0.50	0.16	mg/L		11/01/17 23:42	1

Lab Sample ID: LCS 280-393770/35 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393770

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	25.0	24.7		mg/L		99	88 - 112

Lab Sample ID: LCSD 280-393770/36 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 393770

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	25.0	24.9		mg/L		100	88 - 112	1	15

QC Sample Results

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-393388/5
Matrix: Water
Analysis Batch: 393388

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.2	U	5.0	3.2	1.1	mg/L		10/30/17 12:31	1

Lab Sample ID: LCS 280-393388/4
Matrix: Water
Analysis Batch: 393388

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	203		mg/L		101	90 - 110

QC Association Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

GC/MS VOA

Analysis Batch: 501154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	8260B	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	8260B	
680-144777-6	G6M-04-09X-Fall17	Total/NA	Water	8260B	
680-144777-7	Trip Blank	Total/NA	Water	8260B	
MB 680-501154/9	Method Blank	Total/NA	Water	8260B	
LCS 680-501154/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-501154/4	Lab Control Sample Dup	Total/NA	Water	8260B	
680-144777-2 MS	XSA-12-98X-Fall17	Total/NA	Water	8260B	
680-144777-2 MSD	XSA-12-98X-Fall17	Total/NA	Water	8260B	

Analysis Batch: 501404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	8260B	
680-144777-2	XSA-12-98X-Fall17	Total/NA	Water	8260B	
680-144777-3	G6M-02-07X-Fall17	Total/NA	Water	8260B	
MB 680-501404/9	Method Blank	Total/NA	Water	8260B	
LCS 680-501404/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-501404/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 501263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	RSK-175	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	RSK-175	
MB 680-501263/11	Method Blank	Total/NA	Water	RSK-175	
LCS 680-501263/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-501263/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-501263/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-501263/9	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 501413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	RSK-175	
MB 680-501413/45	Method Blank	Total/NA	Water	RSK-175	
LCS 680-501413/40	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-501413/42	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-501413/41	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-501413/43	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 500766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	9056A	
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	9056A	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	9056A	
MB 680-500766/35	Method Blank	Total/NA	Water	9056A	
LCS 680-500766/36	Lab Control Sample	Total/NA	Water	9056A	
LCSD 680-500766/37	Lab Control Sample Dup	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 500766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-5 DU	G6M-02-12X-Fall17	Total/NA	Water	9056A	

Metals

Prep Batch: 500269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Dissolved	Water	3005A	
680-144777-2	XSA-12-98X-Fall17	Dissolved	Water	3005A	
680-144777-3	G6M-02-07X-Fall17	Dissolved	Water	3005A	
680-144777-4	G6M-03-10X-Fall17	Dissolved	Water	3005A	
680-144777-5	G6M-02-12X-Fall17	Dissolved	Water	3005A	
680-144777-6	G6M-04-09X-Fall17	Dissolved	Water	3005A	
MB 680-500269/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-500269/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-144777-2 MS	XSA-12-98X-Fall17	Dissolved	Water	3005A	
680-144777-2 MSD	XSA-12-98X-Fall17	Dissolved	Water	3005A	

Analysis Batch: 500384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Dissolved	Water	6020A	500269
680-144777-2	XSA-12-98X-Fall17	Dissolved	Water	6020A	500269
680-144777-3	G6M-02-07X-Fall17	Dissolved	Water	6020A	500269
680-144777-4	G6M-03-10X-Fall17	Dissolved	Water	6020A	500269
680-144777-5	G6M-02-12X-Fall17	Dissolved	Water	6020A	500269
680-144777-6	G6M-04-09X-Fall17	Dissolved	Water	6020A	500269
MB 680-500269/1-A	Method Blank	Total Recoverable	Water	6020A	500269
LCS 680-500269/2-A	Lab Control Sample	Total Recoverable	Water	6020A	500269
680-144777-2 MS	XSA-12-98X-Fall17	Dissolved	Water	6020A	500269
680-144777-2 MSD	XSA-12-98X-Fall17	Dissolved	Water	6020A	500269

General Chemistry

Analysis Batch: 393314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	353.2	
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	353.2	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	353.2	
MB 280-393314/110	Method Blank	Total/NA	Water	353.2	
LCS 280-393314/109	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 393388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	SM 2320B	
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	SM 2320B	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	SM 2320B	
MB 280-393388/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-393388/4	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 393769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	9060A	
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	9060A	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	9060A	
680-144777-6	G6M-04-09X-Fall17	Total/NA	Water	9060A	
MB 280-393769/37	Method Blank	Total/NA	Water	9060A	
LCS 280-393769/35	Lab Control Sample	Total/NA	Water	9060A	
LCSD 280-393769/36	Lab Control Sample Dup	Total/NA	Water	9060A	

Analysis Batch: 393770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-393770/37	Method Blank	Total/NA	Water	9060A	
LCS 280-393770/35	Lab Control Sample	Total/NA	Water	9060A	
LCSD 280-393770/36	Lab Control Sample Dup	Total/NA	Water	9060A	

Analysis Batch: 500429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-144777-1	G6M-03-07X-Fall17	Total/NA	Water	9034	
680-144777-4	G6M-03-10X-Fall17	Total/NA	Water	9034	
680-144777-5	G6M-02-12X-Fall17	Total/NA	Water	9034	
MB 680-500429/1	Method Blank	Total/NA	Water	9034	
LCS 680-500429/2	Lab Control Sample	Total/NA	Water	9034	
LCSD 680-500429/3	Lab Control Sample Dup	Total/NA	Water	9034	

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-03-07X-Fall17

Lab Sample ID: 680-144777-1

Date Collected: 10/23/17 08:15

Matrix: Water

Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501404	11/06/17 13:08	CMB	TAL SAV
	Instrument ID: CMSB									
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501413	11/03/17 22:14	KAB	TAL SAV
	Instrument ID: CVGU									
Total/NA	Analysis	9056A		1	5 mL	5 mL	500766	11/01/17 02:41	UI	TAL SAV
	Instrument ID: CICK									
Dissolved	Prep	3005A			50 mL	250 mL	500269	10/27/17 11:53	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500384	10/27/17 22:22	BJB	TAL SAV
	Instrument ID: ICPMSD									
Total/NA	Analysis	353.2		1	100 mL	100 mL	393314	10/30/17 21:20	SVC	TAL DEN
	Instrument ID: WC_Alp 2									
Total/NA	Analysis	9034		1	250 mL	250 mL	500429	10/29/17 08:15	DAM	TAL SAV
	Instrument ID: NOEQUIP									
Total/NA	Analysis	9060A		1			393769	11/02/17 06:22	CCJ	TAL DEN
	Instrument ID: WC_SHI3									
Total/NA	Analysis	SM 2320B		1			393388	10/30/17 14:16	A1D	TAL DEN
	Instrument ID: WC-AT3									

Client Sample ID: XSA-12-98X-Fall17

Lab Sample ID: 680-144777-2

Date Collected: 10/23/17 10:05

Matrix: Water

Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501404	11/06/17 13:30	CMB	TAL SAV
	Instrument ID: CMSB									
Dissolved	Prep	3005A			50 mL	250 mL	500269	10/27/17 11:53	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500384	10/27/17 22:00	BJB	TAL SAV
	Instrument ID: ICPMSD									

Client Sample ID: G6M-02-07X-Fall17

Lab Sample ID: 680-144777-3

Date Collected: 10/23/17 11:35

Matrix: Water

Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501404	11/06/17 13:52	CMB	TAL SAV
	Instrument ID: CMSB									
Dissolved	Prep	3005A			50 mL	250 mL	500269	10/27/17 11:53	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500384	10/27/17 22:26	BJB	TAL SAV
	Instrument ID: ICPMSD									

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-03-10X-Fall17

Lab Sample ID: 680-144777-4

Date Collected: 10/23/17 13:25
Matrix: Water
Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501154	11/03/17 00:19	CMB	TAL SAV
	Instrument ID:	CMSO2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501263	11/03/17 19:41	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	500766	11/01/17 02:24	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	500269	10/27/17 11:53	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500384	10/27/17 22:30	BJB	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	393314	10/30/17 20:00	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	500429	10/29/17 08:15	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			393769	11/02/17 07:07	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			393388	10/30/17 14:12	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Client Sample ID: G6M-02-12X-Fall17

Lab Sample ID: 680-144777-5

Date Collected: 10/23/17 15:25
Matrix: Water
Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501154	11/03/17 00:44	CMB	TAL SAV
	Instrument ID:	CMSO2								
Total/NA	Analysis	RSK-175		1	17 mL	17 mL	501263	11/03/17 19:54	KAB	TAL SAV
	Instrument ID:	CVGU								
Total/NA	Analysis	9056A		1	5 mL	5 mL	500766	11/01/17 01:14	UI	TAL SAV
	Instrument ID:	CICK								
Dissolved	Prep	3005A			50 mL	250 mL	500269	10/27/17 11:53	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500384	10/27/17 22:33	BJB	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	353.2		1	100 mL	100 mL	393314	10/30/17 20:02	SVC	TAL DEN
	Instrument ID:	WC_Alp 2								
Total/NA	Analysis	9034		1	250 mL	250 mL	500429	10/29/17 08:15	DAM	TAL SAV
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	9060A		1			393769	11/02/17 07:21	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								
Total/NA	Analysis	SM 2320B		1			393388	10/30/17 14:08	A1D	TAL DEN
	Instrument ID:	WC-AT3								

Lab Chronicle

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Client Sample ID: G6M-04-09X-Fall17

Lab Sample ID: 680-144777-6

Date Collected: 10/23/17 17:25
Matrix: Water
Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501154	11/03/17 01:08	CMB	TAL SAV
	Instrument ID:	CMSO2								
Dissolved	Prep	3005A			50 mL	250 mL	500269	10/27/17 11:53	AJR	TAL SAV
Dissolved	Analysis	6020A		1			500384	10/27/17 22:19	BJB	TAL SAV
	Instrument ID:	ICPMSD								
Total/NA	Analysis	9060A		1			393769	11/02/17 07:38	CCJ	TAL DEN
	Instrument ID:	WC_SHI3								

Client Sample ID: Trip Blank

Lab Sample ID: 680-144777-7

Date Collected: 10/23/17 08:00
Matrix: Water
Date Received: 10/26/17 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	501154	11/03/17 01:33	CMB	TAL SAV
	Instrument ID:	CMSO2								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

360325-Boston

PO #	17-636	Devens - AOC50 Fall 2017 1024-011	**Chain of Custody Record**	Page: 1 of: 1

360325-Boston

Company	KOMAN GS, LLC
Address:	293 Boston Post Road, Suite 100 Marlborough, MA 01752
Phone:	508-366-7442
Fax:	508-366-7445
Sampled by [Print Name(s)]/Affilliation	Kevin Robinson
Sampler(s) Signature(s)	[signature]

KGS

Laboratory:	Test America - Savannah
Address:	510 LaRoche Ave Savannah, GA 31404
Contact:	Jerry Lanier
Regulatory Facility No.	
Project Name:	Devens Fall 2017 LTM
Sampling QAP No.:	
Approval Date:	
TAT	Routine
Other:	

Preservatives (see codes) / Analyses Requested

Field ID No.	Sampled Date	Sampled Time	Col. Method (see codes)	Matrix (see codes)	Number of Containers	VOCs/SW8260 3-40-ml VOA vials (HCl)	RSK175 3-40-ml VOA vials (HCl)	Sulfate-SW9056 1-125-ml poly	Nitrate/Nitrite-E353.2 1-500 ml amber glass (H2SO4)	Sulfide-SW9034 2-250ml poly (Zn acetate&NaOH)	Alkalinity/SM2320B 1-250-ml poly	TOC/SW9060 1-500-ml amber glass (H2SO4)	**Dissolved Metals*-** SW6010/6020 1-250 ml poly (HNO3)			Remarks	Lab. No.
						H	H	I	S	O	I	S	N				
GGM-03-07X-Fall17	10/23	815	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
XSA-12-98X-Fall17	10/23	1005	P	GW	12	✓							✓			MS/MSD	
GGM-02-07X-Fall17	10/23	1135	P	GW	4	✓							✓				
GGM-03-10X-Fall17	10/23	1325	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
GGM-02-12X-Fall17	10/23	1525	P	GW	13	✓	✓	✓	✓	✓	✓	✓	✓				
GGM-04-09X-Fall17	10/23	1725	P	GW	5	✓						✓	✓				
			P	GW													
Trip Blank	10/23	800	O	O	2	X											
Shipping Details			courier pick up		0	← Total Number of Containers											

Date Out:	Via:	Item No.	Relinquished by/Affiliation	Date	Time		Accepted by/Affiliation	Date	Time
Returned:	Via:		[signature]	10/25/17	1510	✓			
Additional Comments:			[signature]	10-25-17	1516				
* = Dissolved Metals include: Fe, Mn (6010); As (6020)			[signature]	10-25-17	1800				
			[signature]	10/26/17	0520	2.4 (CST 0.2) 2.6			

email logins and results to:

lekes@komangs.com

Lab Comments

Preserve Where Applicable ☐

On ICE ☐

Temperature _____ C

☐ NJ Reduced
☐ NJ Full
☐ Full CLP
☐ Disk Deliverable
☐ Other (Specify)

MATRIX CODES: A = Air	GW = Groundwat	SE = Sediment	SP = Soil	SW = Surface Water	W = Water (Blanks)	O = Other
PRESERVATIVE CODES:	H = HCL + Ice	I = Ice Only	N = Nitric Acid + Ice	S = Sulfuric Acid + Ice	M = Methanol	O = Other
COLLECTION METHOD CODE	C = Composite	G=Grab	P= Pumping			O = Other

Login Sample Receipt Checklist

Client: KOMAN Government Solutions, LLC

Job Number: 680-144777-1

Login Number: 144777

List Source: TestAmerica Savannah

List Number: 1

Creator: Ragnaldsen, Amy E

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.	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	added equipment blank for analysis, per client
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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.	N/A	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	11-05-17 *
Arizona	State Program	9	AZ808	12-14-17 *
Arkansas DEQ	State Program	6	88-0692	02-01-18
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-17
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-17 *
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-17
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-17
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-17
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-17
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-17
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-17
South Carolina	State Program	4	98001	06-30-17 *
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-17 *
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		SAV 3-04	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-17
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

Accreditation/Certification Summary

Client: KOMAN Government Solutions, LLC
Project/Site: Fort Devens / AOC 50

TestAmerica Job ID: 680-144777-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-19 *

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

APPENDIX C
ANALYTICAL DATA VALIDATION REPORTS
(on CD)

APPENDIX C
ANALYTICAL DATA VALIDATION REPORTS
(on CD)

C.1

Data Validation Reports
Spring 2017 LTM Event

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138853
Laboratory: Test America-Savannah, GA	Date: 06/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138853-1	G6M-04-13X-SPR17	5/16/2017	SW8260B/VOC	Groundwater
680-138853-2	G6M-07-02X-SPR17	5/16/2017	SW8260B/VOC	Groundwater
680-138853-3	G6M-04-02X-SPR17	5/16/2017	SW8260B/VOC	Groundwater
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	SW8260B/VOC	Groundwater
680-138853-5	G6M-03-07X-SPR17	5/16/2017	SW8260B/VOC	Groundwater
680-138853-6	G6M-13-02X-SPR17	5/16/2017	SW8260B/VOC	Groundwater
680-138853-7	MW-3-SPR17	5/17/2017	SW8260B/VOC	Groundwater
680-138853-8	Trip Blank	5/17/2017	SW8260B/VOC	Trip Blank

Summary - Data validation was performed on the data for six (6) groundwater samples, one (1) field duplicate sample and one (1) trip blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW-846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 05/18/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curve analyzed on 5/17/2017 (Analytical batch 480302) exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target compounds.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verification analyzed on 5/17/2017 (ICV 680-480302/16) exhibited acceptable %Ds (≤25.0%) for all target VOC.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs analyzed on 5/25/2017 (CCV 680-481343/2) and 5/27/2017 (CCV 680-481703/3) were within acceptance limits for all target VOCs.

Qualification: None required.

Surrogates – Surrogate recoveries were within the control limits for all samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries and RPDs for the LCS/LCDSs (680-481343/3 and 4) analyzed on 5/25/3017 with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks (MB 680-481343/8 and 680481703/9) analyzed on 5/25 and 5/27/2017 with these samples were free of contamination.

Qualification: None required.

Field Blanks – One Trip Blank sample (Lab Sample ID: 680-138853-8) was submitted with this sample set. Target VOCs were non-detect in the TB sample.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-2-SPR17 (Lab Sample ID: 680-138853-4) was the field duplicate sample of G6M-04-02X-SPR17 (Lab Sample ID: 680-138853-3). Results were comparable with %RSDs less than 10% for TCE and PCE. The RPDs for total and cis-1,2-dichloroethene and vinyl chloride were greater than 40%. The FD results are summarized in the table below.

Client Sample ID	G6M-04-02X-SPR17	G6M-DUP-2-SPR17	
Lab Sample ID	680-138853-3	680-138853-4	
Date Sampled	5/6/2017	5/6/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
1,2-Dichloroethene, Total	22	33	40
cis-1,2-Dichloroethene	22	33	40
Trichloroethene	120	130	8.0
Vinyl chloride	2.3	5.1	76
Tetrachloroethene	280	290	3.5

Qualification: The low-level results for total-1,2-dichloroethene, cis-1,2-dichloroehtene and vinyl chloride were qualified as estimated (J).

Compound Quantitation – Samples G6M-04-02X-SPR17 and G6M-DUP-2-SPR17 required dilutions due to high level of TCE and PCE. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL

were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable with the noted qualifications and may be used for their intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-138853-1	G6M-04-13X-SPR17	SW8260B/VOC	No qualifications needed.			
680-138853-2	G6M-07-02X-SPR17	SW8260B/VOC	No qualifications needed.			
680-138853-3	G6M-04-02X-SPR17	1,2-Dichloroethene, Total	22		22	J
680-138853-3	G6M-04-02X-SPR17	cis-1,2-Dichloroethene	22		22	J
680-138853-3	G6M-04-02X-SPR17	Vinyl chloride	2.3		2.3	J
680-138853-4	G6M-DUP-2-SPR17	1,2-Dichloroethene, Total	33		33	J
680-138853-4	G6M-DUP-2-SPR17	cis-1,2-Dichloroethene	33		33	J
680-138853-4	G6M-DUP-2-SPR17	Vinyl chloride	5.1		5.1	J
680-138853-5	G6M-03-07X-SPR17	SW8260B/VOC	No qualifications needed.			
680-138853-6	G6M-13-02X-SPR17	SW8260B/VOC	No qualifications needed.			
680-138853-7	MW-3-SPR17	SW8260B/VOC	No qualifications needed.			
680-138853-8	Trip Blank	SW8260B/VOC	No qualifications needed.			

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138853
Laboratory: Test America-Savannah, GA	Date: 06/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138853-1	G6M-04-13X-SPR17	5/16/2017	RSK175/MEE	Groundwater
680-138853-2	G6M-07-02X-SPR17	5/16/2017	RSK175/MEE	Groundwater
680-138853-3	G6M-04-02X-SPR17	5/16/2017	RSK175/MEE	Groundwater
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	RSK175/MEE	Groundwater
680-138853-5	G6M-03-07X-SPR17	5/16/2017	RSK175/MEE	Groundwater
680-138853-6	G6M-13-02X-SPR17	5/16/2017	RSK175/MEE	Groundwater
680-138853-7	MW-3-SPR17	5/17/2017	RSK175/MEE	Groundwater

Summary - Data validation was performed on the data for six (6) groundwater samples and one (1) field duplicate sample collected and submitted for Methane, Ethane, Ethylene analyses by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 5/18/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples (LCS 680-481882/15 and 19) analyzed on 5/30/2017 reported with these samples met the %R and RPD control limits established in the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blank (MB 680-481882/21) associated with the samples in this SDG was free of contamination.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-2-SPR17 (Lab Sample ID: 680-138853-4) was the field duplicate sample of G6M-04-02X-SPR17 (Lab Sample ID: 680-138853-3). Detected results were comparable for ethylene and methane. FD results are summarized in the table below.

Client Sample ID	G6M-04-02X-SPR17	G6M-DUP-2-SPR17	
Lab Sample ID	680-138853-3	680-138853-4	
Date Sampled	5/6/2017	5/6/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Ethylene	2.2	2.2	0
Methane (TCD)	4,800	5,000	4.1

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-138853-1	G6M-04-13X-SPR17	RSK175/MEE	No qualifications needed.			
680-138853-2	G6M-07-02X-SPR17	RSK175/MEE	No qualifications needed.			
680-138853-3	G6M-04-02X-SPR17	RSK175/MEE	No qualifications needed.			
680-138853-4	G6M-DUP-2-SPR17	RSK175/MEE	No qualifications needed.			
680-138853-5	G6M-03-07X-SPR17	RSK175/MEE	No qualifications needed.			
680-138853-6	G6M-13-02X-SPR17	RSK175/MEE	No qualifications needed.			
680-138853-7	MW-3-SPR17	RSK175/MEE	No qualifications needed.			

Dissolved Metals
SW 846/6010C/6020A
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138853
Laboratory: Test America-Savannah, GA	Date: 06/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138853-1	G6M-04-13X-SPR17	5/16/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138853-2	G6M-07-02X-SPR17	5/16/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138853-3	G6M-04-02X-SPR17	5/16/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138853-5	G6M-03-07X-SPR17	5/16/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138853-6	G6M-13-02X-SPR17	5/16/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138853-7	MW-3-SPR17	5/17/2017	Dissolved Metals (As, Fe, Mn)	Groundwater

Summary – Data validation was performed on the data for six (6) groundwater samples and one (1) field duplicate sample collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. Iron and Manganese were analyzed and reported by method SW6010B and arsenic was analyzed and reported by method SW6020A.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 5/18/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the %R control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-07-02X-SPR17 (Lab Sample ID: 680-138853-2) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The %Rs and RPDs for all analytes were within control limits.

Qualification: None required.

Method Blank – The method blanks associated and analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-2-SPR17 (Lab Sample ID: 680-138853-4) was the field duplicate sample of G6M-04-02X-SPR17 (Lab Sample ID: 680-138853-3). Detected results for all analytes were comparable. The FD results are summarized in the table below.

Client Sample ID	G6M-04-02X-SPR17	G6M-DUP-2-SPR17	
Lab Sample ID	680-138853-3	680-138853-4	
Date Sampled	5/6/2017	5/6/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Arsenic, dissolved	42	40	4.9
Iron, dissolved	15,000	14,000	6.9
Manganese, dissolved	11,000	11,000	0

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-138853-1	G6M-04-13X-SPR17	Dissolved Metals	No qualifications needed.			
680-138853-2	G6M-07-02X-SPR17	Dissolved Metals	No qualifications needed.			
680-138853-3	G6M-04-02X-SPR17	Dissolved Metals	No qualifications needed.			
680-138853-4	G6M-DUP-2-SPR17	Dissolved Metals	No qualifications needed.			
680-138853-5	G6M-03-07X-SPR17	Dissolved Metals	No qualifications needed.			
680-138853-6	G6M-13-02X-SPR17	Dissolved Metals	No qualifications needed.			
680-138853-7	MW-3-SPR17	Dissolved Metals	No qualifications needed.			

Miscellaneous Parameters

Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)

USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138853
Laboratory: Test America-Savannah, GA	Date: 06/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138853-1	G6M-04-13X-SPR17	5/16/2017	Miscellaneous Parameters	Groundwater
680-138853-2	G6M-07-02X-SPR17	5/16/2017	Miscellaneous Parameters	Groundwater
680-138853-3	G6M-04-02X-SPR17	5/16/2017	Miscellaneous Parameters	Groundwater
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	Miscellaneous Parameters	Groundwater
680-138853-5	G6M-03-07X-SPR17	5/16/2017	Miscellaneous Parameters	Groundwater
680-138853-6	G6M-13-02X-SPR17	5/16/2017	Miscellaneous Parameters	Groundwater
680-138853-7	MW-3-SPR17	5/17/2017	Miscellaneous Parameters	Groundwater

Summary - Data validation was performed on the data for six (6) groundwater samples and one (1) field duplicate sample submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 5/18/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Method Blank –The method blanks for nitrate/nitrite, sulfide and sulfate were free from contamination. Alkalinity was reported in associated MB samples at low levels of 1.98 and 2.67 mg/L. The results for alkalinity in all samples were greater than the LOQ; no qualifications were needed. TOC was reported in the associated MB sample at a low level of 0.322 mg/L.

Qualification: The estimated results for TOC in samples G6M-04-13X, G6M-07-02X and G6M-13-02X (Lab Sample IDs: 680-138853-1, -2, and 06) were qualified as non-detect at the LOQ.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-02X-SPR17 (Lab Sample ID: 680-138853-6) was selected by the laboratory and spiked and analyzed as matrix spike/duplicate samples for nitrate/nitrite analysis. The %Rs and RPDs for the MS/MSDs were within control limits.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-2-SPR17 (Lab Sample ID: 680-138853-4) was the field duplicate sample of G6M-04-02X-SPR17 (Lab Sample ID: 680-138853-3). The RPDs for the FD results for nitrate/nitrite as N and TOC were above 30%. The FD results for sulfate and alkalinity were comparable. FD results are summarized in the table below.

Client Sample ID	G6M-04-02X-SPR17	G6M-DUP-2-SPR17	
Lab Sample ID	680-138853-3	680-138853-4	
Date Sampled	5/6/2017	5/6/2017	
Analyte	**Result (mg/L)**	**Result (mg/L)**	**RPD (%)**
Sulfate	10	10	0.0
Nitrate/nitrite as N	0.065 J	0.044 J	38.5
TOC	2.5	4.5	57.0
Alkalinity	130	110	16.7

Qualification: The results for nitrate/nitrite as N and TOC were qualified as estimated (J).

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J- qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-138853-1	G6M-04-13X-SPR17	TOC	0.80	J	1.0	U
680-138853-2	G6M-07-02X-SPR17	TOC	0.96	J	1.0	U
680-138853-3	G6M-04-02X-SPR17	Nitrate/Nitrite as N	0.065	J	0.065	J
680-138853-3	G6M-04-02X-SPR17	TOC	2.5		2.5	J
680-138853-4	G6M-DUP-2-SPR17	Nitrate/Nitrite as N	0.044	J	0.044	J
680-138853-4	G6M-DUP-2-SPR17	TOC	4.5		4.5	J
680-138853-5	G6M-03-07X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138853-6	G6M-13-02X-SPR17	TOC	0.88	J	1.0	U
680-138853-7	MW-3-SPR17	Miscellaneous Parameters	No qualifications needed.			

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-1	G6M-04-13X-SPR17	5/16/2017	353.2	Total/NA	Nitrate Nitrite as N	0.62	mg/L		0.1	0.05	0.019	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	6010C	Dissolved	Manganese	3.6	ug/L	J	10	3	1	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	9056A	Total/NA	Sulfate	4.8	mg/L		1	1	0.4	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	RSK-175	Total/NA	Ethane	12	ug/L		1.1	1.1	0.55	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	RSK-175	Total/NA	Ethylene	10	ug/L		1	1	0.5	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	RSK-175	Total/NA	Methane	21	ug/L		0.58	0.58	0.29	1
680-138853-1	G6M-04-13X-SPR17	5/16/2017	SM 2320B	Total/NA	Alkalinity	9.5	mg/L		5	3.2	1.1	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	353.2	Total/NA	Nitrate Nitrite as N	0.32	mg/L		0.1	0.05	0.019	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	6010C	Dissolved	Manganese	17	ug/L		10	3	1	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	20	ug/L	U	20	20	7.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,1-Trichloroethane	20	ug/L	U	20	20	7.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	20	ug/L	U	20	20	12	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,2-Trichloroethane	10	ug/L	U	20	10	6.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethane	20	ug/L	U	20	20	7.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloropropene	20	ug/L	U	20	20	6.8	20

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichloropropane	20	ug/L	U	20	20	7.8	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	20	ug/L	U	20	20	9.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	40	ug/L	U	100	40	22	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichlorobenzene	20	ug/L	U	20	20	7.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethane	20	ug/L	U	20	20	10	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethene, Total	20	ug/L	U	40	20	15	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloropropane	20	ug/L	U	20	20	13	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	10	ug/L	U	20	10	6.2	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichlorobenzene	20	ug/L	U	20	20	8.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichloropropane	20	ug/L	U	20	20	6.8	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	1,4-Dichlorobenzene	20	ug/L	U	20	20	9.2	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	2,2-Dichloropropane	20	ug/L	U	20	20	7.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	2-Butanone (MEK)	200	ug/L	U	200	200	68	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	2-Chlorotoluene	10	ug/L	U	20	10	5.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	2-Hexanone	100	ug/L	U	200	100	40	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	4-Chlorotoluene	20	ug/L	U	20	20	9	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	4-Isopropyltoluene	20	ug/L	U	20	20	9.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	100	ug/L	U	200	100	42	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Acetone	200	ug/L	U	200	200	140	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Benzene	20	ug/L	U	20	20	8.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Bromobenzene	20	ug/L	U	20	20	10	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Bromoform	20	ug/L	U	20	20	8.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Bromomethane	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Carbon disulfide	40	ug/L	U	40	40	8.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Carbon tetrachloride	10	ug/L	U	20	10	6.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorobenzene	10	ug/L	U	20	10	5.2	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorobromomethane	20	ug/L	U	20	20	9	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorodibromomethane	10	ug/L	U	20	10	6.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Chloroethane	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Chloroform	20	ug/L	U	20	20	10	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Chloromethane	20	ug/L	U	20	20	8	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	20	ug/L	U	20	20	8.2	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	cis-1,3-Dichloropropene	20	ug/L	U	20	20	8	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Dibromomethane	20	ug/L	U	20	20	7	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Dichlorobromomethane	20	ug/L	U	20	20	8.8	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Dichlorodifluoromethane	20	ug/L	U	20	20	12	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Ethylbenzene	10	ug/L	U	20	10	6.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Ethylene Dibromide	20	ug/L	U	20	20	8.8	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Hexachlorobutadiene	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Isopropylbenzene	20	ug/L	U	20	20	7	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Methyl tert-butyl ether	10	ug/L	U	200	10	6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Methylene Chloride	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	m-Xylene & p-Xylene	20	ug/L	U	20	20	7	20

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Naphthalene	100	ug/L	U	100	100	50	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	n-Butylbenzene	20	ug/L	U	20	20	9.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	N-Propylbenzene	20	ug/L	U	20	20	7.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	o-Xylene	10	ug/L	U	20	10	4.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	sec-Butylbenzene	20	ug/L	U	20	20	8.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Styrene	10	ug/L	U	20	10	5.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	tert-Butylbenzene	20	ug/L	U	20	20	9	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Tetrachloroethene	1,800	ug/L		20	20	15	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Toluene	20	ug/L	U	20	20	9.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	trans-1,3-Dichloropropene	20	ug/L	U	20	20	8.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Trichlorofluoromethane	20	ug/L	U	20	20	8.4	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Vinyl acetate	40	ug/L	U	40	40	16	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	8260B	Total/NA	Xylenes, Total	10	ug/L	U	40	10	4.6	20
680-138853-2	G6M-07-02X-SPR17	5/16/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	9056A	Total/NA	Sulfate	6.2	mg/L		1	1	0.4	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	RSK-175	Total/NA	Methane	1.8	ug/L		0.58	0.58	0.29	1
680-138853-2	G6M-07-02X-SPR17	5/16/2017	SM 2320B	Total/NA	Alkalinity	14	mg/L		5	3.2	1.1	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	353.2	Total/NA	Nitrate Nitrite as N	0.065	mg/L	J	0.1	0.05	0.019	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	6010C	Dissolved	Iron	15,000	ug/L		50	50	17	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	6010C	Dissolved	Manganese	11,000	ug/L		10	3	1	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	6020A	Dissolved	Arsenic	42	ug/L		3	3	1.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethene, Total	22	ug/L	J	2	1	0.74	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	22	ug/L	J	1	1	0.41	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.39	ug/L	J	1	1	0.37	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Trichloroethene	120	ug/L		1	1	0.48	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Vinyl chloride	2.3	ug/L	J	1	1	0.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	8260B	Total/NA	Tetrachloroethene	280	ug/L		2	2	1.5	2
680-138853-3	G6M-04-02X-SPR17	5/16/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	9056A	Total/NA	Sulfate	10	mg/L		1	1	0.4	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	9060A	Total/NA	Total Organic Carbon	2.5	mg/L	J	1	0.5	0.16	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	RSK-175	Total/NA	Ethylene	2.2	ug/L		1	1	0.5	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	RSK-175	Total/NA	Methane	4,800	ug/L		390	77	39	1
680-138853-3	G6M-04-02X-SPR17	5/16/2017	SM 2320B	Total/NA	Alkalinity	130	mg/L		5	3.2	1.1	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	353.2	Total/NA	Nitrate Nitrite as N	0.044	mg/L	J	0.1	0.05	0.019	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	6010C	Dissolved	Iron	14,000	ug/L		50	50	17	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	6010C	Dissolved	Manganese	11,000	ug/L		10	3	1	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	6020A	Dissolved	Arsenic	40	ug/L		3	3	1.5	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1,1-Trichloroethane	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	5.0	ug/L	U	5	5	3.1	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1,2-Trichloroethane	2.5	ug/L	U	5	2.5	1.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethane	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethene	5.0	ug/L	U	5	5	1.8	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloropropene	5.0	ug/L	U	5	5	1.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichloropropane	5.0	ug/L	U	5	5	2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	5.0	ug/L	U	5	5	2.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	10	ug/L	U	25	10	5.5	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichlorobenzene	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethane	5.0	ug/L	U	5	5	2.5	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethene, Total	33	ug/L	J	10	5	3.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloropropane	5.0	ug/L	U	5	5	3.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	2.5	ug/L	U	5	2.5	1.6	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichlorobenzene	5.0	ug/L	U	5	5	2.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichloropropane	5.0	ug/L	U	5	5	1.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	1,4-Dichlorobenzene	5.0	ug/L	U	5	5	2.3	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	2,2-Dichloropropane	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	2-Butanone (MEK)	50	ug/L	U	50	50	17	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	2-Chlorotoluene	2.5	ug/L	U	5	2.5	1.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	2-Hexanone	25	ug/L	U	50	25	10	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	4-Chlorotoluene	5.0	ug/L	U	5	5	2.3	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	4-Isopropyltoluene	5.0	ug/L	U	5	5	2.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	25	ug/L	U	50	25	11	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Acetone	50	ug/L	U	50	50	35	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Benzene	5.0	ug/L	U	5	5	2.2	5

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Bromobenzene	5.0	ug/L	U	5	5	2.5	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Bromoform	5.0	ug/L	U	5	5	2.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Bromomethane	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Carbon disulfide	10	ug/L	U	10	10	2.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Carbon tetrachloride	2.5	ug/L	U	5	2.5	1.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Chlorobenzene	2.5	ug/L	U	5	2.5	1.3	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Chlorobromomethane	5.0	ug/L	U	5	5	2.3	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Chlorodibromomethane	2.5	ug/L	U	5	2.5	1.6	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Chloroethane	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Chloroform	5.0	ug/L	U	5	5	2.5	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Chloromethane	5.0	ug/L	U	5	5	2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	33	ug/L	J	5	5	2.1	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	cis-1,3-Dichloropropene	5.0	ug/L	U	5	5	2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Dibromomethane	5.0	ug/L	U	5	5	1.8	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Dichlorobromomethane	5.0	ug/L	U	5	5	2.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Dichlorodifluoromethane	5.0	ug/L	U	5	5	3	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Ethylbenzene	2.5	ug/L	U	5	2.5	1.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Ethylene Dibromide	5.0	ug/L	U	5	5	2.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Hexachlorobutadiene	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Isopropylbenzene	5.0	ug/L	U	5	5	1.8	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Methyl tert-butyl ether	2.5	ug/L	U	50	2.5	1.5	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Methylene Chloride	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	m-Xylene & p-Xylene	5.0	ug/L	U	5	5	1.8	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Naphthalene	25	ug/L	U	25	25	13	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	n-Butylbenzene	5.0	ug/L	U	5	5	2.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	N-Propylbenzene	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	o-Xylene	2.5	ug/L	U	5	2.5	1.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	sec-Butylbenzene	5.0	ug/L	U	5	5	2.1	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Styrene	2.5	ug/L	U	5	2.5	1.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	tert-Butylbenzene	5.0	ug/L	U	5	5	2.3	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Tetrachloroethene	290	ug/L		5	5	3.7	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Toluene	5.0	ug/L	U	5	5	2.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	5.0	ug/L	U	5	5	1.9	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	trans-1,3-Dichloropropene	5.0	ug/L	U	5	5	2.1	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Trichloroethene	130	ug/L		5	5	2.4	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Trichlorofluoromethane	5.0	ug/L	U	5	5	2.1	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Vinyl acetate	10	ug/L	U	10	10	4.1	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Vinyl chloride	5.1	ug/L	J	5	5	2.5	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	8260B	Total/NA	Xylenes, Total	2.5	ug/L	U	10	2.5	1.2	5
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	9056A	Total/NA	Sulfate	10	mg/L		1	1	0.4	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	9060A	Total/NA	Total Organic Carbon	4.5	mg/L	J	1	0.5	0.16	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	RSK-175	Total/NA	Ethylene	2.2	ug/L		1	1	0.5	1
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	RSK-175	Total/NA	Methane	5,000	ug/L		390	77	39	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-4	G6M-DUP-2-SPR17	5/16/2017	SM 2320B	Total/NA	Alkalinity	110	mg/L		5	3.2	1.1	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	353.2	Total/NA	Nitrate Nitrite as N	0.14	mg/L		0.1	0.05	0.019	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	6010C	Dissolved	Iron	84,000	ug/L		50	50	17	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	6010C	Dissolved	Manganese	1,600	ug/L		10	3	1	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	6020A	Dissolved	Arsenic	370	ug/L		3	3	1.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.3	ug/L	J	2	1	0.74	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Acetone	16	ug/L		10	10	7	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.51	ug/L	J	1	1	0.41	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Toluene	0.52	ug/L	J	1	1	0.48	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.76	ug/L	J	1	1	0.37	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	9060A	Total/NA	Total Organic Carbon	19	mg/L		1	0.5	0.16	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	RSK-175	Total/NA	Ethane	1.2	ug/L		1.1	1.1	0.55	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	RSK-175	Total/NA	Ethylene	7.2	ug/L		1	1	0.5	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	RSK-175	Total/NA	Methane	14,000	ug/L		390	77	39	1
680-138853-5	G6M-03-07X-SPR17	5/16/2017	SM 2320B	Total/NA	Alkalinity	200	mg/L		5	3.2	1.1	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	353.2	Total/NA	Nitrate Nitrite as N	0.34	mg/L	J	0.1	0.05	0.019	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	6010C	Dissolved	Manganese	16	ug/L		10	3	1	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloroethene, Total	30	ug/L		2	1	0.74	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	30	ug/L		1	1	0.41	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Tetrachloroethene	79	ug/L		1	1	0.74	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.39	ug/L	J	1	1	0.37	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Trichloroethene	25	ug/L		1	1	0.48	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Vinyl chloride	0.90	ug/L	J	1	1	0.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	9056A	Total/NA	Sulfate	12	mg/L		1	1	0.4	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	RSK-175	Total/NA	Ethane	0.64	ug/L	J	1.1	1.1	0.55	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	RSK-175	Total/NA	Methane	4,300	ug/L		390	77	39	1
680-138853-6	G6M-13-02X-SPR17	5/16/2017	SM 2320B	Total/NA	Alkalinity	54	mg/L		5	3.2	1.1	1
680-138853-7	MW-3-SPR17	5/17/2017	353.2	Total/NA	Nitrate Nitrite as N	0.073	mg/L	J	0.1	0.05	0.019	1
680-138853-7	MW-3-SPR17	5/17/2017	6010C	Dissolved	Iron	56,000	ug/L		50	50	17	1
680-138853-7	MW-3-SPR17	5/17/2017	6010C	Dissolved	Manganese	9,400	ug/L		10	3	1	1
680-138853-7	MW-3-SPR17	5/17/2017	6020A	Dissolved	Arsenic	500	ug/L		3	3	1.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichloroethene, Total	0.98	ug/L	J	2	1	0.74	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.75	ug/L	J	1	1	0.41	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138853-7	MW-3-SPR17	5/17/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138853-7	MW-3-SPR17	5/17/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138853-7	MW-3-SPR17	5/17/2017	9056A	Total/NA	Sulfate	2.2	mg/L		1	1	0.4	1
680-138853-7	MW-3-SPR17	5/17/2017	9060A	Total/NA	Total Organic Carbon	5.2	mg/L		1	0.5	0.16	1
680-138853-7	MW-3-SPR17	5/17/2017	RSK-175	Total/NA	Ethane	1.8	ug/L		1.1	1.1	0.55	1
680-138853-7	MW-3-SPR17	5/17/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138853-7	MW-3-SPR17	5/17/2017	RSK-175	Total/NA	Methane	10,000	ug/L		390	77	39	1
680-138853-7	MW-3-SPR17	5/17/2017	SM 2320B	Total/NA	Alkalinity	310	mg/L		5	3.2	1.1	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1

AOC50 Spring 2017 Validated Analytical Results SDG 138853

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138853-8	Trip Blank	5/17/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1

Notes:
mg/L = milligram per liter
µg/L = microgram per liter
U = non-detect
J = Estimated result
LOQ = Limit of Qualification
LOD = Limit of Detection
MDL = Method Detection Limit

Qualified Data

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138990
Laboratory: Test America-Savannah, GA	Date: 06/15/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138990-1	G6M-97-05B-SPR17	5/17/2017	SW8260B/VOC	Groundwater
680-138990-2	G6M-13-01X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-3	G6M-13-04X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-4	G6M-04-09X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-5	G6M-04-10A-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-6	G6M-04-10X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-7	G6M-13-06X-SPR17	5/19/2017	SW8260B/VOC	Groundwater
680-138990-8	G6M-02-01X-SPR17	5/19/2017	SW8260B/VOC	Groundwater
680-138990-9	G6M-RB1 SPR17	5/19/2017	SW8260B/VOC	Rinsate Blank
680-138990-10	Trip Blank	5/19/2017	SW8260B/VOC	Trip Blank
680-138990-11	G6M-03-01X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-12	G6M-02-08X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-13	G6M-13-05X-SPR17	5/18/2017	SW8260B/VOC	Groundwater
680-138990-14	G6M-DUP-1	5/18/2017	SW8260B/VOC	Groundwater
680-138990-15	IW-17D-SPR17	5/19/2017	SW8260B/VOC	Groundwater
680-138990-16	IW-18D-SPR17	5/19/2017	SW8260B/VOC	Groundwater

Summary - Data validation was performed on the data for thirteen (13) groundwater samples, one (1) field duplicate sample, one (1) rinsate blank sample and one (1) trip blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW-846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 05/20/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curve analyzed on instrument CMSA2 on 5/17/2017 (Analytical batch 480302) exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target compounds. Initial calibration curve analyzed on instrument CMSB on 5/18/2017 (Analytical batch 480492) exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target compounds.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verification analyzed on 5/17/2017 (ICV 680-480302/16) exhibited acceptable %Ds (≤25.0%) for all target VOC.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs analyzed on 5/31/2017 (CCV 680-481931/2), 6/02/2017 (CCV 680-4822881-2) and 6/01/2017 (CCV 680-482104/2) were within acceptance limits for all target VOCs.

Qualification: None required.

Surrogates – Surrogate recoveries were within the control limits for all samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries (%Rs) and RPDs for the LCS/LCDSs analyzed on 5/31, 6/01 and 6/02/2017 with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X-SPR17 (Lab Sample ID: 680-138990-7) was spiked and analyzed as MS/MSD samples. Percent recoveries (%Rs) and RPDs were acceptable for all target VOC with one exception. The RPD for 1,2,3-trichlorbenzene was above acceptance limits at 31%; the results for this compound were non-detect in all samples.

Qualification: None required.

Method Blank – The method blanks (MB 680-481931/8 and 680-482288/8) analyzed on 5/31 and 6/02/2017 with were free of contamination. Method blank (MB 680-481104/7) analyzed on 06/02/2017 had low level detections of carbon disulfide (0.55 µg/L), hexachlorobutadiene (2.73 µg/L), naphthalene (3.77 µg/L) and n-butyl benzene (0.69 µg/L). These compounds were non-detect in all associated samples.

Qualification: None required.

Field Blanks – One rinsate blank, G6M-RB1 SPR17, (Lab Sample ID: 680-138990-9) and one Trip Blank sample (Lab Sample ID: 680-138990-10) were submitted with this sample set. Target VOCs were non-detect in both field blank samples.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-1-SPR17 (Lab Sample ID: 680-138990-14) was the field duplicate sample of G6M-13-05X-SPR17 (Lab Sample ID: 680-138990-13). The results for PCE were comparable with an RSD of 8%. The RPDs for total and cis-1,2-dichloroethene were greater than 30%. The FD results are summarized in the table below.

Client Sample ID	G6M-13-05X-SPR17	G6M-DUP-1	
Lab Sample ID	680-138990-13	680-138990-14	
Collection Date	5/18/2017	5/18/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
1,2-Dichloroethene, Total	64	46	33
cis-1,2-Dichloroethene	64	46	33
Tetrachloroethene	1300	1200	8.0

Qualification: The low-level results for total-1,2-dichloroethene and cis-1,2-dichloroethene were qualified as estimated (J) in the FD sample pair.

Compound Quantitation – Several samples required dilutions due to high levels of select target compounds. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable with the noted qualifications and may be used for their intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-138990-1	G6M-97-05B-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-2	G6M-13-01X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-3	G6M-13-04X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-4	G6M-04-09X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-5	G6M-04-10A-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-6	G6M-04-10X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-7	G6M-13-06X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-8	G6M-02-01X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-9	G6M-RB1 SPR17	SW8260B/VOC	No qualifications needed			
680-138990-10	Trip Blank	SW8260B/VOC	No qualifications needed			
680-138990-11	G6M-03-01X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-12	G6M-02-08X-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-13	G6M-13-05X-SPR17	1,2-Dichloroethene, Total	64		64	J
		cis-1,2-Dichloroethene	64		64	J
680-138990-14	G6M-DUP-1	1,2-Dichloroethene, Total	46		46	J
		cis-1,2-Dichloroethene	46		46	J
680-138990-15	IW-17D-SPR17	SW8260B/VOC	No qualifications needed			
680-138990-16	IW-18D-SPR17	SW8260B/VOC	No qualifications needed			

Methane, Ethane, Ethylene
RSK 175
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138990
Laboratory: Test America-Savannah, GA	Date: 06/16/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138990-1	G6M-97-05B-SPR17	5/17/2017	RSK175/MEE	Groundwater
680-138990-2	G6M-13-01X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-3	G6M-13-04X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-4	G6M-04-09X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-5	G6M-04-10A-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-6	G6M-04-10X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-7	G6M-13-06X-SPR17	5/19/2017	RSK175/MEE	Groundwater
680-138990-8	G6M-02-01X-SPR17	5/19/2017	RSK175/MEE	Groundwater
680-138990-9	G6M-RB1 SPR17	5/19/2017	RSK175/MEE	Rinsate Blank
680-138990-11	G6M-03-01X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-12	G6M-02-08X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-13	G6M-13-05X-SPR17	5/18/2017	RSK175/MEE	Groundwater
680-138990-14	G6M-DUP-1	5/18/2017	RSK175/MEE	Groundwater
680-138990-15	IW-17D-SPR17	5/19/2017	RSK175/MEE	Groundwater
680-138990-16	IW-18D-SPR17	5/19/2017	RSK175/MEE	Groundwater

Summary - Data validation was performed on the data for thirteen (13) groundwater samples, one (1) field duplicate sample and one (1) rinsate blank sample collected and submitted for Methane, Ethane, Ethylene analyses by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 5/20/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples (LCS 680-481882/15&16 and LCS 680-481946/6&7) analyzed on 5/30 and 5/31/2017 reported with these samples met the %R and RPD control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X-SPR17 (Lab Sample ID: 680-138990-7) was spiked and analyzed as MS/MSD samples. Sample results for methane were greater than four (4) times the spike level and

the percent recovery (%R) for methane could not be calculated. The %Rs and RPDs were acceptable for ethane and ethylene.

Qualification: None required.

Method Blank – The method blanks analyzed with theses samples on 5/30 and 5/31/2017 were free of contamination.

Qualification: None required.

Field Blanks – One rinsate blank, G6M-RB1-SPR17, (Lab Sample ID: 680-138990-9) was submitted with this sample set. The results for MEE were non-detect in the RB sample.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-1-SPR17 (Lab Sample ID: 680-138990-14) was the field duplicate sample of G6M-13-05X-SPR17 (Lab Sample ID: 680-138990-13). An estimated level of methane was reported in the FD sample at 0.49 µg/L but was non-detect (0.58 µg/L U) in the native sample. This result was just below the LOQ of 0.58 µg/L. The results for ethane and ethylene were non-detect in both samples.

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-138990-1	G6M-97-05B-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-2	G6M-13-01X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-3	G6M-13-04X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-4	G6M-04-09X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-5	G6M-04-10A-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-6	G6M-04-10X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-7	G6M-13-06X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-8	G6M-02-01X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-9	G6M-RB1 SPR17	RSK175/MEE	No qualifications needed.			
680-138990-11	G6M-03-01X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-12	G6M-02-08X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-13	G6M-13-05X-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-14	G6M-DUP-1	RSK175/MEE	No qualifications needed.			
680-138990-15	IW-17D-SPR17	RSK175/MEE	No qualifications needed.			
680-138990-16	IW-18D-SPR17	RSK175/MEE	No qualifications needed.			

Dissolved Metals
SW 846/6010C/6020A
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138990
Laboratory: Test America-Savannah, GA	Date: 06/16/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138990-1	G6M-97-05B-SPR17	5/17/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-2	G6M-13-01X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-3	G6M-13-04X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-4	G6M-04-09X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-5	G6M-04-10A-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-6	G6M-04-10X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-7	G6M-13-06X-SPR17	5/19/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-8	G6M-02-01X-SPR17	5/19/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-9	G6M-RB1 SPR17	5/19/2017	Dissolved Metals (As, Fe, Mn)	Rinsate Blank
680-138990-11	G6M-03-01X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-12	G6M-02-08X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-13	G6M-13-05X-SPR17	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-14	G6M-DUP-1	5/18/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-15	IW-17D-SPR17	5/19/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-138990-16	IW-18D-SPR17	5/19/2017	Dissolved Metals (As, Fe, Mn)	Groundwater

Summary – Data validation was performed on the data for thirteen (13) groundwater samples, one (1) field duplicate sample and one (1) rinsate blank sample collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. Iron and Manganese were analyzed and reported by method SW6010B and arsenic was analyzed and reported by method SW6020A.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 5/20/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the %R control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X-SPR17 (Lab Sample ID: 680-138990-7) was spiked and analyzed as MS/MSD samples. Native sample results for arsenic, iron and manganese were greater than four (4) times the spike levels and the percent recoveries (%Rs) could not be calculated. LCS/LCS %Rs were acceptable for all analytes.

Qualification: None required.

Method Blank – The method blanks analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Blanks – One rinsate blank, G6M-RB1 SPR17, (Lab Sample ID: 680-138990-9) was submitted with this sample set. The results for target analytes were non-detect in the RB sample.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-1-SPR17 (Lab Sample ID: 680-138990-14) was the field duplicate sample of G6M-13-05X-SPR17 (Lab Sample ID: 680-138990-13). Arsenic was non-detect in both samples. Detected results for iron and manganese were less than 10%. The FD results are summarized in the table below.

Client Sample ID	G6M-13-05X-SPR17	G6M-DUP-1-SPR17	
Lab Sample ID	680-138990-13	680-138990-14	
Date Sampled	5/18/2017	5/18/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Iron, dissolved	280	300	6.9
Manganese, dissolved	350	380	8.2

Qualification: None required.

Compound Quantitation – Sample G6M-03-01X (Lab Sample ID: 680-138990-11) required analysis at a 10X dilution due to a high level of manganese. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-138990-1	G6M-97-05B-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-2	G6M-13-01X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-3	G6M-13-04X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-4	G6M-04-09X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-5	G6M-04-10A-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-6	G6M-04-10X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-7	G6M-13-06X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-8	G6M-02-01X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-9	G6M-RB1 SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-11	G6M-03-01X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-12	G6M-02-08X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-13	G6M-13-05X-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-14	G6M-DUP-1	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-15	IW-17D-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			
680-138990-16	IW-18D-SPR17	Dissolved Metals (As, Fe, Mn)	No qualifications needed.			

Miscellaneous Parameters
Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)
USEPA Level II Review

Site: AOC 50 Spring 2017 LTM	SDG #: 680-138990
Laboratory: Test America-Savannah, GA	Date: 06/16/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-138990-1	G6M-97-05B-SPR17	5/17/2017	Miscellaneous Parameters	Groundwater
680-138990-2	G6M-13-01X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-3	G6M-13-04X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-4	G6M-04-09X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-5	G6M-04-10A-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-6	G6M-04-10X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-7	G6M-13-06X-SPR17	5/19/2017	Miscellaneous Parameters	Groundwater
680-138990-8	G6M-02-01X-SPR17	5/19/2017	Miscellaneous Parameters	Groundwater
680-138990-9	G6M-RB1 SPR17	5/19/2017	Miscellaneous Parameters	Rinsate Blank
680-138990-11	G6M-03-01X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-12	G6M-02-08X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-13	G6M-13-05X-SPR17	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-14	G6M-DUP-1	5/18/2017	Miscellaneous Parameters	Groundwater
680-138990-15	IW-17D-SPR17	5/19/2017	Miscellaneous Parameters	Groundwater
680-138990-16	IW-18D-SPR17	5/19/2017	Miscellaneous Parameters	Groundwater

Summary - Data validation was performed on the data for thirteen (13) groundwater samples, one (1) field duplicate sample and one (1) rinsate blank sample submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 5/20/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – Sample IW-18D-SPR17 (Lab Sample ID: 680-138990-16) was analyzed outside the seven (7) day holding time for sulfide. The non-detect result for sulfide in this sample was qualified as estimated (UJ). All other samples were analyzed within the respective holding times for preserved aqueous samples.

Qualification: None required.

Method Blank –The method blanks for nitrate/nitrite, sulfide and sulfate were free from

contamination. Alkalinity was reported in associated MB samples at low levels of 2.34, 2.67 and 2.15 mg/L. The results for alkalinity in all samples were greater than the LOQ; no qualifications were needed. TOC was reported in the associated MB sample at an estimated level of 0.198 mg/L.

Qualification: The estimated results for TOC in samples G6M-97-05B, G6M-13-01X, G6M-04-10X, G6M-13-05X, and G6M-DUP-1, (Lab Sample IDs: 680-138990-1, -2, -5, -13 and 14) were qualified as non-detect at the LOQ (1.0 U).

Field Blanks – One rinsate blank, G6M-RB1 SPR17, (Lab Sample ID: 680-138990-9) was submitted with this sample set. The results for alkalinity, nitrate/nitrite, sulfide and sulfate were non-detect in the RB sample. TOC was reported in the RB sample at an estimated level of 0.30 mg/L. Sample results were qualified based on the method blank.

Qualification: None required.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X-SPR17 (Lab Sample ID: 680-138990-7) was spiked and analyzed as MS/MSD samples for nitrate/nitrite, sulfide, sulfate and TOC. Batch MS/MSD samples were also analyzed on samples selected by the laboratory. The %Rs and RPDs for the MS/MSDs were within control limits for sulfide, sulfate and TOC analyses. The %Rs were below control limits for the MS/MSD samples analyzed for nitrate/nitrite. The results for nitrate/nitrite in associated native samples were qualified as estimated by the laboratory.

Qualification: None required.

Field Duplicate – Sample G6M-DUP-1-SPR17 (Lab Sample ID: 680-138990-14) was the field duplicate sample of G6M-13-05X-SPR17 (Lab Sample ID: 680-138990-13). Sulfide and sulfate were non-detect in both samples. The RPD for the FD results for alkalinity was above 30%. The FD results for sulfate were comparable. FD results are summarized in the table below.

Client Sample ID	G6M-13-05X-SPR17	G6M-DUP-1-SPR17	
Lab Sample ID	680-138990-13	680-138990-14	
Date Sampled	5/18/2017	5/18/2017	
Analyte	**Result (mg/L)**	**Result (mg/L)**	**RPD (%)**
Nitrate/nitrite as N	1.5	1.5	0
Alkalinity	32	22	37

Qualification: The results for alkalinity were qualified as estimated (J) in the FD sample pair.

Compound Quantitation – Analyte non-detections were reported as “ND”; these results should be considered the equivalent of “PQL U.” Analyte detections below the PQL were reported as J-qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Analyte	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-138990-1	G6M-97-05B-SPR17	TOC	0.33	J	1.0	U
680-138990-2	G6M-13-01X-SPR17	TOC	0.62	J	1.0	U
680-138990-3	G6M-13-04X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-4	G6M-04-09X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-5	G6M-04-10A-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-6	G6M-04-10X-SPR17	TOC	0.81	J	1.0	U
680-138990-7	G6M-13-06X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-8	G6M-02-01X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-9	G6M-RB1 SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-11	G6M-03-01X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-12	G6M-02-08X-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-13	G6M-13-05X-SPR17	TOC	0.50	J	1.0	U
		Alkalinity	32		32	J
680-138990-14	G6M-DUP-1	TOC	0.45	J	1.0	U
		Alkalinity	22		22	J
680-138990-15	IW-17D-SPR17	Miscellaneous Parameters	No qualifications needed.			
680-138990-16	IW-18D-SPR17	Sulfide	1	U	1.0	UJ

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-1	G6M-97-05B-SPR17	5/17/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.94	mg/L		0.1	0.05	0.019	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	6010C	Dissolved	Manganese	3.0	ug/L	U	10	3	1	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichloroethene, Total	8.6	ug/L		2	1	0.74	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Carbon tetrachloride	0.71	ug/L	J	1	0.5	0.33	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	8.6	ug/L		1	1	0.41	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Tetrachloroethene	190	ug/L		1	1	0.74	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Trichloroethene	15	ug/L		1	1	0.48	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	9056A	Total/NA	Sulfate	7.0	mg/L		2	2	0.8	2
680-138990-1	G6M-97-05B-SPR17	5/17/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	RSK-175	Total/NA	Methane	0.84	ug/L		0.58	0.58	0.29	1
680-138990-1	G6M-97-05B-SPR17	5/17/2017	SM 2320B	Total/NA	Alkalinity	31	mg/L		5	3.2	1.1	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-10	Trip Blank	5/19/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.08	mg/L	J	0.1	0.05	0.019	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	6010C	Dissolved	Iron	120,000	ug/L		50	50	17	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	6010C	Dissolved	Manganese	70,000	ug/L		100	30	10	10
680-138990-11	G6M-03-01X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	75	ug/L		3	3	1.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	0.70	ug/L	J	1	1	0.36	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	240	ug/L		2	1	0.74	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	170	ug/L		10	10	3.4	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Acetone	130	ug/L		10	10	7	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	0.82	ug/L	J	1	1	0.35	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	0.27	ug/L	J	1	0.5	0.23	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	61	ug/L		1	1	0.74	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Toluene	1.4	ug/L		1	1	0.48	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	2.3	ug/L		1	1	0.37	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	77	ug/L		1	1	0.48	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	73	ug/L		1	1	0.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	1.1	ug/L	J	2	0.5	0.23	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	210	ug/L		2	2	0.82	2
680-138990-11	G6M-03-01X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	8.6	mg/L		1	1	0.4	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	26	mg/L		1	0.5	0.16	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	120	ug/L		1	1	0.5	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	RSK-175	Total/NA	Methane (TCD)	7,900	ug/L		390	77	39	1
680-138990-11	G6M-03-01X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	310	mg/L		5	3.2	1.1	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.10	mg/L	U	0.2	0.1	0.038	2
680-138990-12	G6M-02-08X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	6010C	Dissolved	Iron	770,000	ug/L		50	50	17	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	6010C	Dissolved	Manganese	4,300	ug/L		10	3	1	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	410	ug/L		3	3	1.5	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	20	ug/L	U	20	20	7.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	20	ug/L	U	20	20	7.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	20	ug/L	U	20	20	12	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	10	ug/L	U	20	10	6.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	20	ug/L	U	20	20	7.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	20	ug/L	U	20	20	6.8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	20	ug/L	U	20	20	7.8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	20	ug/L	U	20	20	9.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	40	ug/L	U	100	40	22	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	20	ug/L	U	20	20	7.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	20	ug/L	U	20	20	10	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	51	ug/L		40	20	15	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	20	ug/L	U	20	20	13	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	10	ug/L	U	20	10	6.2	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	20	ug/L	U	20	20	8.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	20	ug/L	U	20	20	6.8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	20	ug/L	U	20	20	9.2	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	20	ug/L	U	20	20	7.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	700	ug/L		200	200	68	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	10	ug/L	U	20	10	5.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	480	ug/L		200	100	40	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	20	ug/L	U	20	20	9	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	20	ug/L	U	20	20	9.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	100	ug/L	U	200	100	42	20

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Acetone	200	ug/L		200	200	140	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Benzene	20	ug/L	U	20	20	8.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	20	ug/L	U	20	20	10	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	20	ug/L	U	20	20	8.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	40	ug/L	U	40	40	8.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	10	ug/L	U	20	10	6.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	10	ug/L	U	20	10	5.2	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	20	ug/L	U	20	20	9	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	10	ug/L	U	20	10	6.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	20	ug/L	U	20	20	10	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	20	ug/L	U	20	20	8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	51	ug/L		20	20	8.2	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	20	ug/L	U	20	20	8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	20	ug/L	U	20	20	7	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	20	ug/L	U	20	20	8.8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	20	ug/L	U	20	20	12	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	10	ug/L	U	20	10	6.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	20	ug/L	U	20	20	8.8	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	20	ug/L	U	20	20	7	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	10	ug/L	U	200	10	6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	20	ug/L	U	20	20	7	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	100	ug/L	U	100	100	50	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	20	ug/L	U	20	20	9.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	20	ug/L	U	20	20	7.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	10	ug/L	U	20	10	4.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	20	ug/L	U	20	20	8.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Styrene	10	ug/L	U	20	10	5.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	20	ug/L	U	20	20	9	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	20	ug/L	U	20	20	15	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Toluene	140	ug/L		20	20	9.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	20	ug/L	U	20	20	8.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	20	ug/L	U	20	20	8.4	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	40	ug/L	U	40	40	16	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	10	ug/L	U	40	10	4.6	20
680-138990-12	G6M-02-08X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	740	mg/L		23	11	3.5	22.73

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-12	G6M-02-08X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	RSK-175	Total/NA	Methane (TCD)	15,000	ug/L		390	77	39	1
680-138990-12	G6M-02-08X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	930	mg/L		5	3.2	1.1	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	1.5	mg/L		0.1	0.05	0.019	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	6010C	Dissolved	Iron	280	ug/L		50	50	17	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	6010C	Dissolved	Manganese	350	ug/L		10	3	1	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	20	ug/L	U	20	20	7.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	20	ug/L	U	20	20	7.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	20	ug/L	U	20	20	12	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	10	ug/L	U	20	10	6.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	20	ug/L	U	20	20	7.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	20	ug/L	U	20	20	6.8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	20	ug/L	U	20	20	7.8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	20	ug/L	U	20	20	9.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	40	ug/L	U	100	40	22	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	20	ug/L	U	20	20	7.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	20	ug/L	U	20	20	10	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	64	ug/L	J	40	20	15	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	20	ug/L	U	20	20	13	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	10	ug/L	U	20	10	6.2	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	20	ug/L	U	20	20	8.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	20	ug/L	U	20	20	6.8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	20	ug/L	U	20	20	9.2	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	20	ug/L	U	20	20	7.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	200	ug/L	U	200	200	68	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	10	ug/L	U	20	10	5.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	100	ug/L	U	200	100	40	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	20	ug/L	U	20	20	9	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	20	ug/L	U	20	20	9.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	100	ug/L	U	200	100	42	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Acetone	200	ug/L	U	200	200	140	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Benzene	20	ug/L	U	20	20	8.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	20	ug/L	U	20	20	10	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	20	ug/L	U	20	20	8.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	40	ug/L	U	40	40	8.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	10	ug/L	U	20	10	6.6	20

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	10	ug/L	U	20	10	5.2	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	20	ug/L	U	20	20	9	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	10	ug/L	U	20	10	6.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	20	ug/L	U	20	20	10	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	20	ug/L	U	20	20	8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	64	ug/L	J	20	20	8.2	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	20	ug/L	U	20	20	8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	20	ug/L	U	20	20	7	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	20	ug/L	U	20	20	8.8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	20	ug/L	U	20	20	12	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	10	ug/L	U	20	10	6.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	20	ug/L	U	20	20	8.8	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	20	ug/L	U	20	20	7	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	10	ug/L	U	200	10	6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	20	ug/L	U	20	20	7	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	100	ug/L	U	100	100	50	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	20	ug/L	U	20	20	9.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	20	ug/L	U	20	20	7.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	10	ug/L	U	20	10	4.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	20	ug/L	U	20	20	8.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Styrene	10	ug/L	U	20	10	5.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	20	ug/L	U	20	20	9	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	1,300	ug/L		20	20	15	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Toluene	20	ug/L	U	20	20	9.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	20	ug/L	U	20	20	8.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	20	ug/L	U	20	20	8.4	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	40	ug/L	U	40	40	16	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	10	ug/L	U	40	10	4.6	20
680-138990-13	G6M-13-05X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	RSK-175	Total/NA	Methane	0.58	ug/L	U	0.58	0.58	0.29	1
680-138990-13	G6M-13-05X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	32	mg/L	J	5	3.2	1.1	1
680-138990-14	G6M-DUP-1	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	1.5	mg/L		0.1	0.05	0.019	1
680-138990-14	G6M-DUP-1	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-14	G6M-DUP-1	5/18/2017	6010C	Dissolved	Iron	300	ug/L		50	50	17	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-14	G6M-DUP-1	5/18/2017	6010C	Dissolved	Manganese	380	ug/L		10	3	1	1
680-138990-14	G6M-DUP-1	5/18/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	20	ug/L	U	20	20	7.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	20	ug/L	U	20	20	7.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	20	ug/L	U	20	20	12	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	10	ug/L	U	20	10	6.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	20	ug/L	U	20	20	7.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	20	ug/L	U	20	20	6.8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	20	ug/L	U	20	20	7.8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	20	ug/L	U	20	20	9.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	40	ug/L	U	100	40	22	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	20	ug/L	U	20	20	7.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	20	ug/L	U	20	20	10	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	46	ug/L	J	40	20	15	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	20	ug/L	U	20	20	13	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	10	ug/L	U	20	10	6.2	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	20	ug/L	U	20	20	8.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	20	ug/L	U	20	20	6.8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	20	ug/L	U	20	20	9.2	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	20	ug/L	U	20	20	7.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	200	ug/L	U	200	200	68	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	2-Chlorotoluene	10	ug/L	U	20	10	5.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	2-Hexanone	100	ug/L	U	200	100	40	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	4-Chlorotoluene	20	ug/L	U	20	20	9	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	20	ug/L	U	20	20	9.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	100	ug/L	U	200	100	42	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Acetone	200	ug/L	U	200	200	140	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Benzene	20	ug/L	U	20	20	8.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Bromobenzene	20	ug/L	U	20	20	10	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Bromoform	20	ug/L	U	20	20	8.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Bromomethane	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Carbon disulfide	40	ug/L	U	40	40	8.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Carbon tetrachloride	10	ug/L	U	20	10	6.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Chlorobenzene	10	ug/L	U	20	10	5.2	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Chlorobromomethane	20	ug/L	U	20	20	9	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Chlorodibromomethane	10	ug/L	U	20	10	6.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Chloroethane	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Chloroform	20	ug/L	U	20	20	10	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Chloromethane	20	ug/L	U	20	20	8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	46	ug/L	J	20	20	8.2	20

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	20	ug/L	U	20	20	8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Dibromomethane	20	ug/L	U	20	20	7	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Dichlorobromomethane	20	ug/L	U	20	20	8.8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	20	ug/L	U	20	20	12	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Ethylbenzene	10	ug/L	U	20	10	6.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Ethylene Dibromide	20	ug/L	U	20	20	8.8	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Isopropylbenzene	20	ug/L	U	20	20	7	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	10	ug/L	U	200	10	6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Methylene Chloride	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	20	ug/L	U	20	20	7	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Naphthalene	100	ug/L	U	100	100	50	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	n-Butylbenzene	20	ug/L	U	20	20	9.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	N-Propylbenzene	20	ug/L	U	20	20	7.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	o-Xylene	10	ug/L	U	20	10	4.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	sec-Butylbenzene	20	ug/L	U	20	20	8.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Styrene	10	ug/L	U	20	10	5.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	tert-Butylbenzene	20	ug/L	U	20	20	9	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Tetrachloroethene	1,200	ug/L		20	20	15	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Toluene	20	ug/L	U	20	20	9.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	20	ug/L	U	20	20	8.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	20	ug/L	U	20	20	8.4	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Vinyl acetate	40	ug/L	U	40	40	16	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-138990-14	G6M-DUP-1	5/18/2017	8260B	Total/NA	Xylenes, Total	10	ug/L	U	40	10	4.6	20
680-138990-14	G6M-DUP-1	5/18/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138990-14	G6M-DUP-1	5/18/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138990-14	G6M-DUP-1	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-14	G6M-DUP-1	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-14	G6M-DUP-1	5/18/2017	RSK-175	Total/NA	Methane	0.49	ug/L	J	0.58	0.58	0.29	1
680-138990-14	G6M-DUP-1	5/18/2017	SM 2320B	Total/NA	Alkalinity	22	mg/L	J	5	3.2	1.1	1
680-138990-15	IW-17D-SPR17	5/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.11	mg/L		0.1	0.05	0.019	1
680-138990-15	IW-17D-SPR17	5/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-15	IW-17D-SPR17	5/19/2017	6010C	Dissolved	Iron	130,000	ug/L		50	50	17	1
680-138990-15	IW-17D-SPR17	5/19/2017	6010C	Dissolved	Manganese	14,000	ug/L		10	3	1	1
680-138990-15	IW-17D-SPR17	5/19/2017	6020A	Dissolved	Arsenic	110	ug/L		3	3	1.5	1
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	5	5	1.9	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1,1-Trichloroethane	5.0	ug/L	U	5	5	1.9	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	5.0	ug/L	U	5	5	3.1	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1,2-Trichloroethane	2.5	ug/L	U	5	2.5	1.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethane	5.0	ug/L	U	5	5	1.9	5

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethene	5.0	ug/L	U	5	5	1.8	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloropropene	5.0	ug/L	U	5	5	1.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	25	ug/L	U	25	25	13	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichloropropane	5.0	ug/L	U	5	5	2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	25	ug/L	U	25	25	13	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	4.3	ug/L	J	5	5	2.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	10	ug/L	U	25	10	5.5	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichlorobenzene	5.0	ug/L	U	5	5	1.9	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethane	5.0	ug/L	U	5	5	2.5	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethene, Total	16	ug/L		10	5	3.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloropropane	5.0	ug/L	U	5	5	3.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	2.5	ug/L	U	5	2.5	1.6	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichlorobenzene	5.0	ug/L	U	5	5	2.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichloropropane	5.0	ug/L	U	5	5	1.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	1,4-Dichlorobenzene	5.0	ug/L	U	5	5	2.3	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	2,2-Dichloropropane	5.0	ug/L	U	5	5	1.9	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	2-Butanone (MEK)	140	ug/L		50	50	17	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	2-Chlorotoluene	2.5	ug/L	U	5	2.5	1.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	2-Hexanone	25	ug/L	U	50	25	10	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	4-Chlorotoluene	5.0	ug/L	U	5	5	2.3	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	4-Isopropyltoluene	5.0	ug/L	U	5	5	2.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	25	ug/L	U	50	25	11	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Acetone	97	ug/L		50	50	35	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Benzene	5.0	ug/L	U	5	5	2.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Bromobenzene	5.0	ug/L	U	5	5	2.5	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Bromoform	5.0	ug/L	U	5	5	2.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Bromomethane	25	ug/L	U	25	25	13	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Carbon disulfide	10	ug/L	U	10	10	2.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Carbon tetrachloride	2.5	ug/L	U	5	2.5	1.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Chlorobenzene	2.5	ug/L	U	5	2.5	1.3	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Chlorobromomethane	5.0	ug/L	U	5	5	2.3	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Chlorodibromomethane	2.5	ug/L	U	5	2.5	1.6	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Chloroethane	25	ug/L	U	25	25	13	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Chloroform	5.0	ug/L	U	5	5	2.5	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Chloromethane	5.0	ug/L	U	5	5	2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	16	ug/L		5	5	2.1	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	cis-1,3-Dichloropropene	5.0	ug/L	U	5	5	2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Dibromomethane	5.0	ug/L	U	5	5	1.8	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Dichlorobromomethane	5.0	ug/L	U	5	5	2.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Dichlorodifluoromethane	5.0	ug/L	U	5	5	3	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Ethylbenzene	2.5	ug/L	U	5	2.5	1.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Ethylene Dibromide	5.0	ug/L	U	5	5	2.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Hexachlorobutadiene	25	ug/L	U	25	25	13	5

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Isopropylbenzene	5.0	ug/L	U	5	5	1.8	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Methyl tert-butyl ether	2.5	ug/L	U	50	2.5	1.5	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Methylene Chloride	25	ug/L	U	25	25	13	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	m-Xylene & p-Xylene	5.0	ug/L	U	5	5	1.8	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Naphthalene	25	ug/L	U	25	25	13	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	n-Butylbenzene	5.0	ug/L	U	5	5	2.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	N-Propylbenzene	5.0	ug/L	U	5	5	1.9	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	o-Xylene	2.5	ug/L	U	5	2.5	1.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	sec-Butylbenzene	5.0	ug/L	U	5	5	2.1	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Styrene	2.5	ug/L	U	5	2.5	1.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	tert-Butylbenzene	5.0	ug/L	U	5	5	2.3	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Tetrachloroethene	4.1	ug/L	J	5	5	3.7	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Toluene	270	ug/L		5	5	2.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	5.0	ug/L	U	5	5	1.9	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	trans-1,3-Dichloropropene	5.0	ug/L	U	5	5	2.1	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Trichloroethene	6.1	ug/L		5	5	2.4	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Trichlorofluoromethane	5.0	ug/L	U	5	5	2.1	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Vinyl acetate	10	ug/L	U	10	10	4.1	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Vinyl chloride	5.0	ug/L	U	5	5	2.5	5
680-138990-15	IW-17D-SPR17	5/19/2017	8260B	Total/NA	Xylenes, Total	2.5	ug/L	U	10	2.5	1.2	5
680-138990-15	IW-17D-SPR17	5/19/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138990-15	IW-17D-SPR17	5/19/2017	9060A	Total/NA	Total Organic Carbon	680	mg/L		15	7.5	2.3	15
680-138990-15	IW-17D-SPR17	5/19/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-15	IW-17D-SPR17	5/19/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-15	IW-17D-SPR17	5/19/2017	RSK-175	Total/NA	Methane (TCD)	24,000	ug/L		390	77	39	1
680-138990-15	IW-17D-SPR17	5/19/2017	SM 2320B	Total/NA	Alkalinity	110	mg/L		5	3.2	1.1	1
680-138990-16	IW-18D-SPR17	5/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.21	mg/L		0.1	0.05	0.019	1
680-138990-16	IW-18D-SPR17	5/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	UJ	1	1	1	1
680-138990-16	IW-18D-SPR17	5/19/2017	6010C	Dissolved	Iron	140,000	ug/L		50	50	17	1
680-138990-16	IW-18D-SPR17	5/19/2017	6010C	Dissolved	Manganese	8,900	ug/L		10	3	1	1
680-138990-16	IW-18D-SPR17	5/19/2017	6020A	Dissolved	Arsenic	150	ug/L		3	3	1.5	1
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	5	5	1.9	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1,1-Trichloroethane	5.0	ug/L	U	5	5	1.9	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	5.0	ug/L	U	5	5	3.1	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1,2-Trichloroethane	2.5	ug/L	U	5	2.5	1.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethane	5.0	ug/L	U	5	5	1.9	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethene	5.0	ug/L	U	5	5	1.8	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloropropene	5.0	ug/L	U	5	5	1.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichloropropane	5.0	ug/L	U	5	5	2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	3.1	ug/L	J	5	5	2.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	10	ug/L	U	25	10	5.5	5

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichlorobenzene	5.0	ug/L	U	5	5	1.9	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethane	5.0	ug/L	U	5	5	2.5	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethene, Total	660	ug/L		10	5	3.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloropropane	5.0	ug/L	U	5	5	3.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	2.5	ug/L	U	5	2.5	1.6	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichlorobenzene	5.0	ug/L	U	5	5	2.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichloropropane	5.0	ug/L	U	5	5	1.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	1,4-Dichlorobenzene	5.0	ug/L	U	5	5	2.3	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	2,2-Dichloropropane	5.0	ug/L	U	5	5	1.9	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	2-Butanone (MEK)	410	ug/L		50	50	17	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	2-Chlorotoluene	2.5	ug/L	U	5	2.5	1.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	2-Hexanone	25	ug/L	U	50	25	10	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	4-Chlorotoluene	5.0	ug/L	U	5	5	2.3	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	4-Isopropyltoluene	5.0	ug/L	U	5	5	2.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	25	ug/L	U	50	25	11	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Acetone	100	ug/L		50	50	35	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Benzene	5.0	ug/L	U	5	5	2.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Bromobenzene	5.0	ug/L	U	5	5	2.5	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Bromoform	5.0	ug/L	U	5	5	2.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Bromomethane	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Carbon disulfide	10	ug/L	U	10	10	2.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Carbon tetrachloride	2.5	ug/L	U	5	2.5	1.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Chlorobenzene	2.5	ug/L	U	5	2.5	1.3	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Chlorobromomethane	5.0	ug/L	U	5	5	2.3	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Chlorodibromomethane	2.5	ug/L	U	5	2.5	1.6	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Chloroethane	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Chloroform	5.0	ug/L	U	5	5	2.5	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Chloromethane	5.0	ug/L	U	5	5	2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	660	ug/L		5	5	2.1	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	cis-1,3-Dichloropropene	5.0	ug/L	U	5	5	2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Dibromomethane	5.0	ug/L	U	5	5	1.8	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Dichlorobromomethane	5.0	ug/L	U	5	5	2.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Dichlorodifluoromethane	5.0	ug/L	U	5	5	3	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Ethylbenzene	2.5	ug/L	U	5	2.5	1.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Ethylene Dibromide	5.0	ug/L	U	5	5	2.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Hexachlorobutadiene	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Isopropylbenzene	5.0	ug/L	U	5	5	1.8	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Methyl tert-butyl ether	2.5	ug/L	U	50	2.5	1.5	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Methylene Chloride	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	m-Xylene & p-Xylene	5.0	ug/L	U	5	5	1.8	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Naphthalene	25	ug/L	U	25	25	13	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	n-Butylbenzene	5.0	ug/L	U	5	5	2.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	N-Propylbenzene	5.0	ug/L	U	5	5	1.9	5

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	o-Xylene	2.5	ug/L	U	5	2.5	1.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	sec-Butylbenzene	5.0	ug/L	U	5	5	2.1	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Styrene	2.5	ug/L	U	5	2.5	1.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	tert-Butylbenzene	5.0	ug/L	U	5	5	2.3	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Tetrachloroethene	5.1	ug/L		5	5	3.7	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Toluene	16	ug/L		5	5	2.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	5.0	ug/L	U	5	5	1.9	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	trans-1,3-Dichloropropene	5.0	ug/L	U	5	5	2.1	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Trichloroethene	5.0	ug/L	U	5	5	2.4	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Trichlorofluoromethane	5.0	ug/L	U	5	5	2.1	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Vinyl acetate	10	ug/L	U	10	10	4.1	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Vinyl chloride	5.0	ug/L	U	5	5	2.5	5
680-138990-16	IW-18D-SPR17	5/19/2017	8260B	Total/NA	Xylenes, Total	2.5	ug/L	U	10	2.5	1.2	5
680-138990-16	IW-18D-SPR17	5/19/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138990-16	IW-18D-SPR17	5/19/2017	9060A	Total/NA	Total Organic Carbon	680	mg/L		21	10	3.2	20.83
680-138990-16	IW-18D-SPR17	5/19/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-16	IW-18D-SPR17	5/19/2017	RSK-175	Total/NA	Ethylene	15	ug/L		1	1	0.5	1
680-138990-16	IW-18D-SPR17	5/19/2017	RSK-175	Total/NA	Methane (TCD)	21,000	ug/L		390	77	39	1
680-138990-16	IW-18D-SPR17	5/19/2017	SM 2320B	Total/NA	Alkalinity	110	mg/L		5	3.2	1.1	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.14	mg/L		0.1	0.05	0.019	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	6010C	Dissolved	Iron	39	ug/L	J	50	50	17	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	6010C	Dissolved	Manganese	19	ug/L		10	3	1	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	3.4	ug/L		2	1	0.74	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	3.4	ug/L		1	1	0.41	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	13	ug/L		1	1	0.74	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	0.85	ug/L	J	1	1	0.48	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	14	mg/L		1	1	0.4	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	RSK-175	Total/NA	Methane (TCD)	830	ug/L		390	77	39	1
680-138990-2	G6M-13-01X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	36	mg/L		5	3.2	1.1	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.04	mg/L	J	0.1	0.05	0.019	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	6010C	Dissolved	Iron	47,000	ug/L		50	50	17	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	6010C	Dissolved	Manganese	9,000	ug/L		10	3	1	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	400	ug/L		3	3	1.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	9.9	ug/L		2	1	0.74	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	2.7	ug/L	J	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	9.0	ug/L		1	1	0.41	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.91	ug/L	J	1	1	0.37	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	1.8	ug/L		1	1	0.48	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	7.1	ug/L		1	1	0.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	5.0	mg/L	U	5	5	2	5

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-3	G6M-13-04X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	2.4	mg/L		1	0.5	0.16	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	5.7	ug/L		1.1	1.1	0.55	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	6.2	ug/L		1	1	0.5	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	RSK-175	Total/NA	Methane (TCD)	7,600	ug/L		390	77	39	1
680-138990-3	G6M-13-04X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	250	mg/L		5	3.2	1.1	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.15	mg/L		0.1	0.05	0.019	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	6010C	Dissolved	Iron	180,000	ug/L		50	50	17	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	6010C	Dissolved	Manganese	3,200	ug/L		10	3	1	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	430	ug/L		3	3	1.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	0.48	ug/L	J	1	1	0.47	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	5.4	mg/L		1	1	0.4	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	11	mg/L		1	0.5	0.16	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	RSK-175	Total/NA	Methane (TCD)	14,000	ug/L		390	77	39	1
680-138990-4	G6M-04-09X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	190	mg/L		5	3.2	1.1	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.12	mg/L		0.1	0.05	0.019	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-5	G6M-04-10A-SPR17	5/18/2017	6010C	Dissolved	Iron	74,000	ug/L		50	50	17	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	6010C	Dissolved	Manganese	4,800	ug/L		10	3	1	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	6020A	Dissolved	Arsenic	170	ug/L		3	3	1.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.4	ug/L	J	2	1	0.74	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.4	ug/L		1	1	0.41	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	0.52	ug/L	J	1	1	0.48	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	0.85	ug/L	J	1	1	0.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	9056A	Total/NA	Sulfate	15	mg/L		1	1	0.4	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	5.7	mg/L		1	0.5	0.16	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	RSK-175	Total/NA	Methane (TCD)	5,500	ug/L		390	77	39	1
680-138990-5	G6M-04-10A-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	38	mg/L		5	3.2	1.1	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.42	mg/L		0.1	0.05	0.019	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	6010C	Dissolved	Iron	20	ug/L	J	50	50	17	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	6010C	Dissolved	Manganese	1,100	ug/L		10	3	1	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Tetrachloroethene	1.2	ug/L		1	1	0.74	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	9056A	Total/NA	Sulfate	32	mg/L		1	1	0.4	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	RSK-175	Total/NA	Methane	180	ug/L		0.58	0.58	0.29	1
680-138990-6	G6M-04-10X-SPR17	5/18/2017	SM 2320B	Total/NA	Alkalinity	12	mg/L		5	3.2	1.1	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.14	mg/L	J	0.1	0.05	0.019	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	6010C	Dissolved	Iron	250,000	ug/L		50	50	17	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	6010C	Dissolved	Manganese	7,000	ug/L		10	3	1	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	6020A	Dissolved	Arsenic	500	ug/L		3	3	1.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethene, Total	2.7	ug/L		2	1	0.74	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	2-Butanone (MEK)	45	ug/L		10	10	3.4	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Acetone	45	ug/L		10	10	7	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	2.2	ug/L		1	1	0.41	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Ethylbenzene	22	ug/L		1	0.5	0.33	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	m-Xylene & p-Xylene	0.38	ug/L	J	1	1	0.35	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Toluene	2.8	ug/L		1	1	0.48	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.45	ug/L	J	1	1	0.37	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Vinyl chloride	2.6	ug/L		1	1	0.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	8260B	Total/NA	Xylenes, Total	0.38	ug/L	J	2	0.5	0.23	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	9056A	Total/NA	Sulfate	3.0	mg/L		1	1	0.4	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	9060A	Total/NA	Total Organic Carbon	70	mg/L	J	1.8	0.9	0.28	1.79
680-138990-7	G6M-13-06X-SPR17	5/19/2017	RSK-175	Total/NA	Ethane	14	ug/L		1.1	1.1	0.55	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	RSK-175	Total/NA	Ethylene	16	ug/L		1	1	0.5	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	RSK-175	Total/NA	Methane (TCD)	17,000	ug/L		390	77	39	1
680-138990-7	G6M-13-06X-SPR17	5/19/2017	SM 2320B	Total/NA	Alkalinity	470	mg/L		5	3.2	1.1	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.09	mg/L	J	0.1	0.05	0.019	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	6010C	Dissolved	Iron	110,000	ug/L		50	50	17	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	6010C	Dissolved	Manganese	2,600	ug/L		10	3	1	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	6020A	Dissolved	Arsenic	500	ug/L		3	3	1.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.1	ug/L		1	1	0.47	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.36	ug/L	J	1	0.5	0.31	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.52	ug/L	J	1	1	0.41	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	9056A	Total/NA	Sulfate	0.51	mg/L	J	1	1	0.4	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	9060A	Total/NA	Total Organic Carbon	4.9	mg/L		1	0.5	0.16	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	RSK-175	Total/NA	Methane (TCD)	24,000	ug/L		390	77	39	1
680-138990-8	G6M-02-01X-SPR17	5/19/2017	SM 2320B	Total/NA	Alkalinity	220	mg/L		5	3.2	1.1	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	U	0.1	0.05	0.019	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	6010C	Total	Iron	50	ug/L	U	50	50	17	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	6010C	Total	Manganese	3.0	ug/L	U	10	3	1	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	6020A	Total	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1,1,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1,1-Trichloroethane	1.0	ug/L	U	1	1	0.37	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1	0.62	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1,2-Trichloroethane	0.50	ug/L	U	1	0.5	0.33	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethane	1.0	ug/L	U	1	1	0.38	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,1-Dichloropropene	1.0	ug/L	U	1	1	0.34	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2,3-Trichloropropane	1.0	ug/L	U	1	1	0.39	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trichlorobenzene	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2,4-Trimethylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2-Dibromo-3-Chloropropane	2.0	ug/L	U	5	2	1.1	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2-Dichlorobenzene	1.0	ug/L	U	1	1	0.37	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethane	1.0	ug/L	U	1	1	0.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloroethene, Total	1.0	ug/L	U	2	1	0.74	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,2-Dichloropropane	1.0	ug/L	U	1	1	0.67	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,3,5-Trimethylbenzene	0.50	ug/L	U	1	0.5	0.31	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,3-Dichlorobenzene	1.0	ug/L	U	1	1	0.43	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,3-Dichloropropane	1.0	ug/L	U	1	1	0.34	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	1,4-Dichlorobenzene	1.0	ug/L	U	1	1	0.46	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	2,2-Dichloropropane	1.0	ug/L	U	1	1	0.37	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	2-Butanone (MEK)	10	ug/L	U	10	10	3.4	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	2-Chlorotoluene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	2-Hexanone	5.0	ug/L	U	10	5	2	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	4-Chlorotoluene	1.0	ug/L	U	1	1	0.45	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	4-Isopropyltoluene	1.0	ug/L	U	1	1	0.48	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	4-Methyl-2-pentanone (MIBK)	5.0	ug/L	U	10	5	2.1	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Acetone	10	ug/L	U	10	10	7	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Benzene	1.0	ug/L	U	1	1	0.43	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Bromobenzene	1.0	ug/L	U	1	1	0.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Bromoform	1.0	ug/L	U	1	1	0.43	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Bromomethane	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Carbon disulfide	2.0	ug/L	U	2	2	0.43	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Carbon tetrachloride	0.50	ug/L	U	1	0.5	0.33	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Chlorobenzene	0.50	ug/L	U	1	0.5	0.26	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Chlorobromomethane	1.0	ug/L	U	1	1	0.45	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Chlorodibromomethane	0.50	ug/L	U	1	0.5	0.32	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Chloroethane	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Chloroform	1.0	ug/L	U	1	1	0.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Chloromethane	1.0	ug/L	U	1	1	0.4	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	cis-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.4	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Dibromomethane	1.0	ug/L	U	1	1	0.35	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Dichlorobromomethane	1.0	ug/L	U	1	1	0.44	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Dichlorodifluoromethane	1.0	ug/L	U	1	1	0.6	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Ethylbenzene	0.50	ug/L	U	1	0.5	0.33	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Ethylene Dibromide	1.0	ug/L	U	1	1	0.44	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Hexachlorobutadiene	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Isopropylbenzene	1.0	ug/L	U	1	1	0.35	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Methyl tert-butyl ether	0.50	ug/L	U	10	0.5	0.3	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Methylene Chloride	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	m-Xylene & p-Xylene	1.0	ug/L	U	1	1	0.35	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Naphthalene	5.0	ug/L	U	5	5	2.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	n-Butylbenzene	1.0	ug/L	U	1	1	0.47	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	N-Propylbenzene	1.0	ug/L	U	1	1	0.38	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	o-Xylene	0.50	ug/L	U	1	0.5	0.23	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	sec-Butylbenzene	1.0	ug/L	U	1	1	0.42	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Styrene	0.50	ug/L	U	1	0.5	0.27	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	tert-Butylbenzene	1.0	ug/L	U	1	1	0.45	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Toluene	1.0	ug/L	U	1	1	0.48	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	trans-1,3-Dichloropropene	1.0	ug/L	U	1	1	0.42	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Trichlorofluoromethane	1.0	ug/L	U	1	1	0.42	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Vinyl acetate	2.0	ug/L	U	2	2	0.81	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	8260B	Total/NA	Xylenes, Total	0.50	ug/L	U	2	0.5	0.23	1

AOC50 Spring 2017 Validated Analytical Results SDG 138990

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	MDL	Dilution Factor
680-138990-9	G6M-RB1 SPR17	5/19/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	9060A	Total/NA	Total Organic Carbon	0.30	mg/L	J	1	0.5	0.16	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	RSK-175	Total/NA	Methane	0.58	ug/L	U	0.58	0.58	0.29	1
680-138990-9	G6M-RB1 SPR17	5/19/2017	SM 2320B	Total/NA	Alkalinity	3.2	mg/L	U	5	3.2	1.1	1

Notes:

Qualified Data

mg/L = milligram per liter
µg/L = microgram per liter
U = non-detect
J = Estimated result
UJ = Estimated non-detect
LOQ = Limit of Qualification
LOD = Limit of Detection
MDL = Method Detection Limit

C.2

Data Validation Report
Fall 2017 LTM Event

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144039
Laboratory: Test America-Savannah, GA	Date: 10/31/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144039-1	G6M-13-06X-Fall17	10/5/2017	SW8260B/VOC	Groundwater
680-144039-2	Dup-1-Fall17	10/5/2017	SW8260B/VOC	Groundwater
680-144039-3	G6M-13-05X-Fall17	10/5/2017	SW8260B/VOC	Groundwater
680-144039-4	G6M-95-19X-Fall17	10/5/2017	SW8260B/VOC	Groundwater
680-144039-5	G6M-95-20X-Fall17	10/5/2017	SW8260B/VOC	Groundwater
680-144039-6	G6M-03-08X-Fall17	10/4/2017	SW8260B/VOC	Groundwater
680-144039-7	G6M-04-14X-Fall17	10/6/2017	SW8260B/VOC	Groundwater
680-144039-8	G6M-04-13X-Fall17	10/6/2017	SW8260B/VOC	Groundwater
680-144039-9	Dup-02-Fall17	10/6/2017	SW8260B/VOC	Groundwater
680-144039-10	Trip Blank	10/6/2017	SW8260B/VOC	Trip Blank

Summary - Data validation was performed on the data for seven (7) groundwater samples, two (2) field duplicate samples and one (1) trip blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/07/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – The laboratory noted that sample G6M-03-08X (Lab Sample ID: 680-144039-6) was analyzed outside holding times due to laboratory error. The remaining samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: The VOC results for sample G6M-03-08X (Lab Sample ID: 680-144039-6) were qualified as estimated (J/UJ).

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curves reported with these samples exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target compounds.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verifications reported with these samples exhibited acceptable %Ds (≤30.0%) for all target VOC with the exception of bromomethane in ICV 680-499231/20 analyzed on 10/20/2017. Bromomethane was non-detect in the associated sample.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs reported with these sample were within acceptance limits for all target VOCs with the exception of bromomethane in the CCV 680-499333/2 analyzed on 10/20/2017. Bromomethane was non-detect in the associated sample.

Qualification: None required.

Surrogates – The %Rs for the surrogate, toluene, d8, was just below the laboratory control limits of 89% in samples G6M-95-19X and G6M-95-20X (Lab Sample IDs: 680-144039-4 and -5). Both samples were reanalyzed outside holding times with acceptable surrogate recoveries. The initial sample results have been reported. Surrogate recoveries were within the control limits for all other samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries and RPDs for the LCS/LCDSs analyzed and reported with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X (Lab Sample ID: 680-144039-1) was spiked and analyzed as matrix spike/matrix spike duplicate samples. Percent recoveries and RPDs for the MS/MSD were within control limits for all VOC; the MS/MSD RPD for naphthalene was outside control limits. Naphthalene was non-detect in the associated sample; qualifications were not needed.

Qualification: None required.

Method Blank – Carbon disulfide was detected at 1.13 µg/L in MB 680-499333/8 analyzed on 10/20/2017. Carbon disulfide was non-detect in all samples; qualifications were not needed. The remaining method blanks prepared and analyzed with these samples were free of contamination.

Qualification: None required.

Field Blanks – One Trip Blank sample (Lab Sample ID: 680-144039-10) was submitted with this sample set. Target VOCs were non-detect in the TB sample.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-1-Fall17 (Lab Sample ID: 680-144039-2) was the field duplicate sample of G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1). Sample Dup-02-Fall17 (Lab Sample ID: 680-144039-9) was the field duplicate sample of G6M-04-13X-Fall17 (Lab Sample ID: 680-144039-8). Tetrachloroethene was in the FD sample pair G6M-04-13X-Fall17/Dup-02-Fall17 at 1.3 µg/L with an RPD of 0%.

The FD sample results for the FD sample pair G6M-13-06X-Fall17/Dup-1-Fall17 are summarized in the table below.

Lab Sample ID	680-144039-1	680-144039-2	
Client Sample ID	G6M-13-06X-Fall17	Dup-1-Fall17	
Collection Date	10/5/2017	10/5/2017	
Analyte	Result (µg/L)	Result (µg/L)	RPD (%)
1,2,4-Trimethylbenzene	0.53	ND	
1,3,5-Trimethylbenzene	ND	0.54	
1,2-Dichloroethene, Total	2.6	1.5	53.7
2-Butanone (MEK)	36	45	22.2
Acetone	36	26	32.3
cis-1,2-Dichloroethene	2.3	1.2	62.9
Ethylbenzene	13	12	8.0
Toluene	3.7	3.3	11.4
Vinyl chloride	1.1	0.98	11.5

Qualification: The %RPDs for total-1,2-dichloroethene, cis-1,2-dichloroethene and acetone were above 30%; the results for these compounds were qualified as estimated (J).

Compound Quantitation – Sample G6M-13-05X-Fall17 required a 10X dilution due to high levels of chlorinated VOCs; reporting limits were adjusted accordingly. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable with the noted exceptions and may be used for their intended purpose. All VOC results for sample G6M-03-08X (Lab Sample ID: 680-144039-6) were qualified as estimated (J/UJ) due to analysis outside of holding times. All other VOC results were acceptable as reported.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144039-1	G6M-13-06X-Fall17	1,2-Dichloroethene, Total	2.6		2.6	J
		Acetone	36		36	J
		cis-1,2-Dichloroethene	2.3		2.3	J
680-144039-2	Dup-1--Fall17	1,2-Dichloroethene, Total	1.5	J	1.5	J
		Acetone	26		26	J
		cis-1,2-Dichloroethene	1.2		1.2	J
680-144039-3	G6M-13-05X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-4	G6M-95-19X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-4	G6M-95-19X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-5	G6M-95-20X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-5	G6M-95-20X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-6	G6M-03-08X-Fall17	SW8260B/VOC	U/J	H	UJ/J	

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144039-7	G6M-04-14X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-8	G6M-04-13X-Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-9	Dup-02--Fall17	SW8260B/VOC	No qualifications needed.			
680-144039-10	Trip Blank	SW8260B/VOC	No qualifications needed.			

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144039
Laboratory: Test America-Savannah, GA	Date: 11/01/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144039-1	G6M-13-06X-Fall17	10/5/2017	RSK-175	Groundwater
680-144039-2	Dup-1-Fall17	10/5/2017	RSK-175	Groundwater
680-144039-3	G6M-13-05X-Fall17	10/5/2017	RSK-175	Groundwater
680-144039-6	G6M-03-08X-Fall17	10/4/2017	RSK-175	Groundwater
680-144039-8	G6M-04-13X-Fall17	10/6/2017	RSK-175	Groundwater
680-144039-9	Dup-02-Fall17	10/6/2017	RSK-175	Groundwater

Summary - Data validation was performed on the data for four (4) groundwater samples and two (2) field duplicate samples collected and submitted for Methane, Ethane, Ethylene analyses by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/07/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples prepared and analyzed with these samples met the %R and RPD control limits for all compounds.

Qualification: None required.

MS/MSD – Sample G6M-13-06X was spiked and analyzed as matrix spike/matrix spike duplicate samples. The %Rs and RPD for ethene and ethane were within control limits. The native sample result for methane was greater than four times the methane spike level; %Rs could not be calculated.

Qualification: None required.

Method Blank – The method blanks associated with the samples in this SDG were free of contamination.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-1-Fall17 (Lab Sample ID: 680-144039-2) was the field duplicate sample of G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1). Sample Dup-02-Fall17 (Lab Sample ID: 680-144039-9) was the field duplicate sample of G6M-04-13X-Fall17 (Lab Sample ID: 680-144039-8).

Detected results were comparable in both sets of FD samples with %RPDs less than 30%. FD results are summarized in the table below.

Lab Sample ID	680-144039-1	680-144039-2	
Client Sample ID	G6M-13-06X-Fall17	Dup-1-Fall17	
Collection Date	10/5/2017	10/5/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Ethane	6.0	6.9	13.9
Ethylene	6.3	6.9	9.1
Methane	6000	6500	8.0
	680-144039-8	680-144039-9	
	G6M-04-13X-Fall17	Dup-02-Fall17	
	10/6/2017	10/6/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Methane	0.33	0.43	26.3

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144039-1	G6M-13-06X-Fall17	RSK-175	No qualifications needed.			
680-144039-2	Dup-1--Fall17	RSK-175	No qualifications needed.			
680-144039-3	G6M-13-05X-Fall17	RSK-175	No qualifications needed.			
680-144039-6	G6M-03-08X-Fall17	RSK-175	No qualifications needed.			
680-144039-8	G6M-04-13X-Fall17	RSK-175	No qualifications needed.			
680-144039-9	Dup-02--Fall17	RSK-175	No qualifications needed.			

Dissolved Metals
SW 846/6010C/6020A
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144039
Laboratory: Test America-Savannah, GA	Date: 11/01/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144039-1	G6M-13-06X-Fall17	10/5/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-2	Dup-1-Fall17	10/5/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-3	G6M-13-05X-Fall17	10/5/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-4	G6M-95-19X-Fall17	10/5/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-5	G6M-95-20X-Fall17	10/5/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-6	G6M-03-08X-Fall17	10/4/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-7	G6M-04-14X-Fall17	10/6/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-8	G6M-04-13X-Fall17	10/6/2017	Dissolved Metals (As, Fe, Mn)	Groundwater
680-144039-9	Dup-02-Fall17	10/6/2017	Dissolved Metals (As, Fe, Mn)	Groundwater

Summary – Data validation was performed on the data for seven (7) groundwater samples and two (2) field duplicate samples collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. Iron and Manganese were analyzed and reported by method SW6010C and arsenic was analyzed and reported by method SW6020A.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/7/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The %Rs and RPDs were within control limits for arsenic. The native sample results for iron and manganese were greater than four (4) times the spike levels. The %Rs and RPDs could not be calculated; however, LCS recoveries were acceptable for all analytes.

Qualification: None required.

Method Blank – The method blanks associated and analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-1-Fall17 (Lab Sample ID: 680-144039-2) was the field duplicate sample of G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1). Sample Dup-02-Fall17 (Lab Sample ID: 680-144039-9) was the field duplicate sample of G6M-04-13X-Fall17 (Lab Sample ID: 680-144039-8).

The results for arsenic and iron were non-detect in the FD sample pair G6M-04-13X-Fall17/Dup-02-Fall17; manganese was reported at 1.0 µg/L in Dup-02-Fall17 but was non-detect (3.0 U) in the native sample.

The FD results for the sample pair G6M-13-06X/Dup-01-Fall17 are summarized in the table below.

Lab Sample ID	680-144039-1	680-144039-2	
Client Sample ID	G6M-13-06X-Fall17	Dup-1--Fall17	
Collection Date	10/5/2017	10/5/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Iron	220,000	230,000	4.4
Manganese	7,500	7,700	2.6
Arsenic	490	480	2.1

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144039-1	G6M-13-06X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-2	Dup-1-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-3	G6M-13-05X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-4	G6M-95-19X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-5	G6M-95-20X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-6	G6M-03-08X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-7	G6M-04-14X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-8	G6M-04-13X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144039-9	Dup-02-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			

Miscellaneous Parameters
Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144039
Laboratory: Test America-Savannah, GA	Date: 11/1/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144039-1	G6M-13-06X-Fall17	10/5/2017	Miscellaneous Parameters	Groundwater
680-144039-2	Dup-1-Fall17	10/5/2017	Miscellaneous Parameters	Groundwater
680-144039-3	G6M-13-05X-Fall17	10/5/2017	Miscellaneous Parameters	Groundwater
680-144039-6	G6M-03-08X-Fall17	10/4/2017	Miscellaneous Parameters	Groundwater
680-144039-8	G6M-04-13X-Fall17	10/6/2017	Miscellaneous Parameters	Groundwater
680-144039-9	Dup-02-Fall17	10/6/2017	Miscellaneous Parameters	Groundwater

Summary - Data validation was performed on the data for four (4) groundwater samples and two (2) field duplicate samples submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 10/7/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Method Blank –The method blanks for nitrate/nitrite, sulfide, sulfate and TOC were free from contamination. Alkalinity was reported in the associated MB sample at 3.22 mg/L. The results for alkalinity in four samples were greater than five (5) times the MB level.

Qualification: The results for alkalinity in samples G6M-04-13X-Fall17 and Dup-02-Fall17 (Lab Sample IDs: 680-14403988-8 and -9) were qualified as non-detect (U) at the reported concentration.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1) was spiked and analyzed as matrix spike/duplicate samples for sulfate, sulfide, nitrate/nitrite and TOC. The %Rs and RPDs for the MS/MSDs were within control limits for sulfate, sulfide and TOC. The %Rs for nitrate/nitrite and sulfate were below control limits.

Qualification: The detected result for nitrate/nitrite and the non-detect result for sulfate in the native sample G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1) were qualified as estimated (J/UJ).

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-1-Fall17 (Lab Sample ID: 680-144039-2) was the field duplicate sample of G6M-13-06X-Fall17 (Lab Sample ID: 680-144039-1). Sample Dup-02-Fall17 (Lab Sample ID: 680-144039-9) was the field duplicate sample of G6M-04-13X-Fall17 (Lab Sample ID: 680-144039-8).

The FD results for detected parameters were comparable. FD results are summarized in the table below.

Lab Sample ID	680-144039-1	680-144039-2	
Client Sample ID	G6M-13-06X-Fall17	Dup-1--Fall17	
Collection Date	10/5/2017	10/5/2017	
Analyte	**Result (mg/L)**	**Result (mg/L)**	**RPD (%)**
Nitrate/Nitrite-N	0.17	0.16	6.0
TOC	72	70	2.8
Alkalinity	440	500	12.8
	680-144039-8	680-144039-9	
	G6M-04-13X-Fall17	Dup-02--Fall17	
	10/6/2017	10/6/2017	
Analyte	**Result (mg/L)**	**Result (mg/L)**	**RPD (%)**
Nitrate/Nitrite-N	0.84	0.89	5.8
Sulfate	4.6	4.4	4.4
TOC	0.45	0.49	8.5

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J- qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-144039-1	G6M-13-06X-Fall17	Nitrate/nitrite	0.17		0.17	J
680-144039-1	G6M-13-06X-Fall17	Sulfate	1.0	U	1.0	UJ
680-144039-2	Dup-1--Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144039-3	G6M-13-05X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144039-6	G6M-03-08X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144039-8	G6M-04-13X-Fall17	Alkalinity	8.7		8.7	U
680-144039-9	Dup-02--Fall17	Alkalinity	8.9		8.9	U

AOC 50 Fall 2017 LTM - SDG144039

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144039-1	G6M-13-06X-Fall17	10/5/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.17	mg/L	J	0.1	0.05	0.019	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	6010C	Dissolved	Iron	220,000	ug/L		50	50	17	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	6010C	Dissolved	Manganese	7,500	ug/L		10	3	1	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	6020A	Dissolved	Arsenic	490	ug/L		3	3	1.5	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	8260B	Total/NA	cis-1,2-Dichloroethene	2.3	ug/L	J	1	1	0.41	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	8260B	Total/NA	Vinyl chloride	1.1	ug/L		1	1	0.5	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	9056A	Total/NA	Sulfate	1.0	mg/L	UJ	1	1	0.4	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	9060A	Total/NA	Total Organic Carbon	72	mg/L		2	1	0.31	2
680-144039-1	G6M-13-06X-Fall17	10/5/2017	RSK-175	Total/NA	Ethane	6.0	ug/L		1.1	1.1	0.55	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	RSK-175	Total/NA	Ethylene	6.3	ug/L		1	1	0.5	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	RSK-175	Total/NA	Methane	6,000	ug/L		390	77	39	1
680-144039-1	G6M-13-06X-Fall17	10/5/2017	SM 2320B	Total/NA	Alkalinity	440	mg/L		5	3.2	1.1	1
680-144039-10	Trip Blank	10/6/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-10	Trip Blank	10/6/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144039-10	Trip Blank	10/6/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144039-10	Trip Blank	10/6/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-10	Trip Blank	10/6/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-10	Trip Blank	10/6/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144039-2	Dup-1--Fall17	10/5/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.16	mg/L		0.1	0.05	0.019	1
680-144039-2	Dup-1--Fall17	10/5/2017	6010C	Dissolved	Iron	230,000	ug/L		50	50	17	1
680-144039-2	Dup-1--Fall17	10/5/2017	6010C	Dissolved	Manganese	7,700	ug/L		10	3	1	1
680-144039-2	Dup-1--Fall17	10/5/2017	6020A	Dissolved	Arsenic	480	ug/L		3	3	1.5	1
680-144039-2	Dup-1--Fall17	10/5/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-2	Dup-1--Fall17	10/5/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.2	ug/L	J	1	1	0.41	1
680-144039-2	Dup-1--Fall17	10/5/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144039-2	Dup-1--Fall17	10/5/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-2	Dup-1--Fall17	10/5/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-2	Dup-1--Fall17	10/5/2017	8260B	Total/NA	Vinyl chloride	0.98	ug/L	J	1	1	0.5	1
680-144039-2	Dup-1--Fall17	10/5/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144039-2	Dup-1--Fall17	10/5/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144039-2	Dup-1--Fall17	10/5/2017	9060A	Total/NA	Total Organic Carbon	70	mg/L		2	1	0.31	2
680-144039-2	Dup-1--Fall17	10/5/2017	RSK-175	Total/NA	Ethane	6.9	ug/L		1.1	1.1	0.55	1
680-144039-2	Dup-1--Fall17	10/5/2017	RSK-175	Total/NA	Ethylene	6.9	ug/L		1	1	0.5	1
680-144039-2	Dup-1--Fall17	10/5/2017	RSK-175	Total/NA	Methane	6,500	ug/L		390	77	39	1

AOC 50 Fall 2017 LTM - SDG144039

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144039-2	Dup-1--Fall17	10/5/2017	SM 2320B	Total/NA	Alkalinity	500	mg/L		5	3.2	1.1	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.04	mg/L	J	0.1	0.05	0.019	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	6010C	Dissolved	Iron	12,000	ug/L		50	50	17	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	6010C	Dissolved	Manganese	1,700	ug/L		10	3	1	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	6020A	Dissolved	Arsenic	35	ug/L		3	3	1.5	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	8260B	Total/NA	1,1-Dichloroethene	10	ug/L	U	10	10	3.6	10
680-144039-3	G6M-13-05X-Fall17	10/5/2017	8260B	Total/NA	cis-1,2-Dichloroethene	750	ug/L		10	10	4.1	10
680-144039-3	G6M-13-05X-Fall17	10/5/2017	8260B	Total/NA	Tetrachloroethene	280	ug/L		10	10	7.4	10
680-144039-3	G6M-13-05X-Fall17	10/5/2017	8260B	Total/NA	trans-1,2-Dichloroethene	10	ug/L	U	10	10	3.7	10
680-144039-3	G6M-13-05X-Fall17	10/5/2017	8260B	Total/NA	Trichloroethene	69	ug/L		10	10	4.8	10
680-144039-3	G6M-13-05X-Fall17	10/5/2017	8260B	Total/NA	Vinyl chloride	10	ug/L	U	10	10	5	10
680-144039-3	G6M-13-05X-Fall17	10/5/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	9060A	Total/NA	Total Organic Carbon	28	mg/L		1	0.5	0.16	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	RSK-175	Total/NA	Methane	32	ug/L		0.58	0.58	0.29	1
680-144039-3	G6M-13-05X-Fall17	10/5/2017	SM 2320B	Total/NA	Alkalinity	49	mg/L		5	3.2	1.1	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	6010C	Dissolved	Manganese	1,400	ug/L		10	3	1	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	8260B	Total/NA	Tetrachloroethene	1.9	ug/L		1	1	0.74	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-4	G6M-95-19X-Fall17	10/5/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	6010C	Dissolved	Iron	6,300	ug/L		50	50	17	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	6010C	Dissolved	Manganese	410	ug/L		10	3	1	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	6020A	Dissolved	Arsenic	18	ug/L		3	3	1.5	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-5	G6M-95-20X-Fall17	10/5/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	U	0.1	0.05	0.019	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	6010C	Dissolved	Iron	230	ug/L		50	50	17	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	6010C	Dissolved	Manganese	6,900	ug/L		10	3	1	1

AOC 50 Fall 2017 LTM - SDG144039

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144039-6	G6M-03-08X-Fall17	10/4/2017	6020A	Dissolved	Arsenic	6.6	ug/L		3	3	1.5	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	UJ	1	1	0.36	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.50	ug/L	J	1	1	0.41	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	UJ	1	1	0.74	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	UJ	1	1	0.37	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	UJ	1	1	0.48	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	UJ	1	1	0.5	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	9056A	Total/NA	Sulfate	9.5	mg/L		1	1	0.4	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	9060A	Total/NA	Total Organic Carbon	0.84	mg/L	J	1	0.5	0.16	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	RSK-175	Total/NA	Ethylene	0.90	ug/L	J	1	1	0.5	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	RSK-175	Total/NA	Methane	91	ug/L		0.58	0.58	0.29	1
680-144039-6	G6M-03-08X-Fall17	10/4/2017	SM 2320B	Total/NA	Alkalinity	110	mg/L		5	3.2	1.1	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	6010C	Dissolved	Iron	17	ug/L	J	50	50	17	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	6010C	Dissolved	Manganese	3.2	ug/L	J	10	3	1	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	6020A	Dissolved	Arsenic	7.1	ug/L		3	3	1.5	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L		1	1	0.74	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-7	G6M-04-14X-Fall17	10/6/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.84	mg/L		0.1	0.05	0.019	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	6010C	Dissolved	Manganese	3.0	ug/L	U	10	3	1	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	8260B	Total/NA	Tetrachloroethene	1.3	ug/L		1	1	0.74	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	9056A	Total/NA	Sulfate	4.6	mg/L		1	1	0.4	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	9060A	Total/NA	Total Organic Carbon	0.45	mg/L	J	1	0.5	0.16	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144039-8	G6M-04-13X-Fall17	10/6/2017	RSK-175	Total/NA	Methane	0.33	ug/L	J	0.58	0.58	0.29	1

AOC 50 Fall 2017 LTM - SDG144039

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144039-8	G6M-04-13X-Fall17	10/6/2017	SM 2320B	Total/NA	Alkalinity	8.7	mg/L	U	5	3.2	1.1	1
680-144039-9	Dup-02--Fall17	10/6/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.89	mg/L		0.1	0.05	0.019	1
680-144039-9	Dup-02--Fall17	10/6/2017	6010C	Dissolved	Iron	50	ug/L	U	50	50	17	1
680-144039-9	Dup-02--Fall17	10/6/2017	6010C	Dissolved	Manganese	1.0	ug/L	J	10	3	1	1
680-144039-9	Dup-02--Fall17	10/6/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144039-9	Dup-02--Fall17	10/6/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144039-9	Dup-02--Fall17	10/6/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144039-9	Dup-02--Fall17	10/6/2017	8260B	Total/NA	Tetrachloroethene	1.3	ug/L		1	1	0.74	1
680-144039-9	Dup-02--Fall17	10/6/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144039-9	Dup-02--Fall17	10/6/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144039-9	Dup-02--Fall17	10/6/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144039-9	Dup-02--Fall17	10/6/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144039-9	Dup-02--Fall17	10/6/2017	9056A	Total/NA	Sulfate	4.4	mg/L		1	1	0.4	1
680-144039-9	Dup-02--Fall17	10/6/2017	9060A	Total/NA	Total Organic Carbon	0.49	mg/L	J	1	0.5	0.16	1
680-144039-9	Dup-02--Fall17	10/6/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144039-9	Dup-02--Fall17	10/6/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144039-9	Dup-02--Fall17	10/6/2017	RSK-175	Total/NA	Methane	0.43	ug/L	J	0.58	0.58	0.29	1
680-144039-9	Dup-02--Fall17	10/6/2017	SM 2320B	Total/NA	Alkalinity	8.9	mg/L	U	5	3.2	1.1	1

Qualified Data

Notes:

mg/l = milligram per liter

µg/L = microgram per liter

LOQ = Limit of Quantitation

LOD = Limit of Detection

DL = Method Detection Limit

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144217
Laboratory: Test America-Savannah, GA	Date: 11/2/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144217-1	Trip Blank	10/11/2017	SW8260B/VOCs	Trip Blank
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	SW8260B/VOCs	Rinsate Blank
680-144217-3	G6M-07-02X-Fall17	10/10/2017	SW8260B/VOCs	Groundwater
680-144217-4	DUP-3-Fall17	10/10/2017	SW8260B/VOCs	Groundwater
680-144217-5	MW-3-Fall17	10/11/2017	SW8260B/VOCs	Groundwater
680-144217-6	G6M-97-05B-Fall17	10/11/2017	SW8260B/VOCs	Groundwater
680-144217-7	DUP-4-Fall17	10/11/2017	SW8260B/VOCs	Groundwater
680-144217-8	Trip Blank	10/11/2017	SW8260B/VOCs	Trip Blank
680-144217-9	G6M-04-15X-Fall17	10/9/2017	SW8260B/VOCs	Groundwater
680-144217-12	XSA-12-96X-Fall17	10/10/2017	SW8260B/VOCs	Groundwater
680-144217-13	XSA-12-97X-Fall17	10/10/2017	SW8260B/VOCs	Groundwater
680-144217-14	XSA-12-95X-Fall17	10/10/2017	SW8260B/VOCs	Groundwater
680-144217-15	MW-7-Fall17	10/11/2017	SW8260B/VOCs	Groundwater

Summary - Data validation was performed on the data for eight (8) groundwater samples, two (2) field duplicate samples, one (1) rinsate blank and two (2) trip blank samples collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition –All samples arrived at the laboratory on 10/12/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented. Sample G6M-04-09X-Fall17 was submitted with these samples but was missing a sample bottle; all analyses for this sample were canceled.

Qualification: None required.

Holding Times –All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curves reported with these samples exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target compounds.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verifications reported with these samples exhibited acceptable %Ds (≤30.0%) for all target VOC.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs reported with these sample were within acceptance limits for all target VOCs except for hexachlorobutadiene in the CCVs 680-499323/4 and 680-499358/3 analyzed on 10/20 and 10/21/2017. Hexachlorobutadiene was non-detect in associated samples.

Qualification: None required.

Surrogates – Surrogate recoveries were within the control limits for all samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries and RPDs for the LCS/LCDSs analyzed and reported with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank –The method blank samples prepared and analyzed with these samples were free of contamination.

Qualification: None required.

Field Blanks – One rinsate blank, Micro Rinse Blank-Fall17 (Lab Sample ID: 680-144217-2) was submitted with these samples. Acetone was reported in this RB sample at 8.9 µg/L. Acetone was not detected in any associated native sample.

Two Trip Blank samples (Lab Sample IDs: 680-144217-1 and -8) were submitted with this sample set. Target VOCs were non-detect in both TB samples.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-3-Fall17 (Lab Sample ID: 680-144217-4) was the field duplicate sample of G6M-07-02X-Fall17 (Lab Sample ID: 680-144217-3). Sample Dup-4-Fall17 (Lab Sample ID: 680-144217-7) was the field duplicate sample of G6M-97-05B-Fall17 (Lab Sample ID: 680-144217-6).

The FD sample pair G6M-07-02X-Fall 17/Dup-3-Fall17 were analyzed at a 20X dilution due to high levels of PCE and non-target compounds. The RPDs between the detected results for n-butylbenzene and PCE in these samples were greater than 30%. This discrepancy is likely due to matrix interferences caused by the high levels of non-target VOC.

The FD sample results for the FD sample pair G6M-97-05B-Fall17/Dup-4-Fall17 were comparable with RPDs less than 10%.

The FD sample results are summarized in the table below.

Lab Sample ID	680-144217-3	680-144217-4	
Client Sample ID	G6M-07-02X-Fall17	DUP-3-Fall17	
Collection Date	10/10/2017	10/10/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
1,2,4-Trimethylbenzene	13	ND	
2-Butanone (MEK)	150	170	12.5
n-Butylbenzene	19	13	37.5
Tetrachloroethene	910	440	69.6
Carbon disulfide	ND	31	
	680-144217-6	680-144217-7	
	G6M-97-05B-Fall17	DUP-4-Fall17	
	10/11/2017	10/11/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
1,2-Dichloroethene, Total	4.4	4.7	6.6
cis-1,2-Dichloroethene	4.4	4.7	6.6
Tetrachloroethene	140	140	0
Trichloroethene	16	17	6.1
1,1,2-Trichloroethane	ND	4.1	

Qualification: The results for n-butylbenzene and PCE in the FD sample pair G6M-07-02X-Fall 17/Dup-3-Fall17 were qualified as estimated (J).

Compound Quantitation – Samples G6M-07-02X-Fall 17 and Dup-3-Fall17 required 20X dilutions due to high levels of PCE and non-target VOC. Reporting limits were adjusted accordingly. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable with the noted exceptions and may be used for their intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144217-1	Trip Blank	SW8260B/VOCs	No qualifications needed.			
680-144217-2	Micro Rinse Blank-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-3	G6M-07-02X-Fall17	n-butylbenzene	19	J	19	J
		PCE	910		910	J
680-144217-4	DUP-3-Fall17	n-butylbenzene	13	J	13	J
		PCE	440		440	J
680-144217-5	MW-3-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-6	G6M-97-05B-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-7	DUP-4-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-8	Trip Blank	SW8260B/VOCs	No qualifications needed.			
680-144217-9	G6M-04-15X-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-12	XSA-12-96X-Fall17	SW8260B/VOCs	No qualifications needed.			

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144217-13	XSA-12-97X-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-14	XSA-12-95X-Fall17	SW8260B/VOCs	No qualifications needed.			
680-144217-15	MW-7-Fall17	SW8260B/VOCs	No qualifications needed.			

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144217
Laboratory: Test America-Savannah, GA	Date: 11/03/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	RSK-175/MEE	Rinsate Blank
680-144217-3	G6M-07-02X-Fall17	10/10/2017	RSK-175/MEE	Groundwater
680-144217-4	DUP-3-Fall17	10/10/2017	RSK-175/MEE	Groundwater
680-144217-5	MW-3-Fall17	10/11/2017	RSK-175/MEE	Groundwater
680-144217-6	G6M-97-05B-Fall17	10/11/2017	RSK-175/MEE	Groundwater
680-144217-7	DUP-4-Fall17	10/11/2017	RSK-175/MEE	Groundwater

Summary - Data validation was performed on the data for three (3) groundwater samples, one (1) rinsate blank sample and two (2) field duplicate samples collected and submitted for Methane, Ethane, Ethylene analyses by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/12/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples prepared and analyzed with these samples met the %R and RPD control limits for all compounds.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks associated with the samples in this SDG were free of contamination.

Qualification: None required.

Field Blanks – One rinsate blank Micro Rinse Blank-Fall17 (Lab Sample ID: 680-144217-2) was submitted with these samples. The results for MEE in the RB sample were all non-detect.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-3-Fall17 (Lab Sample ID: 680-144217-4) was the field duplicate sample of G6M-07-02X-Fall17 (Lab Sample ID: 680-144217-3). Sample Dup-4-Fall17 (Lab Sample ID: 680-144217-7) was the field duplicate sample of G6M-97-05B-Fall17 (Lab Sample ID: 680-144217-6).

The MEE results for the FD sample pair G6M-97-05B-Fall17/Dup-4-Fall17 were all non-detect. The RPDs for the results for ethane and ethylene in the FD sample pair G6M-07-02X-Fall17/ Dup-3-Fall17 were greater than 30%. The results for methane were comparable. FD results are summarized in the table below.

Lab Sample ID	680-144217-3	680-144217-4	
Client Sample ID	G6M-07-02X-Fall17	DUP-3-Fall17	
Collection Date	10/10/2017	10/10/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Ethane	24	14	52.6
Ethylene	4.3	3.0	35.6
Methane	1,200	1,100	8.7

Qualification: The results for ethane and ethylene were qualified as estimated (J) in the FD sample pair G6M-07-02X-Fall17/ Dup-3-Fall17.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144217-2	Micro Rinse Blank-Fall17	RSK-175/MEE	No qualifications needed.			
680-144217-3	G6M-07-02X-Fall17	Ethane	24		24	J
680-144217-3	G6M-07-02X-Fall17	Ethylene	4.3		4.3	J
680-144217-4	DUP-3-Fall17	Ethane	14		14	J
680-144217-4	DUP-3-Fall17	Ethylene	3.0		3.0	J
680-144217-5	MW-3-Fall17	RSK-175/MEE	No qualifications needed.			
680-144217-6	G6M-97-05B-Fall17	RSK-175/MEE	No qualifications needed.			
680-144217-7	DUP-4-Fall17	RSK-175/MEE	No qualifications needed.			

Dissolved Metals
SW 846/6020A
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144217
Laboratory: Test America-Savannah, GA	Date: 11/03/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	Total As, Fe, Mn	Rinsate Blank
680-144217-3	G6M-07-02X-Fall17	10/10/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-4	DUP-3-Fall17	10/10/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-5	MW-3-Fall17	10/11/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-6	G6M-97-05B-Fall17	10/11/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-7	DUP-4-Fall17	10/11/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-9	G6M-04-15X-Fall17	10/9/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-10	G6M-04-31X-Fall17	10/9/2017	Dissolved As only	Groundwater
680-144217-12	XSA-12-96X-Fall17	10/10/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-13	XSA-12-97X-Fall17	10/10/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-14	XSA-12-95X-Fall17	10/10/2017	Dissolved As, Fe, Mn	Groundwater
680-144217-15	MW-7-Fall17	10/11/2017	Dissolved As, Fe, Mn	Groundwater

Summary – Data validation was performed on the data for nine (9) groundwater samples, one (1) rinsate blank sample and two (2) field duplicate samples collected from AOC 50. All samples were analyzed for target analytes, arsenic, iron and manganese by method SW6020A due to laboratory instrumentation problems and backlog for method SW6010C.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/12/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented. Sample G6M-04-09X-Fall17 was submitted with these samples but was missing a sample bottle; all analyses for this sample were cancelled.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the control limits established in the QAPP.

Qualification: None required.

MS/MSD – Project specific matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blank, MB 680-498793/1-A, analyzed on 10/26/2017 and reported for dissolved arsenic, iron and manganese had a detectable result for iron at 66.9 µg/L. The method blank, MB 680-498682, analyzed on 10/18/2017 was non-detect for all target analytes.

Qualification: The result for dissolved iron in samples G6M-97-05B-Fall17, Dup-4-Fall17 and total iron in sample Micro Rinse Blank-Fall 17 (Lab Sample IDs: 680-144217-6, 07 and -2) were less than five (5) times the MB level and were qualified as non-detect (U).

Field Blank – One rinsate blank Micro Rinse Blank-Fall17 (Lab Sample ID: 680-144217-2) was submitted with these samples. The result for total iron in this RB sample was reported at 66 µg/L and was qualified based on the method blank. Low level results for iron in associated samples were qualified based on the method blank level.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-3-Fall17 (Lab Sample ID: 680-144217-4) was the field duplicate sample of G6M-07-02X-Fall17 (Lab Sample ID: 680-144217-3). Sample Dup-4-Fall17 (Lab Sample ID: 680-144217-7) was the field duplicate sample of G6M-97-05B-Fall17 (Lab Sample ID: 680-144217-6).

The RPDs for the detected analyte results in both sets of FD sample pairs were greater than 30%. The discrepancy in the FD sample pair G6M-07-02X-Fall17/Dup-3-Fall17 is likely due to sample matrix. The FD results are summarized in the table below.

Lab Sample ID	680-144217-3	680-144217-4	
Client Sample ID	G6M-07-02X-Fall17	DUP-3-Fall17	
Collection Date	10/10/2017	10/10/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Arsenic	37	200	137
Iron	220,000	1,200,000	138
Manganese	14,000	75,000	137
	680-144217-6	680-144217-7	
	G6M-97-05B-Fall17	DUP-4-Fall17	
	10/11/2017	10/11/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Manganese	3.3	8.1	84.2

Qualification: The results for arsenic, iron and manganese in the FD sample pair G6M-07-02X-Fall17/Dup-3-Fall17 and the results for manganese in the FD sample pair G6M-97-05B-Fall17/Dup-4-Fall17 were qualified as estimated (J).

Compound Quantitation – Samples G6M-04-15X-Fall17 and MW-7-Fall17 (Lab Sample IDs: 680-144217-7 and -15) were analyzed at 10X dilutions due to high levels of manganese. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis/Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144217-2	Micro Rinse Blank-Fall17	Total Iron	66	J	100	U
680-144217-3	G6M-07-02X-Fall17	Dissolved Arsenic	37		37	J
680-144217-3	G6M-07-02X-Fall17	Dissolved Iron	220,000		220,000	J
680-144217-3	G6M-07-02X-Fall17	Dissolved Manganese	14,000		14,000	J
680-144217-4	DUP-3-Fall17	Dissolved Arsenic	200		200	J
680-144217-4	DUP-3-Fall17	Dissolved Iron	1,200,000		1,200,000	J
680-144217-4	DUP-3-Fall17	Dissolved Manganese	75,000		75,000	J
680-144217-5	MW-3-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144217-6	G6M-97-05B-Fall17	Dissolved Iron	65	J	100	U
680-144217-7	DUP-4-Fall17	Dissolved Iron	130		190	U
680-144217-9	G6M-04-15X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144217-10	G6M-04-31X-Fall17	Dissolved As only	No qualifications needed.			
680-144217-12	XSA-12-96X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144217-13	XSA-12-97X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144217-14	XSA-12-95X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144217-15	MW-7-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			

Miscellaneous Parameters

Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)

USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144217
Laboratory: Test America-Savannah, GA	Date: 11/3/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	Miscellaneous Parameters	Rinsate Blank
680-144217-3	G6M-07-02X-Fall17	10/10/2017	Miscellaneous Parameters	Groundwater
680-144217-4	DUP-3-Fall17	10/10/2017	Miscellaneous Parameters	Groundwater
680-144217-5	MW-3-Fall17	10/11/2017	Miscellaneous Parameters	Groundwater
680-144217-6	G6M-97-05B-Fall17	10/11/2017	Miscellaneous Parameters	Groundwater
680-144217-7	DUP-4-Fall17	10/11/2017	Miscellaneous Parameters	Groundwater

Summary - Data validation was performed on the data for three (3) groundwater samples, one (1) rinsate blank sample and two (2) field duplicate samples submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 10/12/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Method Blank –The method blanks for nitrate/nitrite, sulfide and sulfate were free from contamination. Alkalinity was reported in the associated MB sample at 3.64 mg/L. TOC was reported in the associated MB sample at 0.167 mg/L. The results for alkalinity in four samples were greater than five (5) times the MB level.

Qualification: The results for TOC in samples Micro Rinse Blank-Fall17, G6M-97-05B-Fall17, and Dup-4-Fall17 (Lab Sample IDs: 680-144217-1, -6 and -7) were qualified as non-detect at the reporting limit (1 U).

Field Blank – One rinsate blank Micro Rinse Blank-Fall17 (Lab Sample ID: 680-144217-2) was submitted with these samples. TOC was reported in the rinsate blank at 0.51 mg/L, comparable to the TOC level reported in the MB; this result was qualified as non-detect based on the method blank TOC results.

Qualification: None required.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/duplicate samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Two sets of field duplicate samples were submitted with this sample set. Sample Dup-3-Fall17 (Lab Sample ID: 680-144217-4) was the field duplicate sample of G6M-07-02X-Fall17 (Lab Sample ID: 680-144217-3). Sample Dup-4-Fall17 (Lab Sample ID: 680-144217-7) was the field duplicate sample of G6M-97-05B-Fall17 (Lab Sample ID: 680-144217-6).

Sulfide was non-detect in both set of FD samples and TOC was non-detect in FD sample pair G6M-97-05B-Fall17/DUP-4-Fall17. The FD results for detected parameters were comparable and are summarized in the table below.

Lab Sample ID	680-144217-3	680-144217-4	
Client Sample ID	G6M-07-02X-Fall17	DUP-3-Fall17	
Collection Date	10/10/2017	10/10/2017	
Analyte	**Result (mg/L)**	**Result (mg/L)**	**RPD (%)**
Nitrate/Nitrite-N	2.0	1.9	5.1
Sulfate	20	17	16.2
Total Organic Carbon	3,400	3,000	12.5
Alkalinity	520	530	1.9
	680-144217-6	680-144217-7	
	G6M-97-05B-Fall17	DUP-4-Fall17	
	10/11/2017	10/11/2017	
Analyte	**Result (mg/L)**	**Result (mg/L)**	**RPD (%)**
Nitrate/Nitrite-N	0.89	0.88	11.3
Sulfate	7.4	7.4	0
Alkalinity	32	32	0

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J- qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-144217-2	Micro Rinse Blank-Fall17	TOC	0.51	J	1	U
680-144217-3	G6M-07-02X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-4	DUP-3-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-5	MW-3-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-6	G6M-97-05B-Fall17	TOC	0.50	J	1	U
680-144217-7	DUP-4-Fall17	TOC	0.46	J	1	U
680-144217-9	G6M-04-15X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-10	G6M-04-31X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-12	XSA-12-96X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-13	XSA-12-97X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144217-14	XSA-12-95X-Fall17	Miscellaneous Parameters	No qualifications needed.			

AOC 50 Fall 2017 LTM - SDG 144217

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144217-1	Trip Blank	10/11/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-1	Trip Blank	10/11/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144217-1	Trip Blank	10/11/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144217-1	Trip Blank	10/11/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-1	Trip Blank	10/11/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144217-1	Trip Blank	10/11/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144217-10	G6M-04-31X-Fall17	10/9/2017	6020A	Dissolved	Arsenic	410	ug/L		3	3	1.5	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	6020A	Dissolved	Iron	8,200	ug/L		100	75	25	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	6020A	Dissolved	Manganese	6,200	ug/L		5	5	1.8	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	8260B	Total/NA	1,1-Dichloroethene	0.64	ug/L	J	1	1	0.36	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	8260B	Total/NA	cis-1,2-Dichloroethene	20	ug/L		1	1	0.41	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	8260B	Total/NA	Tetrachloroethene	26	ug/L		1	1	0.74	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	8260B	Total/NA	trans-1,2-Dichloroethene	5.0	ug/L		1	1	0.37	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	8260B	Total/NA	Trichloroethene	20	ug/L		1	1	0.48	1
680-144217-12	XSA-12-96X-Fall17	10/10/2017	8260B	Total/NA	Vinyl chloride	16	ug/L		1	1	0.5	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	6020A	Dissolved	Iron	1,500	ug/L		100	75	25	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	6020A	Dissolved	Manganese	78	ug/L		5	5	1.8	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	8260B	Total/NA	Tetrachloroethene	8.0	ug/L		1	1	0.74	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144217-13	XSA-12-97X-Fall17	10/10/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	6020A	Dissolved	Arsenic	3.2	ug/L		3	3	1.5	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	6020A	Dissolved	Iron	7,800	ug/L		100	75	25	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	6020A	Dissolved	Manganese	9,700	ug/L		5	5	1.8	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	8260B	Total/NA	cis-1,2-Dichloroethene	26	ug/L		1	1	0.41	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	8260B	Total/NA	Tetrachloroethene	36	ug/L		1	1	0.74	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	8260B	Total/NA	trans-1,2-Dichloroethene	3.1	ug/L		1	1	0.37	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	8260B	Total/NA	Trichloroethene	11	ug/L		1	1	0.48	1
680-144217-14	XSA-12-95X-Fall17	10/10/2017	8260B	Total/NA	Vinyl chloride	5.6	ug/L		1	1	0.5	1
680-144217-15	MW-7-Fall17	10/11/2017	6020A	Dissolved	Arsenic	160	ug/L		3	3	1.5	1
680-144217-15	MW-7-Fall17	10/11/2017	6020A	Dissolved	Iron	20,000	ug/L		100	75	25	1
680-144217-15	MW-7-Fall17	10/11/2017	6020A	Dissolved	Manganese	19,000	ug/L		50	50	18	10
680-144217-15	MW-7-Fall17	10/11/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-15	MW-7-Fall17	10/11/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.4	ug/L		1	1	0.41	1
680-144217-15	MW-7-Fall17	10/11/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144217-15	MW-7-Fall17	10/11/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-15	MW-7-Fall17	10/11/2017	8260B	Total/NA	Trichloroethene	0.53	ug/L	J	1	1	0.48	1
680-144217-15	MW-7-Fall17	10/11/2017	8260B	Total/NA	Vinyl chloride	15	ug/L		1	1	0.5	1

AOC 50 Fall 2017 LTM - SDG 144217

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	U	0.1	0.05	0.019	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	6020A	Total/NA	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	6020A	Total/NA	Iron	100	ug/L	U	100	75	25	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	6020A	Total/NA	Manganese	3.6	ug/L	J	5	5	1.8	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	RSK-175	Total/NA	Methane	0.58	ug/L	U	0.58	0.58	0.29	1
680-144217-2	Micro Rinse Blank-Fall17	10/10/2017	SM 2320B	Total/NA	Alkalinity	3.2	mg/L	U	5	3.2	1.1	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	353.2	Total/NA	Nitrate/Nitrite-N	2.0	mg/L		0.2	0.1	0.038	2
680-144217-3	G6M-07-02X-Fall17	10/10/2017	6020A	Dissolved	Arsenic	37	ug/L	J	3	3	1.5	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	6020A	Dissolved	Iron	220,000	ug/L	J	100	75	25	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	6020A	Dissolved	Manganese	14,000	ug/L	J	5	5	1.8	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-144217-3	G6M-07-02X-Fall17	10/10/2017	8260B	Total/NA	cis-1,2-Dichloroethene	20	ug/L	U	20	20	8.2	20
680-144217-3	G6M-07-02X-Fall17	10/10/2017	8260B	Total/NA	Tetrachloroethene	910	ug/L	J	20	20	15	20
680-144217-3	G6M-07-02X-Fall17	10/10/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-144217-3	G6M-07-02X-Fall17	10/10/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20
680-144217-3	G6M-07-02X-Fall17	10/10/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-144217-3	G6M-07-02X-Fall17	10/10/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	9056A	Total/NA	Sulfate	20	mg/L		2	2	0.8	2
680-144217-3	G6M-07-02X-Fall17	10/10/2017	9060A	Total/NA	Total Organic Carbon	3,400	mg/L		80	40	12	80
680-144217-3	G6M-07-02X-Fall17	10/10/2017	RSK-175	Total/NA	Ethane	24	ug/L	J	1.1	1.1	0.55	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	RSK-175	Total/NA	Ethylene	4.3	ug/L	J	1	1	0.5	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	RSK-175	Total/NA	Methane (TCD)	1,200	ug/L		390	77	39	1
680-144217-3	G6M-07-02X-Fall17	10/10/2017	SM 2320B	Total/NA	Alkalinity	520	mg/L		5	3.2	1.1	1
680-144217-4	DUP-3-Fall17	10/10/2017	353.2	Total/NA	Nitrate/Nitrite-N	1.9	mg/L		0.2	0.1	0.038	2
680-144217-4	DUP-3-Fall17	10/10/2017	6020A	Dissolved	Arsenic	200	ug/L	J	30	30	15	1
680-144217-4	DUP-3-Fall17	10/10/2017	6020A	Dissolved	Iron	1,200,000	ug/L	J	1000	750	250	1
680-144217-4	DUP-3-Fall17	10/10/2017	6020A	Dissolved	Manganese	75,000	ug/L	J	50	50	18	1
680-144217-4	DUP-3-Fall17	10/10/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-144217-4	DUP-3-Fall17	10/10/2017	8260B	Total/NA	cis-1,2-Dichloroethene	20	ug/L	U	20	20	8.2	20
680-144217-4	DUP-3-Fall17	10/10/2017	8260B	Total/NA	Tetrachloroethene	440	ug/L	J	20	20	15	20
680-144217-4	DUP-3-Fall17	10/10/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-144217-4	DUP-3-Fall17	10/10/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20

AOC 50 Fall 2017 LTM - SDG 144217

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144217-4	DUP-3-Fall17	10/10/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-144217-4	DUP-3-Fall17	10/10/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144217-4	DUP-3-Fall17	10/10/2017	9056A	Total/NA	Sulfate	17	mg/L		2	2	0.8	2
680-144217-4	DUP-3-Fall17	10/10/2017	9060A	Total/NA	Total Organic Carbon	3,000	mg/L		70	35	11	70
680-144217-4	DUP-3-Fall17	10/10/2017	RSK-175	Total/NA	Ethane	14	ug/L	J	1.1	1.1	0.55	1
680-144217-4	DUP-3-Fall17	10/10/2017	RSK-175	Total/NA	Ethylene	3.0	ug/L	J	1	1	0.5	1
680-144217-4	DUP-3-Fall17	10/10/2017	RSK-175	Total/NA	Methane (TCD)	1,100	ug/L		390	77	39	1
680-144217-4	DUP-3-Fall17	10/10/2017	SM 2320B	Total/NA	Alkalinity	530	mg/L		5	3.2	1.1	1
680-144217-5	MW-3-Fall17	10/11/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.06	mg/L	J	0.1	0.05	0.019	1
680-144217-5	MW-3-Fall17	10/11/2017	6020A	Dissolved	Arsenic	440	ug/L		3	3	1.5	1
680-144217-5	MW-3-Fall17	10/11/2017	6020A	Dissolved	Iron	56,000	ug/L		100	75	25	1
680-144217-5	MW-3-Fall17	10/11/2017	6020A	Dissolved	Manganese	9,200	ug/L		5	5	1.8	1
680-144217-5	MW-3-Fall17	10/11/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-5	MW-3-Fall17	10/11/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L		1	1	0.41	1
680-144217-5	MW-3-Fall17	10/11/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144217-5	MW-3-Fall17	10/11/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-5	MW-3-Fall17	10/11/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144217-5	MW-3-Fall17	10/11/2017	8260B	Total/NA	Vinyl chloride	0.60	ug/L	J	1	1	0.5	1
680-144217-5	MW-3-Fall17	10/11/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144217-5	MW-3-Fall17	10/11/2017	9056A	Total/NA	Sulfate	0.62	mg/L	J	1	1	0.4	1
680-144217-5	MW-3-Fall17	10/11/2017	9060A	Total/NA	Total Organic Carbon	5.0	mg/L		1	0.5	0.16	1
680-144217-5	MW-3-Fall17	10/11/2017	RSK-175	Total/NA	Ethane	1.9	ug/L		1.1	1.1	0.55	1
680-144217-5	MW-3-Fall17	10/11/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144217-5	MW-3-Fall17	10/11/2017	RSK-175	Total/NA	Methane (TCD)	5,500	ug/L		390	77	39	1
680-144217-5	MW-3-Fall17	10/11/2017	SM 2320B	Total/NA	Alkalinity	280	mg/L		5	3.2	1.1	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.89	mg/L		0.1	0.05	0.019	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	6020A	Dissolved	Iron	100	ug/L	U	100	75	25	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	6020A	Dissolved	Manganese	3.3	ug/L	J	5	5	1.8	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	8260B	Total/NA	cis-1,2-Dichloroethene	4.4	ug/L		1	1	0.41	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	8260B	Total/NA	Tetrachloroethene	140	ug/L		1	1	0.74	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	8260B	Total/NA	Trichloroethene	16	ug/L		1	1	0.48	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	9056A	Total/NA	Sulfate	7.4	mg/L		1	1	0.4	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	RSK-175	Total/NA	Methane	0.58	ug/L	U	0.58	0.58	0.29	1
680-144217-6	G6M-97-05B-Fall17	10/11/2017	SM 2320B	Total/NA	Alkalinity	32	mg/L		5	3.2	1.1	1
680-144217-7	DUP-4-Fall17	10/11/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.88	mg/L		0.1	0.05	0.019	1

AOC 50 Fall 2017 LTM - SDG 144217

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144217-7	DUP-4-Fall17	10/11/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144217-7	DUP-4-Fall17	10/11/2017	6020A	Dissolved	Iron	190	ug/L	U	100	75	25	1
680-144217-7	DUP-4-Fall17	10/11/2017	6020A	Dissolved	Manganese	8.1	ug/L	J	5	5	1.8	1
680-144217-7	DUP-4-Fall17	10/11/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-7	DUP-4-Fall17	10/11/2017	8260B	Total/NA	cis-1,2-Dichloroethene	4.7	ug/L		1	1	0.41	1
680-144217-7	DUP-4-Fall17	10/11/2017	8260B	Total/NA	Tetrachloroethene	140	ug/L		1	1	0.74	1
680-144217-7	DUP-4-Fall17	10/11/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-7	DUP-4-Fall17	10/11/2017	8260B	Total/NA	Trichloroethene	17	ug/L		1	1	0.48	1
680-144217-7	DUP-4-Fall17	10/11/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144217-7	DUP-4-Fall17	10/11/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144217-7	DUP-4-Fall17	10/11/2017	9056A	Total/NA	Sulfate	7.4	mg/L		1	1	0.4	1
680-144217-7	DUP-4-Fall17	10/11/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-144217-7	DUP-4-Fall17	10/11/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144217-7	DUP-4-Fall17	10/11/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144217-7	DUP-4-Fall17	10/11/2017	RSK-175	Total/NA	Methane	0.58	ug/L	U	0.58	0.58	0.29	1
680-144217-7	DUP-4-Fall17	10/11/2017	SM 2320B	Total/NA	Alkalinity	32	mg/L		5	3.2	1.1	1
680-144217-8	Trip Blank	10/11/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-8	Trip Blank	10/11/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144217-8	Trip Blank	10/11/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144217-8	Trip Blank	10/11/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-8	Trip Blank	10/11/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144217-8	Trip Blank	10/11/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	6020A	Dissolved	Arsenic	70	ug/L		3	3	1.5	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	6020A	Dissolved	Iron	15,000	ug/L		100	75	25	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	6020A	Dissolved	Manganese	19,000	ug/L		50	50	18	10
680-144217-9	G6M-04-15X-Fall17	10/9/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144217-9	G6M-04-15X-Fall17	10/9/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1

Notes:
mg/l = milligram per liter
µg/L = microgram per liter
LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Method Detection Limit

Qualified Data

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144305
Laboratory: Test America-Savannah, GA	Date: 11/01/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144305-1	G6M-04-10X-Fall17	10/12/2017	SW8260B/VOCS	Groundwater
680-144305-2	G6M-04-10A-Fall17	10/12/2017	SW8260B/VOCS	Groundwater
680-144305-3	G6M-03-02X-Fall17	10/12/2017	SW8260B/VOCS	Groundwater
680-144305-4	G6M-03-01X-Fall17	10/12/2017	SW8260B/VOCS	Groundwater
680-144305-5	G6M-02-01X-Fall17	10/13/2017	SW8260B/VOCS	Groundwater
680-144305-6	DUP-05-Fall17	10/13/2017	SW8260B/VOCS	Groundwater
680-144305-7	G6M-04-01X-Fall17	10/13/2017	SW8260B/VOCS	Groundwater
680-144305-8	Trip Blank	10/12/2017	SW8260B/VOCS	Trip Blank

Summary - Data validation was performed on the data for six (6) groundwater samples, one (1) field duplicate sample and one (1) trip blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/14/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – The laboratory noted that sample G6M-03-01X (Lab Sample ID: 680-144305-4) was analyzed one day outside holding times due to laboratory error. All other samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: The VOC results for sample G6M-03-01X (Lab Sample ID: 680-144305-4) were qualified as estimated (J/UJ).

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curves reported with these samples exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target compounds.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verifications reported with these samples exhibited acceptable %Ds (≤30.0%) for all target VOCs.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs reported with these sample were within acceptance limits for all target VOCs.

Qualification: None required.

Surrogates – Surrogate recoveries were within the control limits for all samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries (%R) and RPDs for the LCS/LCDSs analyzed and reported with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks analyzed with these samples were free of contamination.

Qualification: None required.

Field Blanks – One Trip Blank sample (Lab Sample ID: 680-144305-8) was submitted with this sample set. Target VOCs were non-detect in the TB sample.

Qualification: None required.

Field Duplicate – Sample Dup-05-Fall17 (Lab Sample ID: 680-144305-6) was the field duplicate sample of G6M-02-01X-Fall17 (Lab Sample ID: 680-144305-5). The low-level FD sample results are summarized in the table below.

Lab Sample ID	680-144305-5	680-144305-6	
Client Sample ID	G6M-02-01X-Fall17	DUP-05-Fall17	
Collection Date	10/13/2017	10/13/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
1,2,4-Trimethylbenzene	0.87	0.90	3.4
1,2-Dichloroethene, Total	0.77	0.83	7.5
cis-1,2-Dichloroethene	0.77	0.83	7.5
Vinyl chloride	0.52	ND	

Qualification: None required.

Compound Quantitation – Sample G6M-03-01X-Fall17 required a 2X dilution due to high levels of chlorinated VOC. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable with the noted exception and may be used for their intended purpose. All VOC results for sample G6M-03-01X (Lab Sample ID: 680-144305-4) were qualified as estimated (J/UJ) due to analysis outside of holding times. All other VOC results are acceptable as reported.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144305-1	G6M-04-10X-Fall17	SW8260B/VOCS	No qualifications needed.			
680-144305-2	G6M-04-10A-Fall17	SW8260B/VOCS	No qualifications needed.			
680-144305-3	G6M-03-02X-Fall17	SW8260B/VOCS	No qualifications needed.			
680-144305-4	G6M-03-01X-Fall17	SW8260B/VOCS	U/J	H	UJ/J	
680-144305-5	G6M-02-01X-Fall17	SW8260B/VOCS	No qualifications needed.			
680-144305-6	DUP-05-Fall17	SW8260B/VOCS	No qualifications needed.			
680-144305-7	G6M-04-01X-Fall17	SW8260B/VOCS	No qualifications needed.			
680-144305-8	Trip Blank	SW8260B/VOCS	No qualifications needed.			

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144305
Laboratory: Test America-Savannah, GA	Date: 11/02/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144305-1	G6M-04-10X-Fall17	10/12/2017	RSK-175/MEE	Groundwater
680-144305-2	G6M-04-10A-Fall17	10/12/2017	RSK-175/MEE	Groundwater
680-144305-3	G6M-03-02X-Fall17	10/12/2017	RSK-175/MEE	Groundwater
680-144305-4	G6M-03-01X-Fall17	10/12/2017	RSK-175/MEE	Groundwater
680-144305-5	G6M-02-01X-Fall17	10/13/2017	RSK-175/MEE	Groundwater
680-144305-6	DUP-05-Fall17	10/13/2017	RSK-175/MEE	Groundwater

Summary - Data validation was performed on the data for five (5) groundwater samples and one (1) field duplicate sample collected and submitted for Methane, Ethane, Ethylene analyses by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/14/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples prepared and analyzed with these samples met the %R and RPD control limits for all compounds.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks associated with the samples in this SDG were free of contamination.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Sample Dup-05-Fall17 (Lab Sample ID: 680-144305-6) was the field duplicate sample of G6M-02-01X-Fall17 (Lab Sample ID: 680-144305-5). Ethane was non-detect in both samples. Detected results for methane and ethylene were comparable with %RPDs less than 20%. FD results are summarized in the table below.

Lab Sample ID	680-144305-5	680-144305-6	
Client Sample ID	G6M-02-01X-Fall17	DUP-05-Fall17	
Collection Date	10/13/2017	10/13/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Ethylene	3.8	4.4	14.6
Methane	12,000	13,000	8.0

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144305-1	G6M-04-10X-Fall17	RSK-175/MEE	No qualifications needed.			
680-144305-2	G6M-04-10A-Fall17	RSK-175/MEE	No qualifications needed.			
680-144305-3	G6M-03-02X-Fall17	RSK-175/MEE	No qualifications needed.			
680-144305-4	G6M-03-01X-Fall17	RSK-175/MEE	No qualifications needed.			
680-144305-5	G6M-02-01X-Fall17	RSK-175/MEE	No qualifications needed.			
680-144305-6	DUP-05-Fall17	RSK-175/MEE	No qualifications needed.			

Dissolved Metals
SW 846/6020A
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144305
Laboratory: Test America-Savannah, GA	Date: 11/02/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144305-1	G6M-04-10X-Fall17	10/12/2017	Dissolved Metals	Groundwater
680-144305-2	G6M-04-10A-Fall17	10/12/2017	Dissolved Metals	Groundwater
680-144305-3	G6M-03-02X-Fall17	10/12/2017	Dissolved Metals	Groundwater
680-144305-4	G6M-03-01X-Fall17	10/12/2017	Dissolved Metals	Groundwater
680-144305-5	G6M-02-01X-Fall17	10/13/2017	Dissolved Metals	Groundwater
680-144305-6	DUP-05-Fall17	10/13/2017	Dissolved Metals	Groundwater
680-144305-7	G6M-04-01X-Fall17	10/13/2017	Dissolved Metals	Groundwater

Summary – Data validation was performed on the data for six (6) groundwater samples and one (1) field duplicate sample collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. All samples were analyzed for target analytes, arsenic, iron and manganese by method SW6020A due to laboratory instrumentation problems and backlog for method SW6010C.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/14/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the control limits established in the QAPP.

Qualification: None required.

MS/MSD – Project specific matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks associated and analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Sample Dup-05-Fall17 (Lab Sample ID: 680-144305-6) was the field duplicate sample of G6M-02-01X-Fall17 (Lab Sample ID: 680-144305-5). There was excellent correlation between the FD sample pair; the FD results are summarized in the table below.

Lab Sample ID	680-144305-5	680-144305-6	
Client Sample ID	G6M-02-01X-Fall17	DUP-05-Fall17	
Collection Date	10/13/2017	10/13/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Arsenic	400	400	0
Iron	76,000	76,000	0
Manganese	1,300	1,300	0

Qualification: None required.

Compound Quantitation – Samples G6M-04-03X-Fall17 and G6M-04-01X-Fall 17 (Lab Sample IDs: 680-144305-4 and -7) were analyzed at 10X dilutions due to high levels of manganese. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144305-1	G6M-04-10X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144305-2	G6M-04-10A-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144305-3	G6M-03-02X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144305-4	G6M-03-01X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144305-5	G6M-02-01X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144305-6	DUP-05-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144305-7	G6M-04-01X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			

Miscellaneous Parameters
Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144305
Laboratory: Test America-Savannah, GA	Date: 11/2/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144305-1	G6M-04-10X-Fall17	10/12/2017	Miscellaneous Parameters	Groundwater
680-144305-2	G6M-04-10A-Fall17	10/12/2017	Miscellaneous Parameters	Groundwater
680-144305-3	G6M-03-02X-Fall17	10/12/2017	Miscellaneous Parameters	Groundwater
680-144305-4	G6M-03-01X-Fall17	10/12/2017	Miscellaneous Parameters	Groundwater
680-144305-5	G6M-02-01X-Fall17	10/13/2017	Miscellaneous Parameters	Groundwater
680-144305-6	DUP-05-Fall17	10/13/2017	Miscellaneous Parameters	Groundwater

Summary - Data validation was performed on the data for five (5) groundwater samples and one (1) field duplicate sample submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 10/14/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Method Blank –The method blanks for nitrate/nitrite, sulfide, and sulfate were free from contamination. Alkalinity was reported in associated MB samples at 2.56 and 3.42 mg/L. TOC was reported in the MB sample at 0.167 mg/L. The results for alkalinity in all samples were greater than five (5) times the MB levels; qualifications were not needed. The results for TOC in four samples were greater than five (5) times the MB level.

Qualification: The estimated result for TOC in sample G6M-04-10X-Fall17 (Lab Sample ID: 680-144305-1) was qualified as non-detect at the reporting limit (1.0 U).

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/duplicate samples were not submitted with this samples set.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Sample Dup-05-Fall17 (Lab Sample ID: 680-144305-6) was the field duplicate sample of G6M-02-01X-Fall17 (Lab Sample ID: 680-144305-5). The FD results for detected parameters were comparable. FD results are summarized in the table below.

Lab Sample ID	680-144305-5	680-144305-6	
Client Sample ID	G6M-02-01X-Fall17	DUP-05-Fall17	
Collection Date	10/13/2017	10/13/2017	
Analyte	**Result (µg/L)**	**Result (µg/L)**	**RPD (%)**
Nitrate/Nitrite-N	0.10	0.11	9.5
Sulfate	0.57	0.61	6.8
TOC	3.3	3.3	0
Alkalinity	64	71	8.9

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J- qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-144305-1	G6M-04-10X-Fall17	TOC	0.90	J	1.0	U
680-144305-2	G6M-04-10A-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144305-3	G6M-03-02X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144305-4	G6M-03-01X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144305-5	G6M-02-01X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144305-6	DUP-05-Fall17	Miscellaneous Parameters	No qualifications needed.			

AOC 50 Fall 2017 LTM - SDG 144305

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144305-1	G6M-04-10X-Fall17	10/12/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.46	mg/L		0.1	0.05	0.019	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	6020A	Dissolved	Iron	75	ug/L	U	100	75	25	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	6020A	Dissolved	Manganese	1,200	ug/L		5	5	1.8	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	8260B	Total/NA	Tetrachloroethene	1.2	ug/L		1	1	0.74	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	9056A	Total/NA	Sulfate	34	mg/L		1	1	0.4	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	9060A	Total/NA	Total Organic Carbon - Duplicates	1.0	mg/L	U	1	0.5	0.16	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	RSK-175	Total/NA	Methane (TCD)	760	ug/L		390	77	39	1
680-144305-1	G6M-04-10X-Fall17	10/12/2017	SM 2320B	Total/NA	Alkalinity	13	mg/L		5	3.2	1.1	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.12	mg/L		0.1	0.05	0.019	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	6020A	Dissolved	Arsenic	290	ug/L		3	3	1.5	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	6020A	Dissolved	Iron	100,000	ug/L		100	75	25	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	6020A	Dissolved	Manganese	4,600	ug/L		5	5	1.8	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.2	ug/L		1	1	0.41	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	8260B	Total/NA	Vinyl chloride	0.81	ug/L	J	1	1	0.5	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	9034	Total/NA	Sulfide	1.2	mg/L		1	1	1	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	9056A	Total/NA	Sulfate	8.4	mg/L		1	1	0.4	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	9060A	Total/NA	Total Organic Carbon - Duplicates	8.4	mg/L		1	0.5	0.16	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	RSK-175	Total/NA	Ethylene	3.6	ug/L		1	1	0.5	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	RSK-175	Total/NA	Methane (TCD)	9,200	ug/L		390	77	39	1
680-144305-2	G6M-04-10A-Fall17	10/12/2017	SM 2320B	Total/NA	Alkalinity	78	mg/L		5	3.2	1.1	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.15	mg/L		0.1	0.05	0.019	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	6020A	Dissolved	Arsenic	250	ug/L		3	3	1.5	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	6020A	Dissolved	Iron	150,000	ug/L		100	75	25	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	6020A	Dissolved	Manganese	2,000	ug/L		5	5	1.8	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	8260B	Total/NA	cis-1,2-Dichloroethene	3.5	ug/L		1	1	0.41	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1

AOC 50 Fall 2017 LTM - SDG 144305

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144305-3	G6M-03-02X-Fall17	10/12/2017	8260B	Total/NA	Vinyl chloride	4.0	ug/L		1	1	0.5	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	9060A	Total/NA	Total Organic Carbon - Duplicates	21	mg/L		1	0.5	0.16	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	RSK-175	Total/NA	Ethylene	13	ug/L		1	1	0.5	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	RSK-175	Total/NA	Methane (TCD)	16,000	ug/L		390	77	39	1
680-144305-3	G6M-03-02X-Fall17	10/12/2017	SM 2320B	Total/NA	Alkalinity	140	mg/L		5	3.2	1.1	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.12	mg/L		0.1	0.05	0.019	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	6020A	Dissolved	Arsenic	130	ug/L		3	3	1.5	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	6020A	Dissolved	Iron	210,000	ug/L		100	75	25	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	6020A	Dissolved	Manganese	65,000	ug/L		50	50	18	10
680-144305-4	G6M-03-01X-Fall17	10/12/2017	8260B	Total/NA	1,1-Dichloroethene	2.0	ug/L	UJ	2	2	0.72	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	8260B	Total/NA	cis-1,2-Dichloroethene	240	ug/L	J	2	2	0.82	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	8260B	Total/NA	Tetrachloroethene	2.0	ug/L	UJ	2	2	1.5	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	8260B	Total/NA	trans-1,2-Dichloroethene	2.0	ug/L	UJ	2	2	0.74	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	8260B	Total/NA	Trichloroethene	9.7	ug/L	J	2	2	0.96	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	8260B	Total/NA	Vinyl chloride	160	ug/L	J	2	2	1	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	9056A	Total/NA	Sulfate	0.50	mg/L	J	1	1	0.4	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	9060A	Total/NA	Total Organic Carbon - Duplicates	72	mg/L		2	1	0.31	2
680-144305-4	G6M-03-01X-Fall17	10/12/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	RSK-175	Total/NA	Methane (TCD)	8,000	ug/L		390	77	39	1
680-144305-4	G6M-03-01X-Fall17	10/12/2017	SM 2320B	Total/NA	Alkalinity	390	mg/L		5	3.2	1.1	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.10	mg/L		0.1	0.05	0.019	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	6020A	Dissolved	Arsenic	400	ug/L		3	3	1.5	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	6020A	Dissolved	Iron	76,000	ug/L		100	75	25	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	6020A	Dissolved	Manganese	1,300	ug/L		5	5	1.8	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.77	ug/L	J	1	1	0.41	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	8260B	Total/NA	Vinyl chloride	0.52	ug/L	J	1	1	0.5	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	9056A	Total/NA	Sulfate	0.57	mg/L	J	1	1	0.4	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	9060A	Total/NA	Total Organic Carbon - Duplicates	3.3	mg/L		1	0.5	0.16	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	RSK-175	Total/NA	Ethylene	3.8	ug/L		1	1	0.5	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	RSK-175	Total/NA	Methane (TCD)	12,000	ug/L		390	77	39	1
680-144305-5	G6M-02-01X-Fall17	10/13/2017	SM 2320B	Total/NA	Alkalinity	64	mg/L		5	3.2	1.1	1
680-144305-6	DUP-05-Fall17	10/13/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.11	mg/L		0.1	0.05	0.019	1

AOC 50 Fall 2017 LTM - SDG 144305

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144305-6	DUP-05-Fall17	10/13/2017	6020A	Dissolved	Arsenic	400	ug/L		3	3	1.5	1
680-144305-6	DUP-05-Fall17	10/13/2017	6020A	Dissolved	Iron	76,000	ug/L		100	75	25	1
680-144305-6	DUP-05-Fall17	10/13/2017	6020A	Dissolved	Manganese	1,300	ug/L		5	5	1.8	1
680-144305-6	DUP-05-Fall17	10/13/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-6	DUP-05-Fall17	10/13/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.83	ug/L	J	1	1	0.41	1
680-144305-6	DUP-05-Fall17	10/13/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144305-6	DUP-05-Fall17	10/13/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-6	DUP-05-Fall17	10/13/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144305-6	DUP-05-Fall17	10/13/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144305-6	DUP-05-Fall17	10/13/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144305-6	DUP-05-Fall17	10/13/2017	9056A	Total/NA	Sulfate	0.61	mg/L	J	1	1	0.4	1
680-144305-6	DUP-05-Fall17	10/13/2017	9060A	Total/NA	Total Organic Carbon - Duplicates	3.3	mg/L		1	0.5	0.16	1
680-144305-6	DUP-05-Fall17	10/13/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144305-6	DUP-05-Fall17	10/13/2017	RSK-175	Total/NA	Ethylene	4.4	ug/L		1	1	0.5	1
680-144305-6	DUP-05-Fall17	10/13/2017	RSK-175	Total/NA	Methane (TCD)	13,000	ug/L		390	77	39	1
680-144305-6	DUP-05-Fall17	10/13/2017	SM 2320B	Total/NA	Alkalinity	71	mg/L		5	3.2	1.1	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	6020A	Dissolved	Arsenic	450	ug/L		3	3	1.5	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	6020A	Dissolved	Iron	81,000	ug/L		100	75	25	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	6020A	Dissolved	Manganese	18,000	ug/L		50	50	18	10
680-144305-7	G6M-04-01X-Fall17	10/13/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144305-7	G6M-04-01X-Fall17	10/13/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144305-8	Trip Blank	10/12/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144305-8	Trip Blank	10/12/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144305-8	Trip Blank	10/12/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144305-8	Trip Blank	10/12/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144305-8	Trip Blank	10/12/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144305-8	Trip Blank	10/12/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1

Notes:

mg/l = milligram per liter

µg/L = microgram per liter

LOQ = Limit of Quantitation

LOD = Limit of Detection

DL = Method Detection Limit

Qualified Data

J = Estimated result

U = non-detect

UJ = Estiamted non-detect

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144476
Laboratory: Test America-Savannah, GA	Date: 11/09/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144476-1	G6M-02-04X	10/16/2017	SW8260B/VOCs	Groundwater
680-144476-2	G6M-13-01X	10/16/2017	SW8260B/VOCs	Groundwater
680-144476-3	G6M-13-04X	10/16/2017	SW8260B/VOCs	Groundwater
680-144476-4	G6M-04-07X	10/17/2017	SW8260B/VOCs	Groundwater
680-144476-5	G6M-04-06X	10/17/2017	SW8260B/VOCs	Groundwater
680-144476-6	G6M-03-09X	10/17/2017	SW8260B/VOCs	Groundwater
680-144476-7	G6M-04-05X	10/17/2017	SW8260B/VOCs	Groundwater
680-144476-8	Trip Blank	10/16/2017	SW8260B/VOCs	Trip Blank
680-144476-9	G6M-13-03X-Fall17	10/18/2017	SW8260B/VOCs	Groundwater
680-144476-11	G6M-02-08X-Fall17	10/18/2017	SW8260B/VOCs	Groundwater

Summary - Data validation was performed on the data for nine (9) groundwater samples and one (1) trip blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/19/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required for preserved aqueous samples.

Qualification: None required.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curves reported with these samples exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target VOC.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verifications reported with these samples exhibited acceptable %Ds (≤30.0%) for all target VOCs.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs reported with these sample were within acceptance limits for all target VOCs with the exception of hexachlorobutadiene and dichlorodifluoromethane in CCV 680-500485/3 analyzed on 10/30/2017. The results for these compounds were non-detect in all samples.

Qualification: None required.

Surrogates – Surrogate recoveries were within the control limits for all samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries (%R) and RPDs for the LCS/LCDSs analyzed and reported with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-04X (Lab Sample ID: 680-144476-3) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The RPD for bromomethane was outside control limit; bromomethane was non-detect in all samples.

Qualification: None required.

Method Blank – The method blanks analyzed with these samples were free of contamination.

Qualification: None required.

Field Blanks – One Trip Blank sample (Lab Sample ID: 680-144476-8) was submitted with this sample set. Target VOCs were non-detect in the TB sample.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Sample G6M-02-08X-Fall17 (Lab Sample ID: 680-144476-11) required a 20X dilution due to sample foaming during screening; reporting limits were adjusted accordingly. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable as reported and may be used for their intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144476-1	G6M-02-04X	VOCs	No qualifications needed.			
680-144476-2	G6M-13-01X	VOCs	No qualifications needed.			
680-144476-3	G6M-13-04X	VOCs	No qualifications needed.			
680-144476-4	G6M-04-07X	VOCs	No qualifications needed.			
680-144476-5	G6M-04-06X	VOCs	No qualifications needed.			
680-144476-6	G6M-03-09X	VOCs	No qualifications needed.			
680-144476-7	G6M-04-05X	VOCs	No qualifications needed.			
680-144476-8	Trip Blank	VOCs	No qualifications needed.			
680-144476-9	G6M-13-03X-Fall17	VOCs	No qualifications needed.			
680-144476-11	G6M-02-08X-Fall17	VOCs	No qualifications needed.			

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144476
Laboratory: Test America-Savannah, GA	Date: 11/10/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144476-3	G6M-13-04X	10/16/2017	RSK175-MEE	Groundwater
680-144476-4	G6M-04-07X	10/17/2017	RSK175-MEE	Groundwater
680-144476-5	G6M-04-06X	10/17/2017	RSK175-MEE	Groundwater
680-144476-6	G6M-03-09X	10/17/2017	RSK175-MEE	Groundwater
680-144476-7	G6M-04-05X	10/17/2017	RSK175-MEE	Groundwater
680-144476-11	G6M-02-08X-Fall17	10/18/2017	RSK175-MEE	Groundwater

Summary - Data validation was performed on the data for six (6) groundwater samples collected and submitted for Methane, Ethane, Ethylene analyses by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/19/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples prepared and analyzed with these samples met the %R and RPD control limits for all compounds.

Qualification: None required.

MS/MSD – Sample G6M-13-04X (Lab Sample ID: 680-144476-3) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The %Rs and RPDs for ethane and ethylene were within control limits.

Qualification: None required.

Method Blank – The method blanks associated with the samples in this SDG were free of contamination.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144476-3	G6M-13-04X	RSK175-MEE	No qualifications needed.			
680-144476-4	G6M-04-07X	RSK175-MEE	No qualifications needed.			
680-144476-5	G6M-04-06X	RSK175-MEE	No qualifications needed.			
680-144476-6	G6M-03-09X	RSK175-MEE	No qualifications needed.			
680-144476-7	G6M-04-05X	RSK175-MEE	No qualifications needed.			
680-144476-11	G6M-02-08X-Fall17	RSK175-MEE	No qualifications needed.			

Dissolved Metals
SW 846/6020A
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144476
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144476-1	G6M-02-04X	10/16/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-2	G6M-13-01X	10/16/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-3	G6M-13-04X	10/16/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-4	G6M-04-07X	10/17/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-5	G6M-04-06X	10/17/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-6	G6M-03-09X	10/17/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-7	G6M-04-05X	10/17/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-9	G6M-13-03X-Fall17	10/18/2017	Dissolved As, Fe, Mn	Groundwater
680-144476-10	G6M-04-22X-Fall17	10/18/2017	Dissolved As only	Groundwater
680-144476-11	G6M-02-08X-Fall17	10/18/2017	Dissolved As, Fe, Mn	Groundwater

Summary – Data validation was performed on the data for ten (10) groundwater samples collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. Sample G6M-04-22X-Fall17 was submitted for dissolved arsenic analysis only. All samples were analyzed for target analytes, arsenic, iron and manganese by method SW6020A due to laboratory instrumentation problems and backlog for method SW6010C.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/19/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-04X (Lab Sample ID: 680-144476-3) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The native sample results for iron and manganese were greater than four (4) times the spike level; the %Rs could not be calculated. The %R for arsenic from the MSD was below control limits.

Qualification: The result for arsenic in the native sample was qualified as estimated (J) by the laboratory; the J qualifier was reported.

Method Blank – The method blanks associated and analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Sample G6M-02-08X-Fall17 (Lab Sample ID: 680-144476-11) was analyzed at a 10X dilution due to a high level of manganese. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144476-1	G6M-02-04X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-2	G6M-13-01X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-3	G6M-13-04X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-4	G6M-04-07X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-5	G6M-04-06X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-6	G6M-03-09X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-7	G6M-04-05X	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-9	G6M-13-03X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144476-10	G6M-04-22X-Fall17	Dissolved As only	No qualifications needed.			
680-144476-11	G6M-02-08X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			

Miscellaneous Parameters
Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144476
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144476-3	G6M-13-04X	10/16/2017	Miscellaneous Parameters	Groundwater
680-144476-4	G6M-04-07X	10/17/2017	Miscellaneous Parameters	Groundwater
680-144476-5	G6M-04-06X	10/17/2017	Miscellaneous Parameters	Groundwater
680-144476-6	G6M-03-09X	10/17/2017	Miscellaneous Parameters	Groundwater
680-144476-7	G6M-04-05X	10/17/2017	Miscellaneous Parameters	Groundwater
680-144476-11	G6M-02-08X-Fall17	10/18/2017	Miscellaneous Parameters	Groundwater

Summary - Data validation was performed on the data for six (6) groundwater samples submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 10/19/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Sample G6M-13-04X (Lab Sample ID: 680-144476-3) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The MS/MSD %Rs and RPD were with control limits for all spiked analytes except for nitrate/nitrite. The %Rs for the nitrate/nitrite MS/MSDs were below control limits.

Qualification: The non-detect results for nitrate/nitrite one in sample G6M-13-04X (Lab Sample ID: 680-144476-3) were qualified as estimated (UJ).

Method Blank –The method blanks for nitrate/nitrite, sulfide, and sulfate were free from contamination. Alkalinity was reported in the associated MB sample at 3.56 mg/L. TOC was reported in the MB sample at 0.237 mg/L. The results for alkalinity in all samples were greater than five (5) times the MB levels; qualifications were not needed. The results for TOC in three samples were greater than five (5) times the MB level.

Qualification: The estimated result for TOC in samples G6M-04-06X, G6M-03-09X and G6M-04-05X (Lab Sample IDs: 680-144476-5, -6 and -7) were qualified as non-detect at the reporting limit (1.0 U).

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Sample G6M-02-08X-Fall17 (Lab Sample ID: 680-144476-11) was analyzed at dilution for sulfate and TOC analyses. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J- qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable with the noted qualifications. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-144476-3	G6M-13-04X	Nitrate/Nitrite-N	0.05	UJ	0.05	UJ
680-144476-4	G6M-04-07X	Miscellaneous Parameters	No qualifications needed.			
680-144476-5	G6M-04-06X	TOC	0.90	J	1.0	U
680-144476-6	G6M-03-09X	TOC	0.72	J	1.0	U
680-144476-7	G6M-04-05X	TOC	0.91	J	1.0	U
680-144476-11	G6M-02-08X-Fall17	Miscellaneous Parameters	No qualifications needed.			

AOC 50 Fall 2017 LTM - SDG 144476

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144476-1	G6M-02-04X	10/16/2017	6020A	Dissolved	Arsenic	440	ug/L		3	3	1.5	1
680-144476-1	G6M-02-04X	10/16/2017	6020A	Dissolved	Iron	22,000	ug/L		100	75	25	1
680-144476-1	G6M-02-04X	10/16/2017	6020A	Dissolved	Manganese	1,300	ug/L		5	5	1.8	1
680-144476-1	G6M-02-04X	10/16/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-1	G6M-02-04X	10/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1	ug/L	U	1	1	0.41	1
680-144476-1	G6M-02-04X	10/16/2017	8260B	Total/NA	Tetrachloroethene	1	ug/L	U	1	1	0.74	1
680-144476-1	G6M-02-04X	10/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-1	G6M-02-04X	10/16/2017	8260B	Total/NA	Trichloroethene	1	ug/L		1	1	0.48	1
680-144476-1	G6M-02-04X	10/16/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1
680-144476-10	G6M-04-22X-Fall17	10/18/2017	6020A	Dissolved	Arsenic	970	ug/L		3	3	1.5	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.26	mg/L		0.1	0.05	0.019	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	6020A	Dissolved	Arsenic	370	ug/L		3	3	1.5	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	6020A	Dissolved	Iron	640,000	ug/L		1000	750	250	10
680-144476-11	G6M-02-08X-Fall17	10/18/2017	6020A	Dissolved	Manganese	3,300	ug/L		5	5	1.8	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	8260B	Total/NA	1,1-Dichloroethene	20	ug/L	U	20	20	7.2	20
680-144476-11	G6M-02-08X-Fall17	10/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	20	ug/L	U	20	20	8.2	20
680-144476-11	G6M-02-08X-Fall17	10/18/2017	8260B	Total/NA	Tetrachloroethene	20	ug/L	U	20	20	15	20
680-144476-11	G6M-02-08X-Fall17	10/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	20	ug/L	U	20	20	7.4	20
680-144476-11	G6M-02-08X-Fall17	10/18/2017	8260B	Total/NA	Trichloroethene	20	ug/L	U	20	20	9.6	20
680-144476-11	G6M-02-08X-Fall17	10/18/2017	8260B	Total/NA	Vinyl chloride	20	ug/L	U	20	20	10	20
680-144476-11	G6M-02-08X-Fall17	10/18/2017	9034	Total/NA	Sulfide	1.6	mg/L		1	1	1	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	9056A	Total/NA	Sulfate	2.0	mg/L	U	2	2	0.8	2
680-144476-11	G6M-02-08X-Fall17	10/18/2017	9060A	Total/NA	Total Organic Carbon	250	mg/L		7.7	3.8	1.2	7.69
680-144476-11	G6M-02-08X-Fall17	10/18/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	RSK-175	Total/NA	Ethylene	1	ug/L	U	1	1	0.5	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	RSK-175	Total/NA	Methane	16,000	ug/L		390	77	39	1
680-144476-11	G6M-02-08X-Fall17	10/18/2017	SM 2320B	Total/NA	Alkalinity	680	mg/L		5	3.2	1.1	1
680-144476-2	G6M-13-01X	10/16/2017	6020A	Dissolved	Arsenic	3.6	ug/L		3	3	1.5	1
680-144476-2	G6M-13-01X	10/16/2017	6020A	Dissolved	Iron	830	ug/L		100	75	25	1
680-144476-2	G6M-13-01X	10/16/2017	6020A	Dissolved	Manganese	34	ug/L		5	5	1.8	1
680-144476-2	G6M-13-01X	10/16/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-2	G6M-13-01X	10/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.65	ug/L	J	1	1	0.41	1
680-144476-2	G6M-13-01X	10/16/2017	8260B	Total/NA	Tetrachloroethene	10	ug/L		1	1	0.74	1
680-144476-2	G6M-13-01X	10/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-2	G6M-13-01X	10/16/2017	8260B	Total/NA	Trichloroethene	0.79	ug/L	J	1	1	0.48	1
680-144476-2	G6M-13-01X	10/16/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144476-3	G6M-13-04X	10/16/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	UJ	0.1	0.05	0.019	1
680-144476-3	G6M-13-04X	10/16/2017	6020A	Dissolved	Arsenic	340	ug/L	J	3	3	1.5	1
680-144476-3	G6M-13-04X	10/16/2017	6020A	Dissolved	Iron	27,000	ug/L		100	75	25	1
680-144476-3	G6M-13-04X	10/16/2017	6020A	Dissolved	Manganese	7,100	ug/L		5	5	1.8	1
680-144476-3	G6M-13-04X	10/16/2017	8260B	Total/NA	1,1-Dichloroethene	0.71	ug/L	J	1	1	0.36	1
680-144476-3	G6M-13-04X	10/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	25	ug/L		1	1	0.41	1
680-144476-3	G6M-13-04X	10/16/2017	8260B	Total/NA	Tetrachloroethene	40	ug/L		1	1	0.74	1
680-144476-3	G6M-13-04X	10/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.81	ug/L	J	1	1	0.37	1
680-144476-3	G6M-13-04X	10/16/2017	8260B	Total/NA	Trichloroethene	40	ug/L		1	1	0.48	1
680-144476-3	G6M-13-04X	10/16/2017	8260B	Total/NA	Vinyl chloride	33	ug/L		1	1	0.5	1
680-144476-3	G6M-13-04X	10/16/2017	9034	Total/NA	Sulfide	1	mg/L	U	1	1	1	1
680-144476-3	G6M-13-04X	10/16/2017	9056A	Total/NA	Sulfate	4.1	mg/L		1	1	0.4	1
680-144476-3	G6M-13-04X	10/16/2017	9060A	Total/NA	Total Organic Carbon	1.8	mg/L		1	0.5	0.16	1
680-144476-3	G6M-13-04X	10/16/2017	RSK-175	Total/NA	Ethane	1.5	ug/L		1.1	1.1	0.55	1
680-144476-3	G6M-13-04X	10/16/2017	RSK-175	Total/NA	Ethylene	7.6	ug/L		1	1	0.5	1
680-144476-3	G6M-13-04X	10/16/2017	RSK-175	Total/NA	Methane	2,500	ug/L		390	77	39	1
680-144476-3	G6M-13-04X	10/16/2017	SM 2320B	Total/NA	Alkalinity	190	mg/L		5	3.2	1.1	1
680-144476-4	G6M-04-07X	10/17/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	U	0.1	0.05	0.019	1
680-144476-4	G6M-04-07X	10/17/2017	6020A	Dissolved	Arsenic	18	ug/L		3	3	1.5	1
680-144476-4	G6M-04-07X	10/17/2017	6020A	Dissolved	Iron	1,700	ug/L		100	75	25	1
680-144476-4	G6M-04-07X	10/17/2017	6020A	Dissolved	Manganese	5,200	ug/L		5	5	1.8	1
680-144476-4	G6M-04-07X	10/17/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-4	G6M-04-07X	10/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	56	ug/L		1	1	0.41	1
680-144476-4	G6M-04-07X	10/17/2017	8260B	Total/NA	Tetrachloroethene	38	ug/L		1	1	0.74	1
680-144476-4	G6M-04-07X	10/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.39	ug/L	J	1	1	0.37	1
680-144476-4	G6M-04-07X	10/17/2017	8260B	Total/NA	Trichloroethene	20	ug/L		1	1	0.48	1
680-144476-4	G6M-04-07X	10/17/2017	8260B	Total/NA	Vinyl chloride	3.1	ug/L		1	1	0.5	1
680-144476-4	G6M-04-07X	10/17/2017	9034	Total/NA	Sulfide	1	mg/L	U	1	1	1	1
680-144476-4	G6M-04-07X	10/17/2017	9056A	Total/NA	Sulfate	7.6	mg/L		1	1	0.4	1
680-144476-4	G6M-04-07X	10/17/2017	9060A	Total/NA	Total Organic Carbon	1.1	mg/L		1	0.5	0.16	1
680-144476-4	G6M-04-07X	10/17/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144476-4	G6M-04-07X	10/17/2017	RSK-175	Total/NA	Ethylene	1	ug/L	U	1	1	0.5	1
680-144476-4	G6M-04-07X	10/17/2017	RSK-175	Total/NA	Methane	760	ug/L		390	77	39	1
680-144476-4	G6M-04-07X	10/17/2017	SM 2320B	Total/NA	Alkalinity	170	mg/L		5	3.2	1.1	1
680-144476-5	G6M-04-06X	10/17/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.07	mg/L	J	0.1	0.05	0.019	1
680-144476-5	G6M-04-06X	10/17/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144476-5	G6M-04-06X	10/17/2017	6020A	Dissolved	Iron	30	ug/L	J	100	75	25	1

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144476-5	G6M-04-06X	10/17/2017	6020A	Dissolved	Manganese	98	ug/L		5	5	1.8	1
680-144476-5	G6M-04-06X	10/17/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-5	G6M-04-06X	10/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.60	ug/L	J	1	1	0.41	1
680-144476-5	G6M-04-06X	10/17/2017	8260B	Total/NA	Tetrachloroethene	1.8	ug/L		1	1	0.74	1
680-144476-5	G6M-04-06X	10/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-5	G6M-04-06X	10/17/2017	8260B	Total/NA	Trichloroethene	1	ug/L	U	1	1	0.48	1
680-144476-5	G6M-04-06X	10/17/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1
680-144476-5	G6M-04-06X	10/17/2017	9034	Total/NA	Sulfide	1	mg/L	U	1	1	1	1
680-144476-5	G6M-04-06X	10/17/2017	9056A	Total/NA	Sulfate	16	mg/L		1	1	0.4	1
680-144476-5	G6M-04-06X	10/17/2017	9060A	Total/NA	Total Organic Carbon	1	mg/L	U	1	0.5	0.16	1
680-144476-5	G6M-04-06X	10/17/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144476-5	G6M-04-06X	10/17/2017	RSK-175	Total/NA	Ethylene	1	ug/L	U	1	1	0.5	1
680-144476-5	G6M-04-06X	10/17/2017	RSK-175	Total/NA	Methane	1.6	ug/L		0.58	0.58	0.29	1
680-144476-5	G6M-04-06X	10/17/2017	SM 2320B	Total/NA	Alkalinity	58	mg/L		5	3.2	1.1	1
680-144476-6	G6M-03-09X	10/17/2017	353.2	Total/NA	Nitrate/Nitrite-N	1.7	mg/L		0.1	0.05	0.019	1
680-144476-6	G6M-03-09X	10/17/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144476-6	G6M-03-09X	10/17/2017	6020A	Dissolved	Iron	75	ug/L	U	100	75	25	1
680-144476-6	G6M-03-09X	10/17/2017	6020A	Dissolved	Manganese	180	ug/L		5	5	1.8	1
680-144476-6	G6M-03-09X	10/17/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-6	G6M-03-09X	10/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1	ug/L	U	1	1	0.41	1
680-144476-6	G6M-03-09X	10/17/2017	8260B	Total/NA	Tetrachloroethene	1	ug/L	U	1	1	0.74	1
680-144476-6	G6M-03-09X	10/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-6	G6M-03-09X	10/17/2017	8260B	Total/NA	Trichloroethene	1	ug/L	U	1	1	0.48	1
680-144476-6	G6M-03-09X	10/17/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1
680-144476-6	G6M-03-09X	10/17/2017	9034	Total/NA	Sulfide	1	mg/L	U	1	1	1	1
680-144476-6	G6M-03-09X	10/17/2017	9056A	Total/NA	Sulfate	11	mg/L		1	1	0.4	1
680-144476-6	G6M-03-09X	10/17/2017	9060A	Total/NA	Total Organic Carbon	1	mg/L	U	1	0.5	0.16	1
680-144476-6	G6M-03-09X	10/17/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144476-6	G6M-03-09X	10/17/2017	RSK-175	Total/NA	Ethylene	1	ug/L	U	1	1	0.5	1
680-144476-6	G6M-03-09X	10/17/2017	RSK-175	Total/NA	Methane	0.48	ug/L	J	0.58	0.58	0.29	1
680-144476-6	G6M-03-09X	10/17/2017	SM 2320B	Total/NA	Alkalinity	24	mg/L		5	3.2	1.1	1
680-144476-7	G6M-04-05X	10/17/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.17	mg/L		0.1	0.05	0.019	1
680-144476-7	G6M-04-05X	10/17/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144476-7	G6M-04-05X	10/17/2017	6020A	Dissolved	Iron	75	ug/L	U	100	75	25	1
680-144476-7	G6M-04-05X	10/17/2017	6020A	Dissolved	Manganese	15	ug/L		5	5	1.8	1
680-144476-7	G6M-04-05X	10/17/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-7	G6M-04-05X	10/17/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1	ug/L	U	1	1	0.41	1

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144476-7	G6M-04-05X	10/17/2017	8260B	Total/NA	Tetrachloroethene	1	ug/L	U	1	1	0.74	1
680-144476-7	G6M-04-05X	10/17/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-7	G6M-04-05X	10/17/2017	8260B	Total/NA	Trichloroethene	1	ug/L	U	1	1	0.48	1
680-144476-7	G6M-04-05X	10/17/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1
680-144476-7	G6M-04-05X	10/17/2017	9034	Total/NA	Sulfide	1	mg/L	U	1	1	1	1
680-144476-7	G6M-04-05X	10/17/2017	9056A	Total/NA	Sulfate	16	mg/L		1	1	0.4	1
680-144476-7	G6M-04-05X	10/17/2017	9060A	Total/NA	Total Organic Carbon	1	mg/L	U	1	0.5	0.16	1
680-144476-7	G6M-04-05X	10/17/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144476-7	G6M-04-05X	10/17/2017	RSK-175	Total/NA	Ethylene	1	ug/L	U	1	1	0.5	1
680-144476-7	G6M-04-05X	10/17/2017	RSK-175	Total/NA	Methane	260	ug/L		0.58	0.58	0.29	1
680-144476-7	G6M-04-05X	10/17/2017	SM 2320B	Total/NA	Alkalinity	31	mg/L		5	3.2	1.1	1
680-144476-8	Trip Blank	10/16/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-8	Trip Blank	10/16/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1	ug/L	U	1	1	0.41	1
680-144476-8	Trip Blank	10/16/2017	8260B	Total/NA	Tetrachloroethene	1	ug/L	U	1	1	0.74	1
680-144476-8	Trip Blank	10/16/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-8	Trip Blank	10/16/2017	8260B	Total/NA	Trichloroethene	1	ug/L	U	1	1	0.48	1
680-144476-8	Trip Blank	10/16/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	6020A	Dissolved	Iron	75	ug/L	U	100	75	25	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	6020A	Dissolved	Manganese	550	ug/L		5	5	1.8	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	8260B	Total/NA	1,1-Dichloroethene	1	ug/L	U	1	1	0.36	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1	ug/L	U	1	1	0.41	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	8260B	Total/NA	Tetrachloroethene	1	ug/L	U	1	1	0.74	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1	ug/L	U	1	1	0.37	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	8260B	Total/NA	Trichloroethene	1	ug/L	U	1	1	0.48	1
680-144476-9	G6M-13-03X-Fall17	10/18/2017	8260B	Total/NA	Vinyl chloride	1	ug/L	U	1	1	0.5	1

Notes:
mg/l = milligram per liter
µg/L = microgram per liter
LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Method Detection Limit

Qualified Data
J = Estimated result
U = non-detect
UJ = Estimated non-detect

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144569
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144569-1	G6M-02-13X-Fall17	10/19/2017	SW8260B/VOCs	Groundwater
680-144569-2	G6M-13-02X-Fall17	10/19/2017	SW8260B/VOCs	Groundwater
680-144569-3	G6M-02-11X-Fall17	10/19/2017	SW8260B/VOCs	Groundwater
680-144569-4	G6M-02-06X-Fall17	10/19/2017	SW8260B/VOCs	Groundwater
680-144569-5	G6M-04-04X-Fall17	10/20/2017	SW8260B/VOCs	Groundwater
680-144569-6	G6M-04-03X-Fall17	10/20/2017	SW8260B/VOCs	Groundwater
680-144569-7	G6M-04-02X-Fall17	10/20/2017	SW8260B/VOCs	Groundwater
680-144569-8	Trip Blank	10/19/2017	SW8260B/VOCs	Trip Blank
680-144569-9	RB-02-Fall17	10/20/2017	SW8260B/VOCs	Rinsate Blank

Summary - Data validation was performed on the data for seven (7) groundwater samples, one (1) trip blank sample and one (1) rinsate blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/21/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required for preserved aqueous samples.

Qualification: None required.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curves reported with these samples exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target VOC.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verifications reported with these samples exhibited acceptable %Ds (≤30.0%) for all target VOCs.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCVs reported with these sample were within acceptance limits for all target VOCs.

Qualification: None required.

Surrogates – Surrogate recoveries were within the control limits for all samples.

Qualification: None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

Qualification: None required.

LCS/LCSD – Percent recoveries (%R) and RPDs for the LCS/LCDSs analyzed and reported with these samples were within control limits established in the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks analyzed with these samples were free of contamination.

Qualification: None required.

Field Blanks – One Trip Blank sample (Lab Sample ID: 680-144569-8) was submitted with this sample set. Target VOCs were non-detect in the TB sample. A rinsate blank, RB-01-Fall17 (Lab Sample ID: 680-144569-9) was also submitted with this sample set. Acetone was reported in the RB sample at 19 µg/L; acetone was non-detect in all samples.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Sample G6M-04-02X-Fall17 (Lab Sample ID: 680-144569-7) required a 2X dilution prior to analysis; reporting limits were adjusted accordingly. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable as reported and may be used for their intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144569-1	G6M-02-13X-Fall17	VOCs	No qualifications needed.			
680-144569-2	G6M-13-02X-Fall17	VOCs	No qualifications needed.			
680-144569-3	G6M-02-11X-Fall17	VOCs	No qualifications needed.			
680-144569-4	G6M-02-06X-Fall17	VOCs	No qualifications needed.			
680-144569-5	G6M-04-04X-Fall17	VOCs	No qualifications needed.			
680-144569-6	G6M-04-03X-Fall17	VOCs	No qualifications needed.			
680-144569-7	G6M-04-02X-Fall17	VOCs	No qualifications needed.			
680-144569-8	Trip Blank	VOCs	No qualifications needed.			
680-144569-9	RB-02-Fall17	VOCs	No qualifications needed.			

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144569
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144569-1	G6M-02-13X-Fall17	10/19/2017	RSK175-MEE	Groundwater
680-144569-2	G6M-13-02X-Fall17	10/19/2017	RSK175-MEE	Groundwater
680-144569-3	G6M-02-11X-Fall17	10/19/2017	RSK175-MEE	Groundwater
680-144569-5	G6M-04-04X-Fall17	10/20/2017	RSK175-MEE	Groundwater
680-144569-6	G6M-04-03X-Fall17	10/20/2017	RSK175-MEE	Groundwater
680-144569-7	G6M-04-02X-Fall17	10/20/2017	RSK175-MEE	Groundwater
680-144569-9	RB-02-Fall17	10/20/2017	RSK175-MEE	Rinsate Blank

Summary - Data validation was performed on the data for six (6) groundwater samples and one (1) rinsate blank sample collected and submitted for Methane, Ethane, Ethylene analysis by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/21/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples prepared and analyzed with these samples met the %R and RPD control limits for all compounds.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks associated with the samples in this SDG were free of contamination.

Qualification: None required.

Field Blank – Sample RB-02-Fall17 (Lab Sample ID: 680-144569-9) was a rinsate blank submitted with these samples. The results for ethane and ethylene were non-detect in the RB. A low-level

detection of methane was reported in the RB-02-Fall17 sample at 0.68 µg/L. The results for methane in all samples were reported from the Thermal Conductivity Detector (TCD) and were greater than 10 times the RB.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144569-1	G6M-02-13X-Fall17	RSK175-MEE	No qualifications needed.			
680-144569-2	G6M-13-02X-Fall17	RSK175-MEE	No qualifications needed.			
680-144569-3	G6M-02-11X-Fall17	RSK175-MEE	No qualifications needed.			
680-144569-5	G6M-04-04X-Fall17	RSK175-MEE	No qualifications needed.			
680-144569-6	G6M-04-03X-Fall17	RSK175-MEE	No qualifications needed.			
680-144569-7	G6M-04-02X-Fall17	RSK175-MEE	No qualifications needed.			
680-144569-9	RB-02-Fall17	RSK175-MEE	No qualifications needed.			

Dissolved Metals
SW 846/6020A
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144569
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144569-1	G6M-02-13X-Fall17	10/19/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-2	G6M-13-02X-Fall17	10/19/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-3	G6M-02-11X-Fall17	10/19/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-4	G6M-02-06X-Fall17	10/19/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-5	G6M-04-04X-Fall17	10/20/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-6	G6M-04-03X-Fall17	10/20/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-7	G6M-04-02X-Fall17	10/20/2017	Dissolved As, Fe, Mn	Groundwater
680-144569-9	RB-02-Fall17	10/20/2017	Total As, Fe, Mn	Rinsate Blank

Summary – Data validation was performed on the data for seven (7) groundwater samples and one (1) rinsate blank sample collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. All samples were analyzed for target analytes, arsenic, iron and manganese by method SW6020A due to laboratory instrumentation problems and backlog for method SW6010C.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/21/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the control limits established in the QAPP.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks associated and analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Blanks – Sample RB-02-Fall17 (Lab Sample ID: 680-144569-9) was a rinsate blank submitted with theses samples and analyzed for total arsenic, iron and manganese. The RB results were non-detect for all target analytes.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Sample G6M-04-03X-Fall 17 (Lab Sample ID: 680-144569-6) was analyzed at a 10X dilution due to high level of manganese. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144569-1	G6M-02-13X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-2	G6M-13-02X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-3	G6M-02-11X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-4	G6M-02-06X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-5	G6M-04-04X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-6	G6M-04-03X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-7	G6M-04-02X-Fall17	Dissolved As, Fe, Mn	No qualifications needed.			
680-144569-9	RB-02-Fall17	Total As, Fe, Mn	No qualifications needed.			

Miscellaneous Parameters
Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144569
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144569-1	G6M-02-13X-Fall17	10/19/2017	Miscellaneous Parameters	Groundwater
680-144569-2	G6M-13-02X-Fall17	10/19/2017	Miscellaneous Parameters	Groundwater
680-144569-3	G6M-02-11X-Fall17	10/19/2017	Miscellaneous Parameters	Groundwater
680-144569-5	G6M-04-04X-Fall17	10/20/2017	Miscellaneous Parameters	Groundwater
680-144569-6	G6M-04-03X-Fall17	10/20/2017	Miscellaneous Parameters	Groundwater
680-144569-7	G6M-04-02X-Fall17	10/20/2017	Miscellaneous Parameters	Groundwater
680-144569-9	RB-02-Fall17	10/20/2017	Miscellaneous Parameters	Rinsate Blank

Summary - Data validation was performed on the data for six (6) groundwater samples and one (1) rinsate blank sample submitted for the miscellaneous wet chemistry analyses listed above. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 10/21/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Project specific matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank –The method blanks for alkalinity, nitrate/nitrite, sulfide, and sulfate were free from contamination. TOC was reported in associated MB samples at 0.197 and 0.177 mg/L. The result for TOC in all native field samples were greater than five (5) times the MB levels.

Qualification: The results for TOC in sample RB-02-Fall17 (Lab Sample ID: 680-144569-9) were qualified as non-detect (1 U).

Field Blanks – Sample RB-02-Fall17 (Lab Sample ID: 680-144569-9) was a rinsate blank submitted with theses samples. Low-level detections of alkalinity (1.1 J mg/L) and TOC (0.71 J mg/L) were reported in the RB sample. The TOC result was qualified as non-detect based on the MB samples. The native sample results for both alkalinity and TOC were greater than five (5) times the RB.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J-qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (mg/L)	Lab Qualifier	Validated Value (mg/L)	Validation Qualifier
680-144569-1	G6M-02-13X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144569-2	G6M-13-02X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144569-3	G6M-02-11X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144569-5	G6M-04-04X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144569-6	G6M-04-03X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144569-7	G6M-04-02X-Fall17	Miscellaneous Parameters	No qualifications needed.			
680-144569-9	RB-02-Fall17	TOC	0.71	J	1.0	U

AOC 50 Fall 2017 LTM - SDG 144569

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144569-1	G6M-02-13X-Fall17	10/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	U	0.1	0.05	0.019	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	6020A	Dissolved	Arsenic	120	ug/L		3	3	1.5	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	6020A	Dissolved	Iron	6,400	ug/L		100	75	25	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	6020A	Dissolved	Manganese	8,500	ug/L		5	5	1.8	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	57	ug/L		1	1	0.41	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	8260B	Total/NA	Tetrachloroethene	3.3	ug/L		1	1	0.74	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.47	ug/L	J	1	1	0.37	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	8260B	Total/NA	Trichloroethene	21	ug/L		1	1	0.48	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	8260B	Total/NA	Vinyl chloride	17	ug/L		1	1	0.5	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	9056A	Total/NA	Sulfate	3.0	mg/L		1	1	0.4	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	9060A	Total/NA	Total Organic Carbon	1.8	mg/L		1	0.5	0.16	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	RSK-175	Total/NA	Ethane	0.73	ug/L	J	1.1	1.1	0.55	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	RSK-175	Total/NA	Ethylene	5.9	ug/L		1	1	0.5	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	RSK-175	Total/NA	Methane	1,500	ug/L		390	77	39	1
680-144569-1	G6M-02-13X-Fall17	10/19/2017	SM 2320B	Total/NA	Alkalinity	180	mg/L		5	3.2	1.1	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.47	mg/L		0.1	0.05	0.019	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	6020A	Dissolved	Arsenic	1.5	ug/L	J	3	3	1.5	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	6020A	Dissolved	Iron	230	ug/L		100	75	25	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	6020A	Dissolved	Manganese	50	ug/L		5	5	1.8	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	13	ug/L		1	1	0.41	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	8260B	Total/NA	Tetrachloroethene	65	ug/L		1	1	0.74	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.50	ug/L	J	1	1	0.37	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	8260B	Total/NA	Trichloroethene	15	ug/L		1	1	0.48	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	8260B	Total/NA	Vinyl chloride	0.99	ug/L	J	1	1	0.5	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	9056A	Total/NA	Sulfate	12	mg/L		1	1	0.4	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	9060A	Total/NA	Total Organic Carbon	2.2	mg/L		1	0.5	0.16	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	RSK-175	Total/NA	Methane	4,100	ug/L		390	77	39	1
680-144569-2	G6M-13-02X-Fall17	10/19/2017	SM 2320B	Total/NA	Alkalinity	75	mg/L		5	3.2	1.1	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.03	mg/L	J	0.1	0.05	0.019	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	6020A	Dissolved	Arsenic	530	ug/L		3	3	1.5	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	6020A	Dissolved	Iron	33,000	ug/L		100	75	25	1

AOC 50 Fall 2017 LTM - SDG 144569

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144569-3	G6M-02-11X-Fall17	10/19/2017	6020A	Dissolved	Manganese	7,300	ug/L		5	5	1.8	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	9060A	Total/NA	Total Organic Carbon	3.9	mg/L		1	0.5	0.16	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	RSK-175	Total/NA	Ethane	5.2	ug/L		1.1	1.1	0.55	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	RSK-175	Total/NA	Methane	6,500	ug/L		390	77	39	1
680-144569-3	G6M-02-11X-Fall17	10/19/2017	SM 2320B	Total/NA	Alkalinity	190	mg/L		5	3.2	1.1	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	6020A	Dissolved	Iron	75	ug/L	U	100	75	25	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	6020A	Dissolved	Manganese	5.0	ug/L	U	5	5	1.8	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144569-4	G6M-02-06X-Fall17	10/19/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.11	mg/L		0.1	0.05	0.019	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	6020A	Dissolved	Arsenic	600	ug/L		3	3	1.5	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	6020A	Dissolved	Iron	170,000	ug/L		100	75	25	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	6020A	Dissolved	Manganese	17,000	ug/L		5	5	1.8	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.51	ug/L	J	1	1	0.41	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.4	ug/L		1	1	0.37	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	9056A	Total/NA	Sulfate	0.72	mg/L	J	1	1	0.4	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	9060A	Total/NA	Total Organic Carbon	11	mg/L		1	0.5	0.16	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	RSK-175	Total/NA	Ethane	3.8	ug/L		1.1	1.1	0.55	1

AOC 50 Fall 2017 LTM - SDG 144569

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144569-5	G6M-04-04X-Fall17	10/20/2017	RSK-175	Total/NA	Ethylene	39	ug/L		1	1	0.5	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	RSK-175	Total/NA	Methane	19,000	ug/L		390	77	39	1
680-144569-5	G6M-04-04X-Fall17	10/20/2017	SM 2320B	Total/NA	Alkalinity	250	mg/L		5	3.2	1.1	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.06	mg/L	J	0.1	0.05	0.019	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	6020A	Dissolved	Arsenic	260	ug/L		3	3	1.5	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	6020A	Dissolved	Iron	85,000	ug/L		100	75	25	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	6020A	Dissolved	Manganese	20,000	ug/L		50	50	18	10
680-144569-6	G6M-04-03X-Fall17	10/20/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	8260B	Total/NA	cis-1,2-Dichloroethene	2.2	ug/L		1	1	0.41	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	8260B	Total/NA	Vinyl chloride	1.6	ug/L		1	1	0.5	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	9056A	Total/NA	Sulfate	19	mg/L		1	1	0.4	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	9060A	Total/NA	Total Organic Carbon	5.1	mg/L		1	0.5	0.16	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	RSK-175	Total/NA	Methane	9,100	ug/L		390	77	39	1
680-144569-6	G6M-04-03X-Fall17	10/20/2017	SM 2320B	Total/NA	Alkalinity	160	mg/L		5	3.2	1.1	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.08	mg/L	J	0.1	0.05	0.019	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	6020A	Dissolved	Arsenic	260	ug/L		3	3	1.5	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	6020A	Dissolved	Iron	66,000	ug/L		100	75	25	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	6020A	Dissolved	Manganese	10,000	ug/L		5	5	1.8	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	8260B	Total/NA	1,1-Dichloroethene	2.0	ug/L	U	2	2	0.72	2
680-144569-7	G6M-04-02X-Fall17	10/20/2017	8260B	Total/NA	cis-1,2-Dichloroethene	13	ug/L		2	2	0.82	2
680-144569-7	G6M-04-02X-Fall17	10/20/2017	8260B	Total/NA	Tetrachloroethene	97	ug/L		2	2	1.5	2
680-144569-7	G6M-04-02X-Fall17	10/20/2017	8260B	Total/NA	trans-1,2-Dichloroethene	2.0	ug/L	U	2	2	0.74	2
680-144569-7	G6M-04-02X-Fall17	10/20/2017	8260B	Total/NA	Trichloroethene	26	ug/L		2	2	0.96	2
680-144569-7	G6M-04-02X-Fall17	10/20/2017	8260B	Total/NA	Vinyl chloride	1.8	ug/L	J	2	2	1	2
680-144569-7	G6M-04-02X-Fall17	10/20/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	9056A	Total/NA	Sulfate	6.2	mg/L		1	1	0.4	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	9060A	Total/NA	Total Organic Carbon	3.3	mg/L		1	0.5	0.16	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	RSK-175	Total/NA	Methane	16,000	ug/L		390	77	39	1
680-144569-7	G6M-04-02X-Fall17	10/20/2017	SM 2320B	Total/NA	Alkalinity	160	mg/L		5	3.2	1.1	1

AOC 50 Fall 2017 LTM - SDG 144569

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DF
680-144569-8	Trip Blank	10/19/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-8	Trip Blank	10/19/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144569-8	Trip Blank	10/19/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144569-8	Trip Blank	10/19/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144569-8	Trip Blank	10/19/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144569-8	Trip Blank	10/19/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144569-9	RB-02-Fall17	10/20/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.05	mg/L	U	0.1	0.05	0.019	1
680-144569-9	RB-02-Fall17	10/20/2017	6020A	Total/NA	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144569-9	RB-02-Fall17	10/20/2017	6020A	Total/NA	Iron	75	ug/L	U	100	75	25	1
680-144569-9	RB-02-Fall17	10/20/2017	6020A	Total/NA	Manganese	5.0	ug/L	U	5	5	1.8	1
680-144569-9	RB-02-Fall17	10/20/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144569-9	RB-02-Fall17	10/20/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144569-9	RB-02-Fall17	10/20/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144569-9	RB-02-Fall17	10/20/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144569-9	RB-02-Fall17	10/20/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144569-9	RB-02-Fall17	10/20/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144569-9	RB-02-Fall17	10/20/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144569-9	RB-02-Fall17	10/20/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144569-9	RB-02-Fall17	10/20/2017	9060A	Total/NA	Total Organic Carbon	1.0	mg/L	U	1	0.5	0.16	1
680-144569-9	RB-02-Fall17	10/20/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144569-9	RB-02-Fall17	10/20/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144569-9	RB-02-Fall17	10/20/2017	RSK-175	Total/NA	Methane	0.68	ug/L		0.58	0.58	0.29	1
680-144569-9	RB-02-Fall17	10/20/2017	SM 2320B	Total/NA	Alkalinity	1.1	mg/L	J	5	3.2	1.1	1

Notes:
mg/l = milligram per liter
µg/L = microgram per liter
LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Method Detection Limit

J = Estimated result
U = non-detect
UJ = Estimated non-detect

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144777-1
Laboratory: Test America-Savannah, GA	Date: 11/13/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144777-1	G6M-03-07X-Fall17	10/23/2017	SW8260B/VOCs	Groundwater
680-144777-2	XSA-12-98X-Fall17	10/23/2017	SW8260B/VOCs	Groundwater
680-144777-3	G6M-02-07X-Fall17	10/23/2017	SW8260B/VOCs	Groundwater
680-144777-4	G6M-03-10X-Fall17	10/23/2017	SW8260B/VOCs	Groundwater
680-144777-5	G6M-02-12X-Fall17	10/23/2017	SW8260B/VOCs	Groundwater
680-144777-6	G6M-04-09X-Fall17	10/23/2017	SW8260B/VOCs	Groundwater
680-144777-7	Trip Blank	10/23/2017	SW8260B/VOCs	Trip Blank

Summary - Data validation was performed on the data for six (6) groundwater samples and one (1) trip blank sample collected from AOC 50 and submitted for Volatile Organic (VOC) analyses by SW846 Method 8260B.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/26/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required for preserved aqueous samples.

Qualification: None required.

GC/MS Tuning - All of the BFB tunes in the initial and continuing calibrations met the percent relative abundance criteria.

Qualification: None required.

Initial Calibration - Initial calibration curves reported with these samples exhibited acceptable %RSDs (≤30%) for and average RRF (>0.050) values for all target VOC.

Qualification: None required.

Initial Calibration Verification (ICV): - Initial calibration verifications reported with these samples exhibited acceptable %Ds (≤30.0%) for all target VOCs.

Qualification: None required.

Continuing Calibration Verification (CCV): - The %Ds for the CCV reported in analytical batch 501154 on 11/2/2017 were outside control limits for cis-1,3-dichloropropene and trans-1,3-dichloropropene. The %D for the CCV reported in analytical batch 501404 on 11/6/2017 was outside control limits for 1,2,3-trichlorobenzene. The %Ds for the remaining target VOCs were within control limits.

> *Qualification:* The non-detect results for cis-1,3-dichloropropene and trans-1,3-dichloropropene in analytical batch 501154 and 1,2,3-trichlorobenzene in analytical batch 501404 in associated samples were qualified as estimated (UJ).

Surrogates – Surrogate recoveries were within the control limits for all samples.

> *Qualification:* None required.

Internal Standard (IS) Area Performance: - All samples exhibited acceptable area counts for all internal standards.

> *Qualification:* None required.

LCS/LCSD – Percent recoveries (%R) for the LCS/LCDSs analyzed and reported with these samples were within above control limits for a few VOCs; RPDs were within control limits. Associated sample results were non-detect for the outliers; qualifications are not needed.

> *Qualification:* None required.

MS/MSD – Sample XSA-12-98X-Fall 17 (Lab Sample ID: 680-144777-2) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The %Rs for 1,2,3-trichloropropane were below control limits in the MS/MSD sample. The %Rs and RPDs for the remaining spiked compounds were within control limits.

> *Qualification:* The non-detect result for 1,2,3-trichloropropane in sample XSA-12-98X-Fall17 was qualified as estimated (UJ).

Method Blank – The method blanks analyzed with these samples were free of contamination.

> *Qualification:* None required.

Field Blanks – One Trip Blank sample (Lab Sample ID: 680-144777-7) was submitted with this sample set. Target VOCs were non-detect in the TB sample.

> *Qualification:* None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

> *Qualification:* None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOD U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

> *Qualification:* None required.

Qualification Summary Table - The VOC results reported in this SDG are acceptable with the noted qualifications and may be used for their intended purpose.

Lab Sample ID	Client Sample ID	Analysis/ Compound	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144777-1	G6M-03-07X-Fall17	1,2,3-Trichlorobenzene	5.0	UQ	5.0	UJ
680-144777-2	XSA-12-98X-Fall17	1,2,3-Trichlorobenzene	5.0	UQ	5.0	UJ
680-144777-2	XSA-12-98X-Fall17	1,2,3-Trichloropropane	1.0	UJ	1.0	UJ
680-144777-3	G6M-02-07X-Fall17	1,2,3-Trichlorobenzene	5.0	UQ	5.0	UJ
680-144777-4	G6M-03-10X-Fall17	cis-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-4	G6M-03-10X-Fall17	trans-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-5	G6M-02-12X-Fall17	cis-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-5	G6M-02-12X-Fall17	trans-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-6	G6M-04-09X-Fall17	cis-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-6	G6M-04-09X-Fall17	trans-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-7	Trip Blank	cis-1,3-Dichloropropene	1.0	U	1.0	UJ
680-144777-7	Trip Blank	trans-1,3-Dichloropropene	1.0	U	1.0	UJ

Methane, Ethane, Ethene
RSK 175
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144777
Laboratory: Test America-Savannah, GA	Date: 11/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144777-1	G6M-03-07X-Fall17	10/23/2017	RSK175/MEE	Groundwater
680-144777-4	G6M-03-10X-Fall17	10/23/2017	RSK175/MEE	Groundwater
680-144777-5	G6M-02-12X-Fall17	10/23/2017	RSK175/MEE	Groundwater

Summary - Data validation was performed on the data for three (3) groundwater samples collected and submitted for Methane, Ethane, Ethylene analysis by Method RSK 175.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/26/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples.

Qualification: None required.

LCS/LCSD – The LCS/LCSD samples prepared and analyzed with these samples met the %R and RPD control limits for all compounds.

Qualification: None required.

MS/MSD – Matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank – The method blanks associated with the samples in this SDG were free of contamination.

Qualification: None required.

Field Blank – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – The Flame Ionization Detector (FID) is used as the primary detector for methane, ethane, and ethene and is more sensitive than the Thermal Conductivity Detector (TCD). The TCD is used as the secondary detector for methane only. When the concentration of methane is above the calibration range of the FID, the TCD results are reported. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "LOQ U." Analyte detections below the LOQ were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The RSK175 results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144777-1	G6M-03-07X-Fall17	RSK175-MEE	No qualifications needed.			
680-144777-4	G6M-03-10X-Fall17	RSK175-MEE	No qualifications needed.			
680-144777-5	G6M-02-12X-Fall17	RSK175-MEE	No qualifications needed.			

Dissolved Metals
SW 846/6020A
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144777
Laboratory: Test America-Savannah, GA	Date: 11/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144777-1	G6M-03-07X-Fall17	10/23/2017	Dissolved As, Fe, Mn	Groundwater
680-144777-2	XSA-12-98X-Fall17	10/23/2017	Dissolved As, Fe, Mn	Groundwater
680-144777-3	G6M-02-07X-Fall17	10/23/2017	Dissolved As, Fe, Mn	Groundwater
680-144777-4	G6M-03-10X-Fall17	10/23/2017	Dissolved As, Fe, Mn	Groundwater
680-144777-5	G6M-02-12X-Fall17	10/23/2017	Dissolved As, Fe, Mn	Groundwater
680-144777-6	G6M-04-09X-Fall17	10/23/2017	Dissolved As, Fe, Mn	Groundwater

Summary – Data validation was performed on the data for six (6) groundwater samples collected from AOC 50 and submitted for dissolved arsenic, iron and manganese analyses. All samples were analyzed for target analytes, arsenic, iron and manganese by method SW6020A due to laboratory instrumentation problems and backlog for method SW6010C.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory on 10/25/2017 in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required

Holding Times – All samples were analyzed within the 6-month holding time required by the QAPP for preserved aqueous samples.

Qualification: None required

Laboratory Control Sample – The LCS recoveries (%R) for the reported target analytes met the control limits established in the QAPP.

Qualification: None required.

MS/MSD – Sample XSA-12-98X-Fall 17 (Lab Sample ID: 680-144777-2) was spiked and analyzed as matrix spike/matrix spike duplicate samples. The %Rs and RPDs were within control limits.

Qualification: None required.

Method Blank – The method blanks associated and analyzed with these samples were non-detect for all target analytes.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation – Sample G6M-04-03X-Fall 17 (Lab Sample ID: 680-144569-6) was analyzed at a 10X dilution due to high level of manganese. Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The dissolved metals results reported in this SDG are acceptable as reported and the data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144777-1	G6M-03-07X-Fall17	Dissolved As, Fe, Mn	No qualification needed.			
680-144777-2	XSA-12-98X-Fall17	Dissolved As, Fe, Mn	No qualification needed.			
680-144777-3	G6M-02-07X-Fall17	Dissolved As, Fe, Mn	No qualification needed.			
680-144777-4	G6M-03-10X-Fall17	Dissolved As, Fe, Mn	No qualification needed.			
680-144777-5	G6M-02-12X-Fall17	Dissolved As, Fe, Mn	No qualification needed.			
680-144777-6	G6M-04-09X-Fall17	Dissolved As, Fe, Mn	No qualification needed.			

Miscellaneous Parameters
Alkalinity (SM2320B), Nitrogen/nitrate (E353.2), Sulfate (SW9056A), Sulfide (SW9034) and Total Organic Carbon (TOC) (SW9060A)
USEPA Level II Review

Site: AOC 50 Fall 2017 LTM	SDG #: 680-144777
Laboratory: Test America-Savannah, GA	Date: 11/14/2017
KGS Reviewer: Laurie Ekes	Project: 1024-011

Lab Sample ID	Client Sample ID	Collection Date	Analysis	Matrix
680-144777-1	G6M-03-07X-Fall17	10/23/2017	Miscellaneous Parameters	Groundwater
680-144777-4	G6M-03-10X-Fall17	10/23/2017	Miscellaneous Parameters	Groundwater
680-144777-5	G6M-02-12X-Fall17	10/23/2017	Miscellaneous Parameters	Groundwater
680-144777-6	G6M-04-09X-Fall17	10/23/2017	TOC only	Groundwater

Summary - Data validation was performed on the data for four (4) groundwater samples submitted for miscellaneous wet chemistry analyses. Samples submitted for sulfate and sulfide were analyzed at Test America Savannah. The samples submitted for alkalinity, nitrate/nitrite and TOC analyses were shipped to Test America-Denver for analysis. Sample G6M-04-09X-Fall 17 was submitted for TOC analysis only.

Narrative and Completeness Review – The case narrative and data package were checked for completeness. No discrepancies were noted.

Qualification: None required.

Sample Delivery and Condition – All samples arrived intact at the laboratory on 10/25/2017 in acceptable condition and temperature, and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were analyzed within the respective holding times required by the QAPP for preserved aqueous samples.

Qualification: None required.

Laboratory Control Sample – The LCS %R results for all parameters met the control limits established by the QAPP.

Qualification: None required.

MS/MSD – Project specific matrix spike/matrix spike duplicate samples were not submitted with this sample set.

Qualification: None required.

Method Blank –The method blanks for alkalinity, nitrate/nitrite, sulfide, sulfate and TOC were free from contamination.

Qualification: None required.

Field Blanks – Field blank samples were not submitted with this sample set.

Qualification: None required.

Field Duplicate – Field duplicate samples were not submitted with this sample set.

Qualification: None required.

Compound Quantitation –Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "PQL U." Analyte detections below the PQL were reported as J-qualified results. These J qualifiers were retained unless superseded by a more severe qualifier.

Qualification: None required.

Qualification Summary Table - The miscellaneous parameter results reported in this SDG are acceptable as reported. The data may be used for its intended purpose.

Lab Sample ID	Client Sample ID	Analysis	Lab Value (µg/L)	Lab Qualifier	Validated Value (µg/L)	Validation Qualifier
680-144777-1	G6M-03-07X-Fall17	Miscellaneous Parameters	No qualification needed.			
680-144777-4	G6M-03-10X-Fall17	Miscellaneous Parameters	No qualification needed.			
680-144777-5	G6M-02-12X-Fall17	Miscellaneous Parameters	No qualification needed.			
680-144777-6	G6M-04-09X-Fall17	TOC only	No qualification needed.			

AOC 50 Fall 2017 LTM - SDG 144777

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DL
680-144777-1	G6M-03-07X-Fall17	10/23/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.13	mg/L		0.1	0.05	0.019	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	6020A	Dissolved	Arsenic	450	ug/L		3	3	1.5	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	6020A	Dissolved	Iron	94,000	ug/L		100	75	25	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	6020A	Dissolved	Manganese	1,800	ug/L		5	5	1.8	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.55	ug/L	J	1	1	0.41	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	0.97	ug/L	J	1	1	0.37	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	8260B	Total/NA	Vinyl chloride	0.72	ug/L	J	1	1	0.5	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	9060A	Total/NA	Total Organic Carbon	24	mg/L		1	0.5	0.16	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	RSK-175	Total/NA	Ethane	2.7	ug/L		1.1	1.1	0.55	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	RSK-175	Total/NA	Ethylene	14	ug/L		1	1	0.5	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	RSK-175	Total/NA	Methane	21,000	ug/L		390	77	39	1
680-144777-1	G6M-03-07X-Fall17	10/23/2017	SM 2320B	Total/NA	Alkalinity	170	mg/L		5	3.2	1.1	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	6020A	Dissolved	Arsenic	3.0	ug/L	U	3	3	1.5	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	6020A	Dissolved	Iron	88	ug/L	J	100	75	25	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	6020A	Dissolved	Manganese	2.8	ug/L	J	5	5	1.8	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	0.69	ug/L	J	1	1	0.41	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	8260B	Total/NA	Tetrachloroethene	5.0	ug/L		1	1	0.74	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	8260B	Total/NA	Trichloroethene	0.56	ug/L	J	1	1	0.48	1
680-144777-2	XSA-12-98X-Fall17	10/23/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	6020A	Dissolved	Arsenic	1.9	ug/L	J	3	3	1.5	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	6020A	Dissolved	Iron	110	ug/L		100	75	25	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	6020A	Dissolved	Manganese	12	ug/L		5	5	1.8	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	8260B	Total/NA	Tetrachloroethene	4.2	ug/L		1	1	0.74	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144777-3	G6M-02-07X-Fall17	10/23/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1

AOC 50 Fall 2017 LTM - SDG 144777

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DL
680-144777-3	G6M-02-07X-Fall17	10/23/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.07	mg/L	J	0.1	0.05	0.019	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	6020A	Dissolved	Arsenic	420	ug/L		3	3	1.5	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	6020A	Dissolved	Iron	62,000	ug/L		100	75	25	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	6020A	Dissolved	Manganese	2,100	ug/L		5	5	1.8	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	9056A	Total/NA	Sulfate	5.5	mg/L		1	1	0.4	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	9060A	Total/NA	Total Organic Carbon	1.4	mg/L		1	0.5	0.16	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	RSK-175	Total/NA	Ethane	1.1	ug/L	U	1.1	1.1	0.55	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	RSK-175	Total/NA	Methane	6,500	ug/L		390	77	39	1
680-144777-4	G6M-03-10X-Fall17	10/23/2017	SM 2320B	Total/NA	Alkalinity	62	mg/L		5	3.2	1.1	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	353.2	Total/NA	Nitrate/Nitrite-N	0.055	mg/L	J	0.1	0.05	0.019	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	6020A	Dissolved	Arsenic	670	ug/L		3	3	1.5	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	6020A	Dissolved	Iron	41,000	ug/L		100	75	25	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	6020A	Dissolved	Manganese	8,100	ug/L		5	5	1.8	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	9034	Total/NA	Sulfide	1.0	mg/L	U	1	1	1	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	9056A	Total/NA	Sulfate	1.0	mg/L	U	1	1	0.4	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	9060A	Total/NA	Total Organic Carbon	4.3	mg/L		1	0.5	0.16	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	RSK-175	Total/NA	Ethane	4.0	ug/L		1.1	1.1	0.55	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	RSK-175	Total/NA	Ethylene	1.0	ug/L	U	1	1	0.5	1
680-144777-5	G6M-02-12X-Fall17	10/23/2017	RSK-175	Total/NA	Methane	8,000	ug/L		390	77	39	1

AOC 50 Fall 2017 LTM - SDG 144777

Lab Sample ID	Client Sample ID	Collection Date	Analysis Method	Prep Type	Analyte	Result	Unit	Flag	LOQ	LOD	DL	DL
680-144777-5	G6M-02-12X-Fall17	10/23/2017	SM 2320B	Total/NA	Alkalinity	200	mg/L		5	3.2	1.1	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	6020A	Dissolved	Arsenic	370	ug/L		3	3	1.5	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	6020A	Dissolved	Iron	110,000	ug/L		100	75	25	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	6020A	Dissolved	Manganese	2,400	ug/L		5	5	1.8	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	8260B	Total/NA	Vinyl chloride	0.74	ug/L	J	1	1	0.5	1
680-144777-6	G6M-04-09X-Fall17	10/23/2017	9060A	Total/NA	Total Organic Carbon	7.8	mg/L		1	0.5	0.16	1
680-144777-7	Trip Blank	10/23/2017	8260B	Total/NA	1,1-Dichloroethene	1.0	ug/L	U	1	1	0.36	1
680-144777-7	Trip Blank	10/23/2017	8260B	Total/NA	cis-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.41	1
680-144777-7	Trip Blank	10/23/2017	8260B	Total/NA	Tetrachloroethene	1.0	ug/L	U	1	1	0.74	1
680-144777-7	Trip Blank	10/23/2017	8260B	Total/NA	trans-1,2-Dichloroethene	1.0	ug/L	U	1	1	0.37	1
680-144777-7	Trip Blank	10/23/2017	8260B	Total/NA	Trichloroethene	1.0	ug/L	U	1	1	0.48	1
680-144777-7	Trip Blank	10/23/2017	8260B	Total/NA	Vinyl chloride	1.0	ug/L	U	1	1	0.5	1

Notes:

mg/l = milligram per liter

µg/L = microgram per liter

LOQ = Limit of Quantitation

LOD = Limit of Detection

DL = Method Detection Limit

J = Estimated result

U = non-detect

UJ = Estimated non-detect

APPENDIX D
HISTORICAL GROUNDWATER RESULTS

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
North Plume	G6M-96-22A	10/16/2001	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.50	5.1	210	2	0	15.95
North Plume	G6M-96-22A	2/28/2002	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	0.10U	-	-	5.70	8.37	183.5	1.78	0.5	12.41
North Plume	G6M-96-22A	9/21/2004	2U	2U	2U	2U	1U	2U	-	-	-	5U	1U	54	-	-	-	-	-	5.75	6.73	187.9	1.885	1.59	11.59
North Plume	G6M-96-22A	9/29/2005	2U	2U	2U	2U	1U	2U	-	-	-	5U	1U	52	-	-	-	-	-	5.95	4.9	223.1	3.18	0.38	10.75
North Plume	G6M-96-22A	9/20/2006	2U	2U	2U	2U	1U	2U	-	-	-	5U	0.10U	42	-	-	-	-	-	5.68	4.78	176.3	1.814	1.85	11.03
North Plume	G6M-96-22A	9/12/2007	2U	2U	2U	2U	1U	2U	-	-	-	6U	0.1U	78	-	-	-	-	-	5.50	6.95	-101.1	1.404	5.0	12.38
North Plume	G6M-96-22A	10/17/2008	0.55	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	8U	0.2U	2,240	-	-	-	-	-	5.57	1.41	123.8	1.378	1.8	10.07
North Plume	G6M-96-22A	10/16/2009	0.25J	29	0.27J	0.5U	0.5U	0.5U	-	-	-	8U	0.2U	7,120	-	-	-	-	-	5.91	0.25	228.5	2.288	0	11.31
North Plume	G6M-96-22A	10/7/2010	0.22J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	7,670	-	-	-	-	-	5.72	0.21	141.2	3.623	0	9.31
North Plume	G6M-96-22A	10/7/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	6,860	-	-	-	-	-	5.6	0.18	59.9	2.144	0	10.13
North Plume	G6M-96-22A	10/15/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	12,400	-	-	-	-	-	5.82	0.36	110.5	2.915	0	14.55
North Plume	G6M-96-22A	10/18/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	6,010	-	-	-	-	-	6.05	0.58	177.1	1.524	0	11.1
North Plume	G6M-96-22A	11/4/2014	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5U	0.019U	3,160	-	-	-	-	-	6.12	3.75	203.7	0.774	0.86	-
North Plume	G6M-96-22A	10/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.10 U	3,810	-	-	-	-	-	6.11	2.77	122.9	1.333	0.21	-
North Plume	G6M-96-22A	11/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05 U	2,300	-	-	-	-	-	4.64	3.73	129.4	0.983	0.75	11.89
North Plume	G6M-96-22B	10/19/2001	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.76	6.95	176	2.09	0.6	13.13
North Plume	G6M-96-22B	2/28/2002	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	0.10U	-	-	6.35	7.83	198.5	2.002	1.5	12.89
North Plume	G6M-96-22B	1/31/2003	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.48
North Plume	G6M-96-22B	9/21/2004	2U	2U	2U	2U	1U	2U	-	-	-	5U	1U	44	-	-	-	-	-	5.83	6.15	193.9	1.941	2.76	13.86
North Plume	G6M-96-22B	9/29/2005	2U	2U	2U	2U	1U	2U	-	-	-	5U	1U	48	-	-	-	-	-	6.12	5.57	187.7	3.02	1.43	11.15
North Plume	G6M-96-22B	9/20/2006	2U	2U	2U	2U	1U	2U	-	-	-	5U	0.10U	44	-	-	-	-	-	5.53	6.51	179	2.183	0.67	10.19
North Plume	G6M-96-22B	9/12/2007	2U	2U	2U	2U	1U	2U	-	-	-	6U	0.1U	40	-	-	-	-	-	5.73	16.11	-112.1	2.618	13.9	11.86
North Plume	G6M-96-22B	10/17/2008	0.91	0.5U	0.24J	0.5U	0.5U	0.5U	-	-	-	8U	0.2U	67.3	-	-	-	-	-	5.40	1.77	121.3	1.02	0.85	11.56
North Plume	G6M-96-22B	10/16/2009	0.3J	23	0.32J	0.5U	0.5U	0.5U	-	-	-	8U	0.135U	25,500	-	-	-	-	-	6.08	0.31	209.1	1.683	0.04	11.52
North Plume	G6M-96-22B	10/7/2010	0.25J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	3.3J	0.1U	14,600	-	-	-	-	-	6.00	0.48	115.1	2.295	0.49	12.85
North Plume	G6M-96-22B	10/7/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	9,320	-	-	-	-	-	5.98	0.16	30.7	1.899	0	11.27
North Plume	G6M-96-22B	10/15/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.120U	9,980	-	-	-	-	-	6.14	0.25	16.4	2.358	1.17	12.41
North Plume	G6M-96-22B	10/18/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	3.2J	0.1U	14,100	-	-	-	-	-	6.17	0.81	142	2.288	0.31	13.79
North Plume	G6M-96-22B	11/4/2014	0.21J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	4.6J	0.017U	7,180	-	-	-	-	-	6.58	0.45	137.4	1.087	3.55	17.20
North Plume	G6M-96-22B	10/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.10 U	5,610	-	-	-	-	-	6.53	1.34	93.5	1.457	2.18	15.00
North Plume	G6M-96-22B	11/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05 U	6,500	-	-	-	-	-	5.96	2.66	174	1.362	2.49	11.2
North Plume	G6M-96-24B	10/16/2001	18	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.37	0	81	0.42	19	14.44
North Plume	G6M-96-24B	3/1/2002	11	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.35	-6.27	106.7	0.43	2.8	17.01
North Plume	G6M-96-24B	1/31/2003	7.5	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.61
North Plume	G6M-96-24B	1/12/2004	11	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.41
North Plume	G6M-96-24B	9/24/2004	13	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.17	0.2	152.2	0.422	0.44	19.31
North Plume	G6M-96-24B	12/17/2004	8.1	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.05	0.46	259.6	0.384	2.43	15.12
North Plume	G6M-96-24B	4/13/2005	8.2	1U	2.8	1U	1U	1U	-	-	-	-	-	-	-	-	-	-	-	5.32	0.2	216.6	0.429	2.49	10.84
North Plume	G6M-96-24B	7/6/2005	7.6	2U	3.0	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.69	1.34	242.8	0.77	0.02	14.12
North Plume	G6M-96-24B	9/30/2005	7.2	2U	3.6	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.77	0.29	198.3	1.022	7.7	16.26
North Plume	G6M-96-24B	12/15/2005	7.4	2U	3.1	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.97	0.14	242.8	0.9	2.1	19.14
North Plume	G6M-96-24B	3/23/2006	4.2	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.99	0.23	404.5	0.458	1.31	12.78
North Plume	G6M-96-24B	6/23/2006	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	4.62	0.85	526.9	0.443	0.88	15.18
North Plume	G6M-96-24B	9/22/2006	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.93	0.3	141	0.407	4.23	16.89
North Plume	G6M-96-24B	12/14/2006	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.54	0.17	74.8	0.56	0.2	16.2
North Plume	G6M-96-24B	3/30/2007	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.90	0.5	-43.6	0.62	0.15	12.58
North Plume	G6M-96-24B	6/13/2007	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.10	0.16	138.9	0.727	220.2	12.48
North Plume	G6M-96-24B	9/13/2007	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.05	3.93	-95.7	0.689	9.9	11.3
North Plume	G6M-96-24B	12/12/2007	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.33	0.3	106.2	0.802	0.8	14
North Plume	G6M-96-24B	10/7/2008	0.4J	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	15	8.0U	0.352U	448	10U	46	0.13U	10	0.03UJ	6.04	0.54	92.4	0.51	30	14.4
North Plume	G6M-96-24B	1/22/2009	1.4U	2.3U	1.8U	1.3U	1.2U	1.3U	1.2U	1.5U	4.2	8.0U	226J	315	10UJ	32	0.13U	9.3	0.03U	6.16	0.45	149.6	0.479	65	13.4

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
North Plume	G6M-96-24B	5/11/2009	0.29J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	5.87	0.20	90.8	0.304	23.1	12
Area 1	G6M-02-08X	5/17/2002	2,300	35	250	2U	1U	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.04
Area 1	G6M-02-08X	1/31/2003	3,600	46	480	2.3	1U	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.98
Area 1	G6M-02-08X	3/31/2005	1,300	38J	250	50U	50U	50U	0.049	0.79	1.2	5U	0.3J	770	15	62	1.1	6.2	2U	7.08	9.1	-50	0.563	24.6	9.64
Area 1	G6M-02-08X	7/5/2005	1,000	130	1,800	12U	12U	12U	0.16	0.22	3	33	110	29,000	450	350	0.05U	3.7	8.3	4.23	1.66	19.1	1.616	4.72	14.95
Area 1	G6M-02-08X	9/27/2005	560	26	1,300	1U	1.8	2.5	0.11	0.25	21	270	310J	75U	1,200	466	0.05U	320J	16	5.03	0.33	-68.6	1.965	3.16	18.79
Area 1	G6M-02-08X	12/16/2005	300	24	1,200	4U	2U	4U	0.19	0.36	2.1	4.4B	350J	15U	1,500	520	0.05U	57	9.4	5.46	0.03	-31.4	1.999	66.4	9.72
Area 1	G6M-02-08X	3/21/2006	180	25	1,300	2U	2.1	2.3	0.084	0.24	15	80	470	40,000	3,000	1,400	1U	245	14	5.46	0.33	-62.5	2.45	6.98	15.04
Area 1	G6M-02-08X	6/21/2006	230	30	850	2U	1U	2U	0.14	0.23	19	100	970	44,000	5,700	1,800	1.67	759	40	4.80	1.32	-25.2	4.528	45.4	12.38
Area 1	G6M-02-08X	9/20/2006	150	25	1,300	2U	1.6	2U	0.072	0.14	11	77	860	29,000	4,400	1,000	2U	655	16	5.20	1.57	-14.4	4.503	53.4	19.59
Area 1	G6M-02-08X	12/12/2006	140	28	910	2U	1.1	2U	0.18	0.17	30	73	1,000	32,000	6,400	-	-	13.6	110	4.93	0.67	-38.3	6.436	108.6	7.42
Area 1	G6M-02-08X	3/28/2007	60	14	500	2U	1U	2U	0.31	0.14	62	72	1,200	30,000J	7,200	-	-	1,170	80	4.46	0.21	-144.5	7.243	60.9	11.74
Area 1	G6M-02-08X	6/13/2007	110	8.4	420	2U	1U	2U	0.092	0.11	180	130	1,200	33,000	6,800	-	-	1,160	82	4.70	1.78	24.1	6.948	1328.4	9.25
Area 1	G6M-02-08X	9/13/2007	140	74	1,400	2U	1U	2U	0.22	0.17	120	410	1,100	37,000	4,400	3,000	0.2U	890	200	5.34	2.68	-150.5	6.823	28.2	11.52
Area 1	G6M-02-08X	12/10/2007	250	66	1,100	2U	2.0	3.3	0.14	0.23	240	360	1,200	42,000	7,700	-	-	414	120	5.17	0.15	-115.7	7.569	10.8	11.11
Area 1	G6M-02-08X	3/10/2008	32	5.5	170	2U	1U	2U	0.36	0.15	280	570	970	20,000	11,000	-	-	770	16	4.28	0.5	-55.7	7.828	13.8	15.4
Area 1	G6M-02-08X	10/6/2008	49	4.5J	81	5U	5U	5U	6.3U	7.9U	3,000	103J	598	7,630	4,190	1,800	0.13U	610	0.75UJ	4.52	-0.12	-25.9	4.495	65	12.25
Area 1	G6M-02-08X	1/21/2009	29	18U	39	11U	14U	11U	1.2U	1.5U	3,400	76	474J	6,650	2,900J	3,000	0.13U	710	0.39	4.76	0.15	39.2	3.739	46.4	13.10
Area 1	G6M-02-08X	5/7/2009	25	20U	29	20U	20U	20U	1.3U	5.8	3,500	53.2	356	5,130	3,000	550J	0.092J	410	0.053	3.97	0.4	71.4	3.538	15.4	14.96
Area 1	G6M-02-08X	10/20/2009	0.5U	0.5U	0.31J	0.5U	0.5U	0.5U	1.3U	1.6U	2,300J	70.6	486	6,840	2,300	40	1.3U	440	0.3UJ	4.61	1.88	79.4	3.973	20.1	12.49
Area 1	G6M-02-08X	4/21/2010	11J	2.0UJ	75J	2.0UJ	2.0UJ	2.0UJ	1.3U	1.6U	4,400	98.9	447 J	8,720	3,400	40	1.3U	130	0.28	4.49	0.10	28.2	3.353	22.3	11.07
Area 1	G6M-02-08X	10/7/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	27,000	73.4	381	8,080	2,400	860	2.6U	100	0.095	4.47	0.33	58.0	3.209	4.33	12.69
Area 1	G6M-02-08X	6/9/2011	13	0.5U	140	0.5U	0.5U	1.6	1.2U	1.5U	83,000	155	473	14,000	2,800	1,100	6.5U	99J	0.38	4.64	0.11	18.9	2.968	11	11.14
Area 1	G6M-02-08X	10/4/2011	8.0U	8.0U	210	8.0U	8.0U	8.0U	1.2U	1.5U	28,000	194	491	15,900	2,400	230	0.13U	86	0.091	4.81	0.02	18.1	2.376	4.99	13.73
Area 1	G6M-02-08X	5/10/2012	9.8	8.0U	270	8.0U	8.0U	8.0U	1.2U	1.5U	14,000	184	581	19,000	1,900	730	0.13U	64	1.8	5.16	0.21	-9.9	3.338	3.29	11.46
Area 1	G6M-02-08X	10/15/2012	12	4.0U	270	4.0U	4.0U	6.2	1.2U	1.5U	3,600	121	523	20,300	1,800	900	0.080J	37	0.096	4.85	0.32	-1.0	2.915	3.76	10.42
Area 1	G6M-02-08X	5/23/2013	20	8.0U	510	8.0U	8.0U	24	1.2U	1.5U	11,000	160	460	18,200	1,600	610	0.041J	5.3	3.5J	4.88	0.10	9.4	2.618	4.01	-
Area 1	G6M-02-08X	10/22/2013	13U	13U	500	13U	13U	51	3.6	84	40,000	200	428	15,400	1,100	630	0.13U	8.9	3.8	5.23	0.27	1.1	1.308	10.8	8.2
Area 1	G6M-02-08X	6/12/2014	12	1.5	400	0.5U	0.7	140	1.3UJ	1.6UJ	9,400	241	420	10,100	670	700J	0.13U	1.0J	0.03U	5.23	0.21	11.2	2.023	6.68	16.6
Area 1	G6M-02-08X	11/3/2014	8.3	5U	260	5U	5U	44	4.4	7.7	26,000	258	461	10,400	1,400	590	0.13U	0.96J	0.03U	5.28	0.12	-33.6	0.994	33.6	15
Area 1	G6M-02-08X	6/16/2015	10 U	10 U	98.8	10 U	10 U	10 U	10 U	10 U	1,410	318	455	10,200	1,020	582	0.15	8.6 J	1.0 U	5.43	2.94	43.0	1.476	110	13.62
Area 1	G6M-02-08X	9/9/2015	20 U	20 U	83.8	20 U	20 U	20 U	10 U	10 U	10,600	340	428	8,780	976	-	0.078 J	15.8	4.80	5.59	0.07	-39.2	1.337	12.0	13.71
Area 1	G6M-02-08X	10/13/2015	20 U	21 U	83.5	21 U	21 U	21 U	10 U	10 U	18,400	320	483	9,410	1280	526	0.11 U	7.1 J	2.0 U	5.02	0.33	0.4	1.689	47.8	9.80
Area 1	G6M-02-08X	2/10/2016	2.9	2.0 U	49.0	2.0 U	2.0 U	4.7	10 U	10 U	14,500	272	1,150	12,100	3,110	879	0.10 J	5.3 J	2.0 U	4.89	0.47	52.6	2.906	17.2	10.44
Area 1	G6M-02-08X	6/14/2016	10 U	10 U	35.0	10 U	10 U	10 U	2.80	1.0 UJ	19,000	220	1,200	8,000	2,600	1,200	0.05 U	1.3	1.0 U	5.21	0.33	29.1	3.37	10.71	16.41
Area 1	G6M-02-08X	11/10/2016	4.3	1.0 U	27	1.0 U	1.0 U	2.1	1.1 U	1.0 U	11,000	230	880	8,600	2,100	1,000	0.053 J	0.58 J	7.0	5.27	0.77	-0.9	1.37	9.44	8.3
Area 1	G6M-02-08X	5/18/2017	20 U	20 U	51	20 U	20 U	20 U	1.1 U	1.0 U	15,000	410	770	4,300	740	930	0.10 U	1.0 U	1.0 U	12.31	0.01	-111.3	2.65	30.4	13.04
Area 1	G6M-02-08X	10/18/2017	20 U	20 U	20 U	20 U	20 U	20 U	1.1 U	1.0 U	16,000	370	640	3,300	250	680	0.26	2.0 U	1.6	6.66	0.44	-144.8	1.97	38.1	12.23
Area 1	G6M-03-01X	10/21/2009	380	65	670	25U	25U	25U	-	-	-	-	-	-	-	-	-	-	-	6.52	0.88	-153.5	0.559	7.25	11.99
Area 1	G6M-03-01X	10/16/2012	200	60	200	10U	10U	550	-	-	-	-	-	-	-	-	-	-	-	6.51	0.95	-69.4	1.776	2.28	20.17
Area 1	G6M-03-01X	6/12/2014	0.29J	37	19	0.59	0.51	68	-	-	-	-	-	-	-	-	-	-	-	6.52	1.95	11.7	0.812	13.1	16.73
Area 1	G6M-03-01X	10/31/2014	300	310	98	0.5U	0.5U	34	-	-	-	-	-	-	-	-	-	-	-	6.40	0.75	-106.6	1.263	8.57	9.6
Area 1	G6M-03-01X	6/18/2015	0.65 J	37	53	0.50 U	0.55 J	18.8	-	-	-	-	-	-	-	-	-	-	-	6.36	1.82	19.9	1.093	22.9	13.63
Area 1	G6M-03-01X	9/10/2015	103	67	65	2.40	1.40	62.8	10 U	68.9	8,640	46.0	41.8	7,080	5.30	-	0.076 J	10.30	2.0 U	6.00	0.61	-55.0	1.881	4.38	12.57
Area 1	G6M-03-01X	10/13/2015	126	190	141	5.20	1.50	57.5	-	-	-	-	-	-	-	-	-	-	-	6.27	0.28	-83.5	2.096	3.61	13.25
Area 1	G6M-03-01X	2/22/2016	1.0 U	81	87	1.9	1.0 U	50.6	10 U	95.5	16,300	23.5	20.0	6,330	6.4	144	0.11 U	3.4 J	2.0 U	6.62	2.11	33.6	1.162	4.98	8.46
Area 1	G6M-03-01X	6/15/2016	9.6	180	180	8.8	1.4	99	-	-	-	-	-	-	-	-	-	-	-	5.84	2.81	-48.3	1.726	5.61	12.87
Area 1	G6M-03-01X	11/10/2016	1.0 U	130	180	4.0	1.4	140	-	-	-	-	-	-	-	-	-	-	-	6.25	0.47	-84.7	1.097	2.4	8.21
Area 1	G6M-03-01X	5/18/2017	61	77	210	2.3	0.70 J	73	1.1 U	120	7,900	75	120	70,000	26	310	0.08 J	8.6	1.0 U	12.52	0.12	-93.1	2.28	8.51	13.56
Area 1	G6M-03-01X	10/12/2017	2.0 UJ	9.7 J	240 J	2.0 UJ	2.0 UJ	160 J	1.1 U	1.0 U	8,000	130	210	65,000	72	390	0.12	0.50 J	1.0 U	6.42	2.23	-69.7	2.02	7.96	12.49
Area 1	G6M-03-02X	5/12/2003	1,300	2U	4.4	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.92

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1	G6M-03-02X	10/11/2004	690	2U	5.6	2U	1U	2U	0.051	0.03	2.6	5U	1U	17	1U	12	3.7	20	1.7J	6.29	8.25	97.4	0.321	12.1	8.83
Area 1	G6M-03-02X	12/15/2004	200	2U	5	2U	1U	2U	0.056	0.063	3.4	5U	1U	610	390	29	2.4	30	2U	5.86	1.75	-132.9	0.382	1.93	12.75
Area 1	G6M-03-02X	3/29/2005	340	20U	14J	20U	10U	20U	0.15	0.34	5.1	640	140	49,000	1,300	366	0.2U	230	6.7J	5.23	0.65	-20.1	1.654	28.7	15.46
Area 1	G6M-03-02X	6/29/2005	190	11	91	2.5U	2.5U	2.5U	0.29	0.65	43	130	220J	35,000J	1,200	431	0.05U	74	11	4.62	1.13	2.9	1.723	29.1	15.57
Area 1	G6M-03-02X	9/29/2005	57	7.8	190	2.5U	2.5U	2.5U	0.2	0.29	560	150	260J	37,000	850	345	0.05U	62	16	4.94	0.53	-73.7	1.752	23.8	11.33
Area 1	G6M-03-02X	12/15/2005	39	8U	190	8U	4U	8U	0.17	0.26	4,300	146	290J	38,000	1,100	550	0.05U	66	16	5.42	4.55	13.9	1.65	19.7	12.12
Area 1	G6M-03-02X	3/21/2006	17	2U	140	2U	1U	2U	0.016J	0.14	6,700	140	320	37,000	1,400	1,200	2U	88.4	8.8	5.56	0.16	-47.7	1.731	17.3	13.35
Area 1	G6M-03-02X	6/21/2006	8.2	2U	160	2U	1U	2U	0.044	0.12	10,000	240	410	23,000	1,300	1,000	1U	120	9.6	3.21	0.89	140.1	2.428	11.6	10.08
Area 1	G6M-03-02X	9/20/2006	9.7	2.3	230	2U	1U	2U	0.05	0.2	8,700	200	440	21,000	1,300	570	1U	115	8.4	5.55	0.71	-27.8	2.029	13.7	11.46
Area 1	G6M-03-02X	12/12/2006	6.9	2U	180	2U	1U	2U	0.047	0.16	6,800	170	350	11,000	890	-	-	53	8.0	5.85	1.31	-43.1	2.326	26.7	12.11
Area 1	G6M-03-02X	3/28/2007	13	2.2	320	2U	1U	2U	0.033	0.11	9,800	230	470	14,000J	920	-	-	74.5	9.2	5.38	0.17	-62.3	2.523	14.9	12.75
Area 1	G6M-03-02X	6/12/2007	11	2U	650	2U	1.4	17	0.025U	0.14	21,000	200	360	10,000	840	-	-	39	8.4	5.77	0.38	-59.3	2.268	39.5	12
Area 1	G6M-03-02X	9/12/2007	12	2.1	800	2U	1U	81	0.006J	0.6	17,000	230	350	12,000	740	790	0.2U	580	20	5.44	10.26	-122.8	2.156	18.1	12.29
Area 1	G6M-03-02X	12/10/2007	3.8	2U	720	2U	1.8	94	0.005J	1.4	14,000	290	390	29,000	1,000	-	-	24.7	7.0	5.67	6.03	-80.2	2.802	5.3	12.33
Area 1	G6M-03-02X	3/10/2008	2U	2U	590	2U	1.8	50	0.098	3.4	11,000	320	410	100,000	2,000	-	-	50U	4.8	5.47	0.51	-55.9	3.113	24.5	11.74
Area 1	G6M-03-02X	10/15/2008	5U	5U	260	5U	5U	27	1.2U	10	12,000	193	366	108,000	454	860	0.13U	59	0.03UJ	5.6	0.75	-28.1	2.376	15	11
Area 1	G6M-03-02X	5/7/2009	4.0U	4.0U	220	4.0U	4.0U	12	1.2U	18	23,000	188	396	56,700	900	1,100J	0.13U	44	0.03U	5.45	0.32	-46.7	1.962	4.81	11.27
Area 1	G6M-03-02X	10/19/2009	10U	20U	290	10U	10U	9.5J	1.3U	14	18,000	205	423	43,400	290	920	0.13U	300	0.03U	5.99	2.56	-44.2	1.832	11.9	-
Area 1	G6M-03-02X	4/21/2010	2.0UJ	2.0UJ	120J	2.0UJ	2.0UJ	9.3J	1.3U	16	16,000	189	566J	39,600	1,200	1,000	0.13U	0.28J	0.03U	5.85	0.29	18.9	1.902	7.28	18.13
Area 1	G6M-03-02X	10/6/2010	0.5U	0.5U	3.2	0.5U	0.5U	0.42J	1.2U	20	35,000	118	580	36,100	810	1,100	0.29	0.40J	0.03U	5.65	0.57	-21.1	2.137	5.47	13.03
Area 1	G6M-03-02X	10/4/2011	13U	13U	410	13U	13U	30	1.2U	63	47,000	379	352	12,400	190	3,300	0.13U	0.51J	0.035	6.32	0.09	-86.1	1.14	13	16.73
Area 1	G6M-03-02X	10/11/2012	2.0U	2.0U	59	2.0U	2.0U	34	1.2U	540	39,000	270	295	10,200	140	500	0.051J	5.0U	0.49	6.13	0.46	-68.9	1.31	9.5	23.98
Area 1	G6M-03-02X	10/22/2013	1.3U	1.3U	44	1.3U	1.3U	36	1.2U	200	44,000	296	212	6,750	57	300	0.13U	5.0U	0.19	6.24	0.41	-68.8	0.609	9.19	17.97
Area 1	G6M-03-02X	10/30/2014	0.5U	0.27J	6.6	0.5U	0.5U	6.3	1.2U	12	38,000	254	251	6,090	340	450	0.13U	0.23J	0.03U	6.45	0.33	-61.7	0.82	13.6	10.2
Area 1	G6M-03-02X	10/13/2015	1.0 U	1.0 U	6.0	1.0 U	1.0 U	5.30	10 U	10 U	17,600	168	116	3,540	33.0	156	0.062 J	10.2	2.0 U	5.85	0.39	-86.6	0.679	23.1	13.10
Area 1	G6M-03-02X	11/10/2016	1.0 U	0.54 J	18	1.0 U	1.0 U	6.4	1.1 U	1.0 U	17,000	180	260	3,900	120	300	0.05 U	0.44 J	1.9	6.21	0.25	-57	0.73	8.87	9.15
Area 1	G6M-03-02X	10/12/2017	1.0 U	1.0 U	3.5	1.0 U	1.0 U	4.0	1.1 U	13	16,000	250	150	2,000	21	140	0.15	1.0 U	1.0 U	6.29	1.29	-44.1	1.13	13.9	11.17
Area 1	G6M-04-09X	9/24/2004	7,400	4.2	9.0	2U	1U	2U	-	-	-	5U	1UJ	160	-	-	-	-	-	5.15	3.84	637.6	0.495	0.82	9.54
Area 1	G6M-04-09X	9/28/2005	3,200	5U	5U	5U	5U	5U	-	-	-	5U	1U	37	-	-	-	-	-	5.92	3.41	678.4	0.169	2.07	10.21
Area 1	G6M-04-09X	9/21/2006	190	2U	2U	2U	1U	2U	-	-	-	5U	0.10U	50	-	-	-	-	-	5.83	8.18	215.6	0.102	5.51	15.4
Area 1	G6M-04-09X	9/12/2007	440	22	31	2U	1U	2U	-	-	-	5U	0.83	390	-	-	-	-	-	6.22	2.18	49.7	0.179	4.3	14
Area 1	G6M-04-09X	10/17/2008	4,000	330	410	50U	50U	44	-	-	-	63.4	13.3	5,700	-	-	-	-	-	6.23	0.66	-36.2	0.497	9.2	10.50
Area 1	G6M-04-09X	10/21/2009	1,600	210	210	50U	50U	51	-	-	-	70.8	13	3,960	-	-	-	-	-	5.80	0.58	33.3	0.376	4.53	12.35
Area 1	G6M-04-09X	10/8/2010	1,000	420	990	0.79	0.89	7.8	-	-	-	69.9	14.3	15,300	-	-	-	-	-	6.17	0.99	-20.8	0.388	1.58	11.9
Area 1	G6M-04-09X	6/9/2011	260	140	950	0.56	1.7	200	-	-	-	203	43.3	9,820	-	-	-	-	-	6.14	0.35	-49.3	0.562	0.03	11.27
Area 1	G6M-04-09X	10/7/2011	20U	23	910	20U	20U	240	-	-	-	291	107	50,900	45	-	-	-	-	6.45	0.14	-105.8	0.626	2	10.1
Area 1	G6M-04-09X	5/9/2012	970	250	510	40U	40U	340	-	-	-	344	76.7	17,800	9.1J	-	-	-	-	6.66	0.08	-85.2	0.495	12.5	10.11
Area 1	G6M-04-09X	10/16/2012	260	70	100	20U	20U	350	-	-	-	225	41.7	13,800	3.0J	-	-	-	-	6.24	0.31	-79.9	0.289	10.3	10.75
Area 1	G6M-04-09X	5/22/2013	5.9	3.6	5.9	0.81	0.5U	9.9	-	-	-	321	135	30,800	11	-	-	-	-	6.29	0.15	-84.7	0.812	4.21	8.74
Area 1	G6M-04-09X	10/22/2013	0.5U	0.5U	52	0.53	0.5U	38	-	-	-	551	303	27,100	34	-	-	-	-	6.64	3.3	-130.9	0.917	18.5	10
Area 1	G6M-04-09X	6/12/2014	1.4	0.75	12	0.6	0.5U	26	-	-	-	607	315	19,200	29	-	-	-	-	6.37	0.26	-82.0	1.392	3.64	10.42
Area 1	G6M-04-09X	11/3/2014	0.21J	0.5U	0.43J	0.21J	0.5U	0.83	-	-	-	600	339	16,500	31	-	-	-	-	6.59	0.05	-129.2	1.03	21.8	10.47
Area 1	G6M-04-09X	6/17/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	-	-	-	351	159	3,560	14.10	-	-	-	-	6.33	0.64	-65.0	1.384	96	14.03
Area 1	G6M-04-09X	10/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	577	241	5,600	16.4	-	-	-	-	6.61	0.13	134.9	1.604	15.3	10.75
Area 1	G6M-04-09X	2/19/2016	1.0 U	1.0 U	0.55 J	1.0 U	1.0 U	1.0 U	10 U	10 U	16,700	514	202	3,600	13.4	439	0.37	4.5 J	2.0 U	6.74	1.09	-95.7	1.280	12.42	9.9
Area 1	G6M-04-09X	6/15/2016	1.0 U	0.85 J	1.0	1.0 U	1.0 U	0.61 J	-	-	-	550	200	3,100	14.0	-	-	-	-	6.38	2.56	-87.6	2.118	11.48	11.23
Area 1	G6M-04-09X	11/9/2016	1.0 U	1.0 U	0.67 J	1.0 U	1.0 U	0.56 J	-	-	-	430	160	2,600	-	-	-	-	-	7.32	0.52	-139.7	1.277	21.7	8.53
Area 1	G6M-04-09X	5/18/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	14,000	430	180.0	3,200	11	190	0.15	5.4	1.0 U	6.58	0.45	-116.7	1.81	17.0	10.40
Area 1	G6M-04-09X	10/23/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 J	--	--	--	370	110	2,400	7.8					6.72	0.13	-106.4	1.86	30.7	10.44
Area 1	G6M-04-11X	9/20/2004	8.5	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.54	3.42	374.7	0.782	16.8	14.39
Area 1	G6M-04-11X	9/26/2005	7.8	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.96	5.14	94.6	0.39	8.7	10.63

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1	G6M-04-11X	9/20/2006	4.0	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.24	6	129	0.38	5.99	14.35
Area 1	G6M-04-11X	9/11/2007	2.1	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.87	6.59	46.5	0.38	14.8	11.82
Area 1	G6M-04-11X	10/17/2008	1.4	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.53	5.62	98.1	0.302	3.5	9.54
Area 1	G6M-04-11X	10/16/2009	1.1	53	1U	1U	1U	1U	-	-	-	-	-	-	-	-	-	-	-	6.46	7.04	176	0.225	4.2	9.76
Area 1	G6M-04-11X	10/8/2010	0.41J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.71	6.95	152.6	0.247	3.15	9.59
Area 1	G6M-04-11X	10/6/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.77	2.5	87.7	0.219	4.0	10.61
Area 1	G6M-04-11X	10/16/2012	0.62	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.36	9.4	161.8	0.224	0	10.14
Area 1	G6M-04-11X	10/31/2014	0.54	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.88	7.12	167.7	0.163	0.91	10.43
Area 1	G6M-04-11X	11/10/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	-	-	-	-	-	-	-	-	6.65	6.67	25.6	0.167	1.18	10.28
Area 1	G6M-04-12X	9/20/2004	310	7.5	56	2U	1U	2U	-	-	-	5U	1.0	44	-	-	-	-	-	11.03	0.86	102.6	2.003	5.22	9.63
Area 1	G6M-04-12X	9/26/2005	250	6.8	49	2U	1U	2U	-	-	-	15	1U	360	-	-	-	-	-	8.41	1.05	234.2	1.961	1.65	-
Area 1	G6M-04-12X	9/18/2006	470	9.4	60	2U	1U	2U	-	-	-	6.5	0.10U	550	-	-	-	-	-	7.21	3.22	253.5	1.764	7.11	12.69
Area 1	G6M-04-12X	9/10/2007	350	11	50	2U	1U	2U	-	-	-	2U	0.1U	580	-	-	-	-	-	6.84	1.73	90.2	2.613	29.8	12.19
Area 1	G6M-04-12X	10/16/2008	360	7.7J	35	10U	10U	10U	-	-	-	3.1J	0.2U	360	-	-	-	-	-	7.23	1.45	91.2	2.623	2.00	12.44
Area 1	G6M-04-12X	10/19/2009	170	22U	28	10U	10U	10U	-	-	-	2.3J	0.2U	308	-	-	-	-	-	6.72	1.8	66.7	2.543	5.91	11.5
Area 1	G6M-04-12X	10/8/2010	100	4.4	22	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	336	-	-	-	-	-	6.57	1.75	208.0	3.632	2.35	10.62
Area 1	G6M-04-12X	6/9/2011	180	3.9	19	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	209	-	-	-	-	-	7.26	1.38	25.6	2.816	9	10.24
Area 1	G6M-04-12X	10/4/2011	280	4.6	27	4.0U	4.0U	4.0U	-	-	-	5U	0.1U	200	-	-	-	-	-	6.62	1.06	63.8	2.332	2.44	13.35
Area 1	G6M-04-12X	5/9/2012	160	5.0U	12	5.0U	5.0U	5.0U	-	-	-	4.1J	0.1U	155	-	-	-	-	-	6.7	1.34	85.1	2.68	1.42	12.32
Area 1	G6M-04-12X	10/16/2012	120	5.0U	14	5.0U	5.0U	5.0U	-	-	-	5U	0.1U	156	-	-	-	-	-	6.6	2.11	62.5	3.799	2.03	12.96
Area 1	G6M-04-12X	5/22/2013	220	3.4J	18	5.0U	5.0U	5.0U	-	-	-	3.8J	0.1U	92.5	-	-	-	-	-	6.55	0.87	120.8	2.927	2.58	12.5
Area 1	G6M-04-12X	10/22/2013	190	3.7J	23	4.0U	4.0U	4.0U	-	-	-	5U	0.1U	106	-	-	-	-	-	6.58	1.6	133.7	2.231	4.88	12.27
Area 1	G6M-04-12X	6/10/2014	130	2.7	13	0.50U	0.50U	0.50U	-	-	-	5U	0.1U	75	-	-	-	-	-	6.59	0.84	178.9	2.675	13.04	14.4
Area 1	G6M-04-15X	9/21/2004	5.2	2U	5.3	2U	1U	2U	-	-	-	5U	4.8	8,100	-	-	-	-	-	5.26	0.82	410	2.64	0.23	11.25
Area 1	G6M-04-15X	9/28/2005	9.1	2U	6.4	2U	1U	2U	-	-	-	33	1.8	4,400	-	-	-	-	-	5.11	0.39	248.1	0.674	0.29	11.78
Area 1	G6M-04-15X	9/20/2006	3.5	2U	5.2	2U	1U	2U	-	-	-	20	2.0	4,300	-	-	-	-	-	4.60	1.07	-100.3	1.555	0.95	11.07
Area 1	G6M-04-15X	9/11/2007	2.7	2U	2U	2U	1U	2U	-	-	-	18	0.75	2,100	-	-	-	-	-	6.21	3.21	85.1	1.353	3.5	11.29
Area 1	G6M-04-15X	10/17/2008	4.8	1.0	2.3	0.5U	0.5U	0.5U	-	-	-	36.3	3.01	3,010	-	-	-	-	-	6.34	1.5	-8.1	0.910	4.0	11.1
Area 1	G6M-04-15X	10/19/2009	1.9	14	3.2	0.5U	0.5U	0.5U	-	-	-	48.9	4.8	3,130	-	-	-	-	-	6.19	0.31	24.4	0.799	4.68	11.1
Area 1	G6M-04-15X	10/8/2010	0.65	0.34J	3.2	0.5U	0.5U	0.5U	-	-	-	59.1	4.76	2,900	-	-	-	-	-	6.14	0.3	3.2	0.704	1.34	10.85
Area 1	G6M-04-15X	10/6/2011	0.52	0.5U	3.7	0.5U	0.5U	0.5U	-	-	-	55.5	3.75	3,470	-	-	-	-	-	6.12	0.05	37.3	0.446	4.89	19.25
Area 1	G6M-04-15X	10/16/2012	1.0	0.5U	3.9	0.5U	0.5U	0.5U	-	-	-	111	11.1	4,300	-	-	-	-	-	6.15	0.49	-48.6	0.76	1.08	14.33
Area 1	G6M-04-15X	10/18/2013	0.97	0.27J	2.2	0.5U	0.5U	0.5U	-	-	-	112	14.5	3,530	-	-	-	-	-	5.68	0.24	14.1	0.838	1.33	18.79
Area 1	G6M-04-15X	11/4/2014	1.60	0.29J	2.2	0.5U	0.5U	0.5U	-	-	-	135	33.4	14,000	-	-	-	-	-	6.08	0.14	-16	1.937	3.61	12.98
Area 1	G6M-04-15X	10/14/2015	0.76 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	103	45.0	21,200	-	-	-	-	-	5.93	0.69	-38.2	4.011	1.24	13.62
Area 1	G6M-04-15X	11/10/2016	1.0 U	0.95 J	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	55	16	14,000	-	-	-	-	-	4.64	0.5	-21.4	2.929	4.6	13.9
Area 1	G6M-04-15X	10/9/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	70	15	19,000	--	--	--	--	--	6.13	0.59	0.59	4.28	8.9	14.50
Area 1	G6M-04-22X	9/21/2004	900	24	110	2U	1U	2U	-	-	-	5U	1U	990	-	-	-	-	-	6.30	4.78	192.2	0.897	19	13.17
Area 1	G6M-04-22X	9/28/2005	210	6.8	45	2.5	1U	2U	-	-	-	5U	1U	120	-	-	-	-	-	5.52	6.13	391.3	0.757	21	14.07
Area 1	G6M-04-22X	9/20/2006	200	8.7	54	2U	1U	2U	-	-	-	5U	0.43	4,500	-	-	-	-	-	5.68	2.8	197.8	1.048	6.98	15.37
Area 1	G6M-04-22X	9/11/2007	95	12	75	2U	1U	9.4	-	-	-	390	250	44,000	-	-	-	-	-	6.92	0.28	-160.8	2.25	20.7	13.43
Area 1	G6M-04-22X	10/17/2008	18	3.7	53	0.44J	1U	26	-	-	-	439	421	15,900	-	-	-	-	-	6.34	0.28	-106.1	2.104	18	12.88
Area 1	G6M-04-22X	10/19/2009	7.2	9.7	16	0.5U	0.5U	4.9	-	-	-	320	355	9,360	-	-	-	-	-	6.26	1.27	-48.7	2.181	290	14.32
Area 1	G6M-04-22X	10/8/2010	0.39J	2.2	7.1	0.23J	0.5U	4.7	-	-	-	522	210	3,020	-	-	-	-	-	6.32	2.51	-59.7	1.691	22.2	14.77
Area 1	G6M-04-22X	10/6/2011	0.5U	0.5U	13	0.5U	0.5U	7.5	-	-	-	534	232	15,800	-	-	-	-	-	6.25	0.39	-53.4	0.016	6.47	12.2
Area 1	G6M-04-22X	10/12/2012	0.5U	0.5U	5.7	0.5U	0.5U	6.6	-	-	-	657	162	9,080	-	-	-	-	-	6.41	0.6	-66.8	1.701	8.66	12.39
Area 1	G6M-04-22X	10/18/2013	-	-	-	-	-	-	-	-	-	767	-	-	-	-	-	-	-	6.12	0.29	-68.7	1.113	14.3	12.78
Area 1	G6M-04-22X	11/4/2014	0.5U	0.5U	2.0	0.72	0.5U	4.6	-	-	-	667	150	1,600	-	-	-	-	-	6.39	0.2	-64	0.951	42.9	13.26
Area 1	G6M-04-22X	10/13/2015	-	-	-	-	-	-	-	-	-	223	-	-	-	-	-	-	-	-	-	-	-	-	-
Area 1	G6M-04-22X	11/9/2016	2.5	1.4	1.2	1.0 U	1.0 U	1.0 U	-	-	-	650	150	960	-	-	-	-	-	6.92	1.22	-73.1	0.74	55.5	7.02
Area 1	G6M-04-22X	10/18/2017	--	--	--	--	--	--	--	--	--	970			--	--	--	--	--	6.32	0.48	-66.9	1.27	120	11.74

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1	G6M-04-31X	9/21/2004	1,600	2U	4.2	2U	1U	2U	-	-	-	5U	1U	190	-	-	-	-	-	5.69	5.1	211	1	2.99	13.27
Area 1	G6M-04-31X	9/28/2005	1,900	5U	5.2	5U	5U	5U	-	-	-	5U	1U	35	-	-	-	-	-	5.63	3.66	305.4	0.388	2.2	9.28
Area 1	G6M-04-31X	9/20/2006	600	6.1	2.5	2U	1U	2U	-	-	-	5U	0.10U	15U	-	-	-	-	-	6.52	0.28	-108.5	0.729	3.56	9.22
Area 1	G6M-04-31X	9/11/2007	340	260	330	2.8	1.3	2U	-	-	-	5U	0.1	890	-	-	-	-	-	6.38	5.61	101.6	0.217	6.9	10.90
Area 1	G6M-04-31X	10/17/2008	110	72	340	20U	20U	730	-	-	-	103	68.4	9,710	-	-	-	-	-	6.43	2	-72.7	0.636	9.0	9.42
Area 1	G6M-04-31X	10/21/2009	86	11	270	10U	10U	560	-	-	-	311	181	16,900	-	-	-	-	-	5.82	1.96	-102.01	0.626	6.23	10.26
Area 1	G6M-04-31X	10/8/2010	3.1	1.1	7.4	0.30J	0.5U	31	-	-	-	428	127	9,620	-	-	-	-	-	6.41	0.93	-107.6	0.728	1.21	9.54
Area 1	G6M-04-31X	10/6/2011	18	5.3	38	0.5U	0.5U	37	-	-	-	635	223	15,800	-	-	-	-	-	6.62	0.07	-112.4	1.333	2.89	11.23
Area 1	G6M-04-31X	10/12/2012	25	31	61	2.0U	2.0U	72	-	-	-	556	181	8,940	-	-	-	-	-	6.62	0.43	-104.6	1.193	4.58	11.36
Area 1	G6M-04-31X	10/18/2013	-	-	-	-	-	-	-	-	-	498	-	-	-	-	-	-	-	6.36	1.71	-87.6	1.656	1.13	10.83
Area 1	G6M-04-31X	11/4/2014	0.5U	0.51	6.9	0.23J	0.5U	3.4	-	-	-	468	121	9,690	-	-	-	-	-	6.51	0.12	-95.5	1.775	9.01	11.58
Area 1	G6M-04-31X	10/13/2015	-	-	-	-	-	-	-	-	-	420	-	-	-	-	-	-	-	5.93	0.84	-144.3	3.98	9.80	8.97
Area 1	G6M-04-31X	11/10/2016	1.0 U	0.95 J	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	430	-	-	-	-	-	-	-	6.15	0.89	-95.8	2.49	2.95	14.11
Area 1	G6M-04-31X	10/9/2017	--	--	--	--	--	--	--	--	--	410			--	--	--		--	6.52	0.58	-83.5	2.83	8.7	14.26
Area 1	G6M-13-05X	1/30/2014	250	10U	16	10U	10U	10U	-	-	-	-	-	-	-	-	-	-	-	8.63	0.37	-86.6	1.112	3.09	11.35
Area 1	G6M-13-05X	6/10/2014	1,200	12	70	0.40J	0.54	0.50U	-	-	-	10.7	0.299 J	556	-	-	-	-	-	7.65	0.46	-107	0.515	8.19	11.34
Area 1	G6M-13-05X	11/4/2014	1,700	13J	77	32U	32U	32U	-	-	-	6.6	0.233	565	-	-	-	-	-	7.43	0.47	-93.6	0.417	9.73	18.31
Area 1	G6M-13-05X	6/16/2015	1,520	12	62	0.50 U	0.50 U	0.50 U	-	-	-	5.20	0.05 U	229	-	-	-	-	-	7.04	1.63	57.0	0.398	33.2	12.71
Area 1	G6M-13-05X	10/13/2015	1,120	11	63	1.0 U	1.0 U	1.0 U	-	-	-	2.3 J	0.10 U	235	-	-	-	-	-	7.22	0.99	59.5	0.525	2.14	11.23
Area 1	G6M-13-05X	2/10/2016	770	5.2 J	24	10 U	10 U	10 U	10 U	10 U	10 U	4.0 U	0.10 U	199	1.0 U	25	1.4	10 U	2.0 U	6.2	4.39	244.6	0.523	20.2	9.67
Area 1	G6M-13-05X	6/15/2016	1,200	9.6	50	10 U	10 U	10 U	-	-	-	3.0	0.022 J	130	-	-	-	-	-	6.41	0.89	55.2	0.582	2.59	12.33
Area 1	G6M-13-05X	11/10/2016	830	7.2 J	31	10 U	10 U	10 U	-	-	-	3.0 U	0.05 U	54	-	-	-	-	-	6.57	2.63	20.9	0.404	2.47	9.16
Area 1	G6M-13-05X	5/18/2017	1,300	20 U	64 J	20 U	20 U	20 U	1.1 U	1.0 U	0.58 U	3.0 U	0.28	350	1.0 U	32 J	1.5	1.0 U	1.0 U	11.40	3.97	25.1	0.55	7.65	12.67
Area 1	G6M-13-05X	10/5/2017	280	69	750	10 U	10 U	10 U	1.1 U	1.0 U	32	35	12	1,700	28	49	0.04 J	1.0 U	1.0 U	5.95	0.51	19.7	0.63	27.4	12.80
Area 1	G6M-13-06X	1/30/2014	3.9J	8U	300	8U	8U	95	-	-	-	-	-	-	-	-	-	-	-	6.61	0.33	-38.3	2.521	35.9	10.81
Area 1	G6M-13-06X	6/12/2014	0.5U	0.44J	180	0.68	0.37J	330	1.3UJ	33J	18,000J	444	365	16,900	160	710J	0.13U	0.68J	0.03U	6.42	0.24	-88.9	1.71	13.7	19.03
Area 1	G6M-13-06X	10/30/2014	0.5U	0.5U	14	0.7	0.5U	15	1.2U	63	79,000	558	274	12,500	42	580	0.13U	0.42J	0.03U	6.31	0.24	-99	1.943	20.1	18.31
Area 1	G6M-13-06X	6/16/2015	0.50 U	0.50 U	3.9	0.98 J	0.50 U	6.0	10 U	27.3	10,300	546	246	16,900	54.5	510	0.15	1.0 J	1.0 U	6.25	0.11	-40.1	1.989	31.9	11.27
Area 1	G6M-13-06X	9/9/2015	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	4.0 J	5.0 U	36.6	18,200	511	269	22,500	82.2	-	0.11	10 U	6.50	6.02	0.16	-53.6	1.745	4.09	12.15
Area 1	G6M-13-06X	10/14/2015	5.0 U	5.0 U	3.2 J	5.0 U	5.0 U	5.0 U	10 U	30.2	11,300	531	260	21,300	61.5	434	0071 J	1.70	1.50	5.71	1.19	100.7	0.904	1.46	19.27
Area 1	G6M-13-06X	2/9/2016	1.0 U	1.0 U	2.0	0.80 J	1.0 U	4.6	10 U	31.7	14,500	536	226	12,000	46.0	409	0.17	10 U	2.0 U	6.35	1.07	-23.7	1.204	3.69	7.11
Area 1	G6M-13-06X	6/14/2016	1.0 U	1.0 U	1.9	0.59 J	1.0 U	4.2	1.1 U	41.0	13,000	490	280	18,000	150	640	0.05 UJ	0.8 UJ	1.0 U	6.40	0.57	-48.4	2.223	2.27	10.67
Area 1	G6M-13-06X	11/8/2016	1.0 U	1.0 U	9.8	0.55 J	1.0 U	7.7	1.1 U	23	11,000	470	250	9,600	55	560	0.05 UJ	1.0 U	5.8	6.42	1.47	-127.3	1.23	4.72	8.19
Area 1	G6M-13-06X	5/19/2017	1.0 U	1.0 U	2.2	0.45 J	1.0 U	2.6	14	16	17,000	500	250	7,000	70 J	470	0.14 J	3.0	1.0 U	5.96	1.01	-64.8	1.45	7.43	10.87
Area 1	G6M-13-06X	10/5/2017	1.0 U	1.0 U	2.3 J	1.0 U	1.0 U	1.1	6.0	6.3	6,000	490	220	7,500	72	440	0.17 J	1.0 UJ	1.0 UJ	6.20	0.31	-88.6	1.46	15.2	10.97
Area 1	G6M-93-13X	10/15/2001	0.55J	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.30	9.9	355	6	1.2	14.88
Area 1	G6M-93-13X	9/20/2004	3.8	2U	2U	2U	1U	2U	0.0081	0.014	0.89	5U	1.0	15U	1U	23	1.3J	10	2.7J	6.14	13.07	250.7	0.059	4.31	12.36
Area 1	G6M-93-13X	12/13/2004	2U	2U	2U	2U	1U	2U	0.005U	0.005U	3.8	5U	1U	15U	5U	20	1.2	9.6M	2U	6.16	10.41	192.5	0.08	1.42	14.8
Area 1	G6M-93-13X	3/29/2005	2U	2U	2U	2U	1U	2U	0.0063	0.28	3.1	5U	1UM	15U	0.6J	22	0.2U	9.1	2U	6.24	10.4	97.3	0.09	0.64	15.91
Area 1	G6M-93-13X	6/28/2005	2U	2U	2U	2U	1U	2U	0.023	0.02	9.4	2U	1U	10U	4.9	41.2	0.081	8.2	1U	11.30	11.43	146.1	0.275	2.46	13.31
Area 1	G6M-93-13X	9/26/2005	2U	2U	2U	2U	1U	2U	0.006J	0.018J	4.9	5U	1U	15U	3.1	27	0.083	9.5	1U	6.04	7.98	191.8	0.126	18.2	15.19
Area 1	G6M-93-13X	12/13/2005	2U	2U	2U	2U	1U	2U	0.008J	0.011J	9.3	5U	1U	15U	4.4J	41	3.4	9.4	1U	6.48	9.55	69.6	0.086	0.5	13.7
Area 1	G6M-93-13X	3/21/2006	2U	2U	2U	2U	1U	2U	0.025U	0.046	9.5	5U	0.1U	19	6.8	24	0.2U	6.83	1U	6.87	9.55	-9.4	0.058	0.61	13
Area 1	G6M-93-13X	6/19/2006	2U	2U	2U	2U	1U	2U	0.008J	0.008J	5.3	5U	0.1U	28	1.4J	46	0.2UH	4.42	1U	6.33	9.14	190.1	0.087	1.34	11.49
Area 1	G6M-93-13X	9/18/2006	2U	2U	2U	2U	1U	2U	0.006J	0.014J	5	5U	0.10U	15U	4.6J	22	0.2U	7.76	1U	6.22	9.33	173.6	0.062	4.62	10.39
Area 1	G6M-93-13X	12/11/2006	2U	2U	2U	2U	1U	2U	0.008J	0.038	11	5U	0.1U	15U	5U	-	-	6.55	1U	6.38	10.68	91.3	0.076	2.23	12.11
Area 1	G6M-93-13X	3/28/2007	2U	2U	2U	2U	1U	2U	0.005J	0.014J	9.6	5U	0.1U	15U	5U*	-	-	5.74	1U	6.14	9.8	-3.1	0.071	8.73	12.58
Area 1	G6M-93-13X	6/11/2007	2U	2U	2U	2U	1U	2U	0.034	0.3	13	5U	0.1U	15U	0.4J	-	-	8.96	1U	6.64	10.12	125.4	0.121	3.3	13.98
Area 1	G6M-93-13X	9/11/2007	3.0	2U	2U	2U	1U	2U	0.005J	0.025U	2.8	6U	0.1U	15U	0.7J	99	0.2U	12	1U	6.31	9.67	96.7	0.095	7.1	12.44
Area 1	G6M-93-13X	12/10/2007	2U	2U	2U	2U	1U	2U	0.004J	0.007J	1.1	5U	0.1U	15U	5U	-	-	6.92	1U	6.25	8.81	71	0.156	0.6	11.83
Area 1	G6M-93-13X	3/10/2008	2U	2U	2U	2U	1U	2U	0.008J	0.05	10	5U	0.2	12,000	34	-	-	100	1U	6.3	3.84	141	0.953	0	16

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1	G6M-93-13X	10/15/2008	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	5.6	8.0U	0.2U	3,270	10U	110	3.6	34	0.03UJ	6.31	2.97	116.4	0.304	0	15.24
Area 1	G6M-93-13X	5/7/2009	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	2.2	3.5J	0.2U	50U	10U	67J	0.71	16	0.03U	6.26	6.1	79.6	0.164	1.1	-
Area 1	G6M-93-13X	10/19/2009	0.5U	15	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	6	8U	0.142U	50U	10U	54	0.058J	9.2	0.03UJ	6.42	4.79	182	0.110	1.01	15.69
Area 1	G6M-93-13X	4/21/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	440	5.0U	0.115U	25U	6.5J	140	0.13U	10	0.03U	6.19	9.03	37.3	0.109	0.00	15.22
Area 1	G6M-93-13X	10/6/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	16	5U	0.1U	25U	10U	63	0.050J	11	0.03U	6.12	4.77	114	0.116	3.42	17.33
Area 1	G6M-93-13X	9/9/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	4.0 U	0.10 U	207	-	-	0.11 U	49.6	2.0 U	6.02	0.16	-53.6	1.745	4.09	12.15
Area 1	G6M-93-13X	2/9/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	4.0 U	0.10 U	12 J	2.2	85.7	0.11 U	73.4	2.0 U	6.21	1.64	232.3	0.35	10.7	8.96
Area 1	G6M-93-13X	6/14/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.045 J	130	-	-	-	-	-	6.35	1.01	63.1	0.306	14.0	13.39
Area 1	G6M-93-13X	11/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.15	230	-	-	-	-	-	6.47	0.91	-29.7	0.192	11.39	9.52
Area 1	G6M-95-19X	10/15/2001	110	6.6	42	1.5J	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.46	6.24	202	2.87	8.5	9.84
Area 1	G6M-95-19X	9/20/2004	41	2.9	16	2U	1U	2U	-	-	-	5U	1	210	-	-	-	-	-	5.45	7.92	467.5	4.17	3.1	14.08
Area 1	G6M-95-19X	9/26/2005	21	2U	5.4	2U	1U	2U	-	-	-	8.3	1U	160	-	-	-	-	-	4.00	4.51	595.3	4.361	0.72	14.45
Area 1	G6M-95-19X	9/19/2006	12	2U	2U	2U	1U	2U	-	-	-	5U	0.10U	160	-	-	-	-	-	3.82	6.77	281	4.236	2.41	11.78
Area 1	G6M-95-19X	9/12/2007	21	2U	4	2U	1U	2U	-	-	-	5U	0.1U	200	-	-	-	-	-	5.28	7.62	175.1	6.566	0.4	12.46
Area 1	G6M-95-19X	10/15/2008	14J	0.39J	1.6J	0.5U	0.5U	0.5U	-	-	-	8U	0.2U	212	-	-	-	-	-	5.35	6.63	267.9	5.306	0.9	12.15
Area 1	G6M-95-19X	10/16/2009	20U	540	20U	20U	20U	20U	-	-	-	8U	0.2U	153	-	-	-	-	-	5.22	4.53	232	4.529	1.49	11.54
Area 1	G6M-95-19X	1/15/2010	6.9	0.5U	0.46J	0.75U	0.75U	1.0U	-	-	-	-	-	-	-	-	-	-	-	5.46	4.09	243.8	4.733	2.17	10.45
Area 1	G6M-95-19X	10/7/2010	1.8	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	186	-	-	-	-	-	5.34	3.35	159.4	4.211	3.88	9.77
Area 1	G6M-95-19X	10/7/2011	2.2	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	242	-	-	-	-	-	5.51	2.9	132.2	2.319	1.1	12.69
Area 1	G6M-95-19X	10/15/2012	3.3	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	1,450	-	-	-	-	-	5.53	2.8	225.1	7.618	0.19	9.91
Area 1	G6M-95-19X	10/18/2013	2.4	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	2,250	-	-	-	-	-	5.49	1.44	154.9	3.827	5.42	10.34
Area 1	G6M-95-19X	11/3/2014	3.0	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5U	0.0847U	1,190	-	-	-	-	-	5.73	3.06	202.5	2.189	2.78	10.00
Area 1	G6M-95-19X	10/14/2015	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.10 U	739	-	-	-	-	-	5.85	1.10	170.4	4.126	1.43	10.94
Area 1	G6M-95-19X	11/8/2016	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05 U	760	-	-	-	-	-	2.68	1.7	67.5	2.952	3.39	12.48
Area 1	G6M-95-19X	10/5/2017	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.05 U	1,400	--	--	--	--	--	5.60	1.22	171.7	3.53	3.41	13.04
Area 1	G6M-95-20X	10/16/2001	4.4	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.90	7.2	212	0.27	4.1	11.2
Area 1	G6M-95-20X	2/25/2002	5.0	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.59	12.37	155.7	0.171	7.67	11.53
Area 1	G6M-95-20X	2/27/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.7	-	-	-	-	-	-	-	10.42
Area 1	G6M-95-20X	9/21/2004	2.8	2U	2U	2U	1U	2U	-	-	-	5U	1U	15U	-	-	-	-	-	5.76	8.88	205.5	0.544	0	11.25
Area 1	G6M-95-20X	9/26/2005	2.3	2U	2U	2U	1U	2U	-	-	-	5U	1U	15U	-	-	-	-	-	5.62	8.75	328.7	0.741	0.95	11.42
Area 1	G6M-95-20X	9/19/2006	2.2	2U	42	2U	1U	2U	-	-	-	71	350	39,000	-	-	-	-	-	6.31	0.76	-108	2.715	4.19	12.17
Area 1	G6M-95-20X	9/12/2007	2U	2U	11	2U	1U	2U	-	-	-	160	110	15,000	-	-	-	-	-	6.49	3.19	-114.3	0.74	73.7	12.6
Area 1	G6M-95-20X	10/15/2008	0.38J	0.2J	2.5	0.5U	0.5U	0.5U	-	-	-	97.2	45.6	5,250	-	-	-	-	-	6.45	0.49	-104.4	0.511	4.2	9.54
Area 1	G6M-95-20X	10/16/2009	0.5U	37J	3.1	0.5U	0.5U	0.5U	-	-	-	166	206	7,660	-	-	-	-	-	6.61	0.29	-81.4	0.898	8.81	13.42
Area 1	G6M-95-20X	10/6/2010	0.5U	0.5U	5.1	0.5U	0.5U	1.8	-	-	-	149	546	12,200	-	-	-	-	-	6.49	0.11	-124.3	2.047	36.6	14.15
Area 1	G6M-95-20X	10/7/2011	0.5U	0.5U	1.5	0.5U	0.5U	0.5U	-	-	-	108	57.8	3,610	-	-	-	-	-	6.59	0.10	-112.9	0.234	4.0	14.3
Area 1	G6M-95-20X	10/15/2012	0.5U	0.5U	1.0	0.5U	0.5U	0.5U	-	-	-	112	67.9	3,140	-	-	-	-	-	6.58	0.60	-98.2	0.526	4.83	12.73
Area 1	G6M-95-20X	10/18/2013	0.5U	0.29J	0.59	0.5U	0.5U	0.5U	-	-	-	79.9	30	1,760	-	-	-	-	-	6.56	0.18	-79.5	0.41	3.37	12.63
Area 1	G6M-95-20X	10/31/2014	2.7	0.53	0.5U	0.5U	0.5U	0.5U	-	-	-	7.9	20.3	1,160	-	-	-	-	-	6.59	0.16	-105.1	0.688	4.03	10.88
Area 1	G6M-95-20X	10/13/2015	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	32.2	110	614	-	-	-	-	-	6.61	0.55	-55	0.722	2.86	12.15
Area 1	G6M-95-20X	11/8/2016	0.82 J	1.0	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	26	14	940	-	-	-	-	-	4.99	0.54	-5.6	0.799	7.04	13.62
Area 1	G6M-95-20X	10/5/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	18	6.3	410	--	--	--		--	5.80	0.35	27.8	0.60	11.0	14.46
Area 1	G6M-96-13B	10/15/2001	3,600	39	220	12	1U	1.1J	-	-	-	-	-	-	-	-	-	-	-	6.10	2.9	219	0.12	6.8	12.55
Area 1	G6M-96-13B	2/25/2002	5,200	34	200	1.4J	1U	1.5J	-	-	-	-	-	-	-	-	-	-	-	6.40	3.85	181.5	1.142	6.59	13.56
Area 1	G6M-96-13B	1/31/2003	3,800	31	190	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.13
Area 1	G6M-96-13B	9/20/2004	4,500	35	210	2U	1U	2.1	0.022	0.12	1.7	5U	1	15U	1U	38	5.4J	19	2.0	6.30	3.57	186.4	1.035	0.5	11.41
Area 1	G6M-96-13B	12/13/2004	2,500	24	150	2U	1U	2U	0.05	0.025	24	5U	1U	23	5U	35	5.0	31M	2U	6.26	2.57	316.5	0.787	2.68	12.51
Area 1	G6M-96-13B	3/28/2005	4,500	200U	180J	200U	200U	200U	0.17	0.22	37	5U	2.6M	1,600	5.7	47	0.46	17	2UJ	6.24	0.87	21.2	0.943	0.68	10.08
Area 1	G6M-96-13B	8/10/2005	2,800	190	1,500	3.6	4.8	6.8	0.15	0.44	2.9	32	24J	8,100	140	98.9	0.23	4.6	5.3	4.35	0.16	-35.6	0.838	3.5	-
Area 1	G6M-96-13B	9/26/2005	3,700	140	570	5U	5U	5U	0.054	0.33	18	44	51J	12,000	200	134	0.28	11	11	4.98	1.32	-45.9	1.071	4.54	13.5
Area 1	G6M-96-13B	12/13/2005	3,400	130	350	10U	5U	10U	0.069	0.35	31	46.3	63J	12,100	140	150	0.05U	11	4.5	5.51	0.13	-52.1	0.851	0.9	16.38

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1	G6M-96-13B	3/20/2006	2,100	250	400	2U	1.2	2.5	0.036	0.42	97	38	96	17,000	360	300	0.207	6.77	2.4	5.68	0.17	-161.5	0.759	7.1	15.13
Area 1	G6M-96-13B	6/20/2006	1,900	280	370	2U	1U	3.5	0.044	0.27	200	48J	100	16,000	110	310	0.2U	4.21	4.8	5.46	0.62	-86.8	1.252	2.63	13.27
Area 1	G6M-96-13B	9/18/2006	880	370	530	2U	1.3	9.4	0.022J	0.43	2,400	150	110	20,000	300	370	0.262	4.56	3.0	6.14	0.48	-120.9	1.555	2.19	12.5
Area 1	G6M-96-13B	12/11/2006	830	340	620	2U	1.6	7.3	0.020J	0.047	9,000	190	130	27,000	360	-	-	6.06	1.2	6.28	14.07	-260	1.93	2.1	11.04
Area 1	G6M-96-13B	3/27/2007	940	290	590	2.6	2.1	26	0.025U	0.96	22,000	250	230	35,000J	140	-	-	4.3	1.6	5.71	0.1	-16.8	1.861	1.79	12.5
Area 1	G6M-96-13B	6/11/2007	1,200	280	610	2U	1.7	55	0.025U	0.68	22,000	200	200	15U	260	-	-	8.17	2.2	6.24	0.15	-97.5	1.87	1322	12.04
Area 1	G6M-96-13B	9/10/2007	2,600	130J	590	2U	1.6	38	0.036	6.3	32,000	240	210	25,000	270	410	0.2U	580	2.8	6.25	0.4	-136.3	1.866	15.5	12.96
Area 1	G6M-96-13B	12/11/2007	750	99	830	2U	1.5	110	0.005J	3.6	26,000	260	230	25,000	240	-	-	429	2.4	6.11	1.92	-25.7	1.907	8.0	11.98
Area 1	G6M-96-13B	3/10/2008	1,200	140	1,000	2U	1.7	140	0.025U	8.3	29,000	240	240	26,000	210	-	-	5U	2.0	6.18	1.55	-90.2	1.958	6.4	11.33
Area 1	G6M-96-13B	10/15/2008	7.3J	6.5J	490	10U	10U	350	1.2U	5.7	9,700	172	290	39,500	91.8U	470	0.13U	21	0.03UJ	6.19	0.90	-59.2	2.046	11	12.96
Area 1	G6M-96-13B	5/7/2009	190	75	310	10U	10U	95	1.2U	13	46,000	169	323	38,600	74	740J	0.13U	32	0.03U	6.09	0.10	-97.6	1.909	4.0	10.53
Area 1	G6M-96-13B	10/19/2009	440	140	290	10U	10U	89	1.2U	9.2	52,000	173	325	36,000	54	630	0.022U	53	0.041	6.32	1.53	-93.1	2.054	13.6	-
Area 1	G6M-96-13B	4/21/2010	93	29	100	2.0U	2.0U	57	1.3U	15	37,000	217	400J	39,100	130	610	0.13U	0.71J	0.041	6.21	0.13	18.2	2.496	10.99	-
Area 1	G6M-96-13B	10/6/2010	360	150	150	1.5	0.70	65	1.2U	18	96,000	222	366	37,500	57	95	0.045J	1.1J	0.03U	6.19	0.22	-103.4	2.547	12.9	12.34
Area 1	G6M-96-13B	6/9/2011	740	90	270	1.9	1.4	86	3.7	44	110,000	242	304	25,100	75	300	0.023J	0.49J	0.03U	6.22	0.09	-112	2.126	13.1	11.49
Area 1	G6M-96-13B	10/4/2011	160	24	79	8.0U	8.0U	43	1.2U	1.5U	98,000	284	335	25,300	73	620	0.13U	0.35J	0.03U	6.36	0.02	-77.8	1.733	20	10.82
Area 1	G6M-96-13B	5/9/2012	130	47	150	5.0U	5.0U	38	44	100	29,000	298	231	16,600	51	500	0.13U	0.58J	0.13	6.47	1.7	-89.7	1.68	12.1	16.85
Area 1	G6M-96-13B	10/11/2012	130	48	130	5.0U	5.0U	76	81	190	62,000	282	209	17,100	38	480	0.13U	5.0U	0.14	6.26	0.44	-66.4	2.335	7.09	10.87
Area 1	G6M-96-13B	5/22/2013	170	55	230	2.7J	5.0U	100	1.1U	86	23,000	395	241	18,600	29	540J	0.13U	5.0U	0.12J	6.23	0.15	-84.3	2.27	13	9.71
Area 1	G6M-96-13B	10/17/2013	78	38	200	4.0U	4.0U	170	2.4	36	18,000	365	234	17,600	37	560	0.13U	5.0U	0.058	6.46	0.15	-113.1	1.728	17.3	10.91
Area 1	G6M-96-25B	10/15/2001	360	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.81	5.3	142	0.498	3.9	12
Area 1	G6M-96-25B	2/25/2002	130	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.70	11.51	158.5	0.15	9.75	13.7
Area 1	G6M-96-25B	2/27/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	-	-	-	-	-	-	-	13.8
Area 1	G6M-96-25B	1/31/2003	52	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Area 1	G6M-96-25B	9/20/2004	56	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	4.98	7.63	593	0.589	0.0	13.7
Area 1	G6M-96-25B	9/26/2005	40	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.82	6.74	314.1	0.587	1.1	17
Area 1	G6M-96-25B	9/19/2006	44	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.20	7.64	223.5	0.496	1.46	12.2
Area 1	G6M-96-25B	9/11/2007	16	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.91	6.29	96.6	0.802	9.5	16.3
Area 1	G6M-96-25B	10/17/2008	1.7	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.80	8.41	89.7	0.151	4.0	14.5
Area 1	G6M-96-25B	10/16/2009	1.9	38J	0.5UJ	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.27	8.08	183.5	0.404	4.7	10.5
Area 1	G6M-96-25B	10/8/2010	3.1	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	5.80	6.70	190.2	0.622	1.59	16.3
Area 1	G6M-96-25B	10/6/2011	0.58	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.85	8.11	69.8	0.131	4.5	16.8
Area 1	G6M-96-25B	10/16/2012	2.0	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	5.87	7.09	181.7	0.572	7.76	12.7
Area 1	IW-17D	5/19/2017	4.1	6.1	16	5.0 U	5.0 U	5.0 U	1.1 U	1.0 U	24,000	110	130	14,000	680	110	0.11	1.0 U	1.0 U	11.10	0.45	40.9	1.78	21.28	11.27
Area 1	IW-18D	5/19/2017	5.1	5.0 U	660	5.0 U	5.0 U	5.0 U	1.1 U	15	21,000	150	140	8,900	680	110	0.21	1.0 U	1.0 UJ	11.00	0.46	44.3	1.27	85	12.65
Area 1/FDSA	G6M-03-04X	10/21/2009	4.2U	4.0U	81	4.0U	4.0U	4.1	-	-	-	-	-	-	-	-	-	-	-	6.04	0.7	-99.6	0.635	24.5	19.6
Area 1/FDSA	G6M-03-04X	10/16/2012	0.5U	0.5U	0.5U	0.5U	0.5U	1.3	-	-	-	-	-	-	-	-	-	-	-	6.79	0.7	-123	0.622	80.4	22.98
Area 1/FDSA	G6M-04-10A	9/20/2004	2,900	2.5	3.4	2U	1U	2U	0.021	0.03	1.1	5U	1	170	1U	41	4.5J	22	2	5.91	3.75	206.5	0.552	1.7	10.79
Area 1/FDSA	G6M-04-10A	12/14/2004	2,400	2U	2U	2U	1U	2U	0.015	0.096	1500	5U	1U	120	5U	25	1.7	13	2U	5.89	2.81	215.4	0.965	2.04	9.62
Area 1/FDSA	G6M-04-10A	3/30/2005	640	40U	40U	40U	40U	40U	0.33	0.07	1.4	8.4	1.2	8,100	52	107	0.33	16	2U	5.90	4.22	68.3	1.01	1.76	10.99
Area 1/FDSA	G6M-04-10A	8/11/2005	380	45	390	2U	2U	2U	0.24	0.23	3.4	77	87J	50,000J	240	359	.05U	7.8	1U	5.65	1.84	11.9	0.977	14.9	10.06
Area 1/FDSA	G6M-04-10A	9/27/2005	340	88	260	1U	1U	1U	0.08	0.15	110	190	230J	76,000	330	442	0.084	3.0J	5.9	6.33	1.89	-1.9	1.135	4.3	10.77
Area 1/FDSA	G6M-04-10A	12/14/2005	1,500	180	220	2U	1U	2U	0.048	0.13	6,800	179	250J	32,500	370	480	0.05U	3.7	7.4	6.41	1.57	-64.8	0.985	1.9	10.24
Area 1/FDSA	G6M-04-10A	3/21/2006	4,400	180	450	2U	1U	8.3	0.025U	0.69	20,000	180	220	8,100	180	390	0.2U	4.08	2	6.72	0.27	-121.4	0.676	7.51	9.75
Area 1/FDSA	G6M-04-10A	6/20/2006	6,100	650	330	2U	1U	27	0.025U	0.12	16,000	160	220	5,700	120	340	0.2U	4.32	3.2	6.34	0.22	-99.8	0.893	9.82	10.97
Area 1/FDSA	G6M-04-10A	9/19/2006	1,000	15	59	2U	1U	14	0.23	0.11	11,000	170	97	5,000	61	150	0.311	5.2	1.2	6.56	1.14	-86.9	0.43	6.0	14.64
Area 1/FDSA	G6M-04-10A	12/13/2006	450	37	860	2U	1.2	76	0.025U	0.12	22,000	150	96	4,800	73	-	-	1.82	1.6	6.91	0.14	-111	0.662	27.3	6.31
Area 1/FDSA	G6M-04-10A	3/28/2007	1,200J	230J	680J	2U	1.6J	60J	0.65	0.26	20,000	380	260	27,000J	130	-	-	2.07	1U	6.1	0.19	-89.9	1.188	15.4	11.18
Area 1/FDSA	G6M-04-10A	6/12/2007	760	140	900	2U	2.1	130	0.54	1.1	23,000	310	260	15,000	190	-	-	1U	2.4	6.58	0.19	-145.2	1.295	128.5	15.77
Area 1/FDSA	G6M-04-10A	9/11/2007	2,700	99J	400	2U	1U	91	0.35	0.47	18,000	240	290	13,000	220	440	0.2U	54	2.4	6.42	1.72	-138.2	0.864	42.3	13.97
Area 1/FDSA	G6M-04-10A	12/11/2007	830	8.8	280	2U	1U	90	0.3	0.52	31,000	330	280	12,000	270	-	-	3.57	3.0	6.4	1.2	-70.1	1.366	8.0	10.09

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1/FDSA	G6M-04-10A	3/10/2008	200	830	670	3.4	1.8	37	0.34	0.61	25,000	340	230	35,000	210	-	-	10	2.2	6.53	0.94	-123.8	1.362	24	9.82
Area 1/FDSA	G6M-04-10A	10/6/2008	4,000	450	990	100U	100U	1,400	1.3U	11	16,000	247	187	9,100	34	210	0.13U	12	0.03UJ	6.38	0.21	-168	0.948	15	15.25
Area 1/FDSA	G6M-04-10A	1/21/2009	1,500	390	1,400	1,100U	0.67J	1,200	1.2U	9.6	53,000	250	234J	7.8	46J	20U	0.13U	20	0.03UJ	6.6	0.2	-112.6	0.937	7.02	14.25
Area 1/FDSA	G6M-04-10A	5/7/2009	380	41	390J	10U	10U	420	1.2U	11	34,000	292	194	17,200	49	590J	0.13U	24	0.03U	6.4	0.8	-125	1.165	4.2	11.25
Area 1/FDSA	G6M-04-10A	10/20/2009	2,700	290	2,100	50U	50U	1,400	1.3U	15	11,000	220	127	8,960	21	350	0.13U	8.7	0.03U	6.42	0.17	-121.4	0.805	11.43	12.63
Area 1/FDSA	G6M-04-10A	4/21/2010	170	21	170	4.0U	4.0U	130	1.3U	15	21,000J	286	297J	18,200J	120	670	0.017J	0.65J	0.03U	6.58	0.70	-139.5	0.880	7.00	14.71
Area 1/FDSA	G6M-04-10A	10/6/2010	25	10J	600	20U	20U	190	1.2U	14	51,000	296	119	4,280	26	260	0.13U	0.98J	0.03U	6.32	0.17	-85.2	0.694	6.24	13.56
Area 1/FDSA	G6M-04-10A	6/9/2011	110	36	300	0.5U	0.5U	170	1.2U	5.7	92,000	295	198	9,140	63	660	0.13U	1.2J	0.03U	6.4	0.39	-105.1	1.243	5.1	10.45
Area 1/FDSA	G6M-04-10A	10/4/2011	850	170	1,100	40U	40U	270	1.2U	74	36,000	322	304	17,600	160	750	0.13U	1.1J	0.22	6.07	0.21	-94	0.629	8.18	8.25
Area 1/FDSA	G6M-04-10A	5/10/2012	180	120	610	20U	20U	200	1.1U	250	46,000	367	183	6,700	16	340	0.13U	0.70J	0.10	6.49	0.48	-107.7	0.71	9.05	10.96
Area 1/FDSA	G6M-04-10A	10/15/2012	2.0U	2.0U	26	2.0U	2.0U	110	1.2U	44	14,000	291	185	8,250	64	340	0.092J	5.0U	0.13J	6.43	0.6	-103.7	0.92	5.5	10.36
Area 1/FDSA	G6M-04-10A	5/23/2013	0.5U	0.5U	13	0.53	0.5U	15	1.2U	1.5U	18,000	342	400	7,110	200	650	0.11J	0.84J	0.1J	6.37	1.3	-84.4	1.311	11	10.6
Area 1/FDSA	G6M-04-10A	10/17/2013	360J	92J	130J	10U	10U	14J	1.2U	9.4	24,000J	292	341	5,000	150	650	0.13U	1.1J	0.034J	6.37	0.29	-95.5	1.756	9.78	10.48
Area 1/FDSA	G6M-04-10A	6/12/2014	0.5U	0.23J	1.4	0.5U	0.5U	5.1	2.2J	1.6UJ	9,500J	264	164	3,730	29	200J	0.13U	17	0.03U	6.36	0.59	-82.7	1.761	10.93	10.89
Area 1/FDSA	G6M-04-10A	11/3/2014	0.5U	0.5U	0.92	0.5U	0.5U	4.4	1.2U	3.6J	21,000	288	184	2,100	34	240	0.13U	16J	0.03U	6.62	0.15	-136.9	1.742	16.98	11.17
Area 1/FDSA	G6M-04-10A	6/19/2015	0.50 U	0.50 U	0.50 J	0.50 U	0.50 U	5.00	5.0 U	5.0 U	7,510	274	145	1,940	18.3	278	0.11 U	21.70	1.0 U	6.62	0.51	-94.6	2.201	8.06	10.47
Area 1/FDSA	G6M-04-10A	10/13/2015	1.0 U	1.0 U	0.72 J	1.0 U	1.0 U	1.60	10 U	10 U	15,000	292	205	2,360	26.7	241	0.099 J	8.6 J	2.0 U	6.53	0.08	-119.6	2.367	17	11.30
Area 1/FDSA	G6M-04-10A	6/14/2016	1.0 U	0.64 J	1.1	1.0 U	1.0 U	4.0	1.1 U	1.0 UJ	13,000	220	82	1,700	10.0	190	0.05 U	7.3	1.0 U	5.94	0.23	-66.6	1.878	7.73	11.89
Area 1/FDSA	G6M-04-10A	11/9/2016	1.0 U	0.49 J	0.96 J	1.0 U	1.0 U	1.40	1.1 U	1.0 U	7,100	220	92	3,200	5.5	86	0.05 U	17	1.5	6.50	0.37	-96.9	1.44	5.27	8.47
Area 1/FDSA	G6M-04-10A	5/18/2017	1.0 U	0.52 J	1.4	1.0 U	1.0 U	0.85 J	1.1 U	1.0 U	5,500	170	74	4,800	5.7	38	0.12	15	1.0 U	6.59	0.33	-98.6	1.78	19.2	10.93
Area 1/FDSA	G6M-04-10A	10/12/2017	1.0 U	1.0 U	1.2	1.0 U	1.0 U	0.81 J	1.1 U	3.6	9,200	290	100	4,600	8.4	78	0.12	8.4	1.2	6.62	0.97	-94.7	1.87	16.0	10.01
Area 1/FDSA	G6M-04-10X	9/20/2004	70	7.5	32	2U	1U	2U	0.019	0.039	1.0	5U	1.0	260	1U	11	6.7J	21	3.4	5.59	6.87	246.2	0.902	0.95	10.24
Area 1/FDSA	G6M-04-10X	12/14/2004	65	7.8	35	2U	1U	2U	0.022	0.053	2.2	5U	1U	200	5U	10U	6.6	23	2U	5.40	7.57	424.2	0.816	5.5	16.22
Area 1/FDSA	G6M-04-10X	3/31/2005	56	6.8	30	2U	2U	2U	0.022	0.86	1.1	5U	1U	190	0.4J	10U	1.5	25	2U	5.18	7.65	256.7	1.337	0.41	13.05
Area 1/FDSA	G6M-04-10X	7/1/2005	50	5.4	23	2U	1U	2U	0.035	0.05	12	4.2	1UJ	10U	5.9	43.5	1.7	12	1U	5.33	6.09	265.2	1.502	0.90	17.5
Area 1/FDSA	G6M-04-10X	9/27/2005	48	4.7	23	2U	1U	2U	0.010J	0.018J	16	5U	1U	170	4	7.7	1.4	26	1U	5.26	6.68	450.9	1.123	0.50	14.74
Area 1/FDSA	G6M-04-10X	12/14/2005	67	6.3	27	2U	1U	2U	0.016J	0.034	11	5U	1U	164	5U	9.8	1.5	28	1U	5.49	6.78	205.1	1.032	3.40	10.78
Area 1/FDSA	G6M-04-10X	3/22/2006	76	9.1J	32	2U	1U	2U	0.015J	0.025J	25	5U	.1U	200	5.6	10U	1.44	23.6	1U	5.57	6.74	195.7	0.94	1.45	10.62
Area 1/FDSA	G6M-04-10X	6/20/2006	87	10	47	2U	1U	2U	0.013J	0.012J	18	5U	0.1U	240	5U	10U	1.69	25.2	1U	5.08	6.23	248.8	1.512	1.9	10.93
Area 1/FDSA	G6M-04-10X	9/19/2006	65	6.8	32	2U	1U	2U	0.026	0.025J	13	5U	0.10U	240	2.2J	8.0	1.27	22.2	1U	5.21	6.94	273.9	1.66	4.68	12.18
Area 1/FDSA	G6M-04-10X	12/13/2006	64	7.2	35	2U	1U	2U	0.008J	0.011J	28	5U	0.1U	280	5U	-	-	27	1U	5.38	7.9	39.3	2.16	0.59	11.34
Area 1/FDSA	G6M-04-10X	3/28/2007	56	5.9	26	2U	1U	2U	0.017J	0.054	21	5U	0.21	290J	5U	-	-	27.9	1U	5.21	6.37	77.9	1.947	3.71	10.56
Area 1/FDSA	G6M-04-10X	6/12/2007	28	2.4	9.9	2U	1U	2U	0.010J	0.065	18	5U	0.1U	250	5U	-	-	31.2	1U	5.35	6.31	230.7	3.15	14	15.88
Area 1/FDSA	G6M-04-10X	9/11/2007	35	3.4	13	2U	1U	2U	0.008J	0.010J	13	6U	0.1U	270	5U	10U	1.4	2000	1U	5.29	8.98	-40.6	2.617	10.5	14.25
Area 1/FDSA	G6M-04-10X	12/11/2007	20	2U	6.4	2U	1U	2U	0.010J	0.028	5.3	5U	0.1U	230	5U	-	-	34.7	1U	5.46	5.62	27.7	3.66	2.8	14.5
Area 1/FDSA	G6M-04-10X	3/11/2008	22	2.1	9.7	2U	1U	2U	0.004J	0.010J	4.1	5U	0.16	250	5U	-	-	28	1U	4.99	6.42	213.5	2.89	0	13.63
Area 1/FDSA	G6M-04-10X	10/15/2008	18	1.6	8.4	0.5U	0.5U	0.5U	1.2U	1.5U	6.1	8.0U	0.2U	265	10U	30	1.4	27	0.03U	5.28	6.58	247.1	3.339	1.4	11.75
Area 1/FDSA	G6M-04-10X	5/7/2009	15	1.2	5	0.5U	0.5U	0.5U	1.3U	1.6U	0.76	8.0U	0.2U	213	10U	20UJ	1.2	33	0.03U	5.20	5.86	196.8	2.229	1.53	11.22
Area 1/FDSA	G6M-04-10X	10/20/2009	9.8	4.8	5.2	0.5U	0.5U	0.27J	1.3U	1.6U	19	8U	0.139U	197	10U	20U	1.1	29	0.03U	5.20	5.72	226.2	2.651	2.68	11.56
Area 1/FDSA	G6M-04-10X	4/21/2010	24	1.5	6.5	0.5U	0.5U	0.5U	1.3U	1.6U	87	5.0U	0.1U	200	10U	25	1.4	31	0.03U	5.26	5.13	187.2	2.760	4.00	14.4
Area 1/FDSA	G6M-04-10X	10/6/2010	24	1.8	7.9	0.5U	0.5U	0.5U	1.2U	1.5U	3.7	5U	0.1U	208	10U	25	1.8	28	0.03U	5.18	5.63	225.7	2.937	0.00	12.4
Area 1/FDSA	G6M-04-10X	10/4/2011	9.0	0.5U	1.9	0.5U	0.5U	0.5U	1.2U	1.5U	47	5U	0.1U	173	4.5J	20U	1.3	28	0.03U	5.01	4.46	192.8	1.078	1.16	11.3
Area 1/FDSA	G6M-04-10X	10/15/2012	15	0.72	1.9	0.5U	0.5U	0.5U	1.2U	1.5U	32	5U	0.103U	224	10U	20U	1.2	35	0.03U	5.53	5.25	204	3.135	0.33	12.88
Area 1/FDSA	G6M-04-10X	10/17/2013	6.2	0.28J	0.5J	0.5U	0.5U	0.5U	1.2U	1.5U	5,500	3.3J	1.27	262	2.7J	20U	0.95	37	0.03U	5.32	3.9	164.1	4.698	2.89	13.02
Area 1/FDSA	G6M-04-10X	11/3/2014	7.4	0.27J	0.47J	0.5U	0.5U	0.5U	1.2U	1.5U	200	2.5U	1.32	308	5U	20U	1.3J	30J	0.03U	5.27	5.28	148.4	2.562	0.97	12.55
Area 1/FDSA	G6M-04-10X	9/9/2015	2.8	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	5.0 U	2.0 U	0.114	383	0.81 U	-	0.92	34.7	1.0 U	5.38	3.32	169.9	2.257	4.98	13.13
Area 1/FDSA	G6M-04-10X	10/13/2015	3.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	4.0 U	0.10 U	344	1.0 U	7.2	1.10	35.4	2.0 U	5.31	2.86	202.1	3.174	28.5	12.33
Area 1/FDSA	G6M-04-10X	2/9/2016	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	6.9 J	4.0 U	0.053 J	274	1.0 U	7.1	0.91	35.1	2.0 U	5.49	2.49	196.7	1.922	19.3	8.62
Area 1/FDSA	G6M-04-10X	6/14/2016	3.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.3	5.1 J	27	3.0 U	0.073	330	0.63 J	9.4	1.0	35.0	1.0 U	5.72	1.77	102.1	3.364	0.96	11.60
Area 1/FDSA	G6M-04-10X	11/9/2016	2.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	170	3.0 U	0.036 J	420	0.72 J	10	0.58	32	2.2	5.70	0.76	67.9	1.546	4.27	9.16
Area 1/FDSA	G6M-04-10X	5/18/2017	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	180	3.0 U	0.020 J	1,100	1.0 U	12	0.42	32	1.0 U	5.51	0.63	162.1	1.52	11.3	10.93

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 1/FDSA	G6M-04-10X	10/12/2017	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	760	3.0 U	0.075 U	1,200	1.0 U	13	0.46	34	1.0 U	5.56	1.11	195.3	2.02	4.17	10.29
Area 1/FDSA	G6M-04-13X	9/21/2004	8.0	2U	2U	2U	1U	2U	-	-	-	5U	1U	350	-	-	-	-	-	5.96	8	551.8	0.138	1.75	16.01
Area 1/FDSA	G6M-04-13X	9/26/2005	2U	2U	2U	2U	1U	2U	-	-	-	5U	1U	15U	-	-	-	-	-	6.43	10.5	180	0.042	3.8	17.24
Area 1/FDSA	G6M-04-13X	9/18/2006	2U	2U	2U	2U	1U	2U	-	-	-	5U	0.10U	15U	-	-	-	-	-	5.65	8.63	213.9	0.076	12.1	13.33
Area 1/FDSA	G6M-04-13X	9/12/2007	2U	2U	2U	2U	1U	2U	-	-	-	5U	0.1U	15U	-	-	-	-	-	6.07	8.7	147.4	140	14.1	13.36
Area 1/FDSA	G6M-04-13X	10/17/2008	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	8U	0.2U	50U	-	-	-	-	-	5.22	9.98	124.4	0.046	45	10.56
Area 1/FDSA	G6M-04-13X	10/20/2009	25U	16J	25U	25U	25U	25U	-	-	-	2J	0.132U	50U	-	-	-	-	-	5.78	10.61	283.7	0.049	12.2	11.05
Area 1/FDSA	G6M-04-13X	10/7/2010	0.29J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.102U	25U	-	-	-	-	-	5.83	8.84	147.3	0.048	2.87	10.33
Area 1/FDSA	G6M-04-13X	10/4/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	14.0J	-	-	-	-	-	5.54	9.15	208.7	0.024	13.5	11.43
Area 1/FDSA	G6M-04-13X	10/16/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	5.1J	-	-	-	-	-	6.28	9.95	108.1	0.047	17.2	11.11
Area 1/FDSA	G6M-04-13X	10/22/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	5.92	10.69	120.9	0.021	45.6	10.28
Area 1/FDSA	G6M-04-13X	11/3/2014	0.36J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5U	0.0247U	7.5U	-	-	-	-	-	6.23	6.38	147.6	0.029	35.2	15.24
Area 1/FDSA	G6M-04-13X	10/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.10 U	15 U	-	-	-	-	-	6.85	8.83	114.7	0.045	1.07	14.69
Area 1/FDSA	G6M-04-13X	11/10/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05 U	3.0 U	-	-	-	-	-	6.13	8.22	-8.8	0.027	2.69	6.8
Area 1/FDSA	G6M-04-13X	5/16/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12	10	21	3.0 U	0.05 U	3.6 J	1.0 U	9.5	0.62	4.8	1.0 U	6.47	9.01	210.7	0.03	2.36	9.67
Area 1/FDSA	G6M-04-13X	10/6/2017	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.33 J	3.0 U	0.05 U	3.0 U	0.45 J	8.7 U	0.84	4.6	1.0 U	5.86	3.64	223.4	0.06	2.6	10.42
Area 1/FDSA	G6M-07-02X	12/12/2007	50	2U	2U	2U	1U	2U	0.024J	0.022J	0.73	5U	0.1U	64	5U	-	-	16.2	1U	5.9	7.54	194.2	0.148	5.4	9.8
Area 1/FDSA	G6M-07-02X	3/11/2008	1,800	2U	2U	2U	1U	2U	0.014J	0.019J	7.1	5U	0.1U	35	5U	-	-	26	1U	5.7	7.5	165.5	0.108	0	10.96
Area 1/FDSA	G6M-07-02X	10/15/2008	170	5.0U	5.0U	5.0U	5.0U	5.0U	1.2U	10	12,000	5.5J	0.2U	21.2J	10U	20U	0.13U	11	0.030UJ	5.34	9.25	93.2	0.067	19	10.69
Area 1/FDSA	G6M-07-02X	5/11/2009	46	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	7	7.1	0.2U	5.8J	5.7J	20U	0.062	8.6J	0.030UJ	6.17	9.4	115.7	0.055	4	11.27
Area 1/FDSA	G6M-07-02X	10/20/2009	30J	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	6.2J	6.6	0.2U	50U	10U	20U	0.13U	7.2	0.03UJ	6	9.34	128.9	0.053	9.35	14.5
Area 1/FDSA	G6M-07-02X	4/21/2010	63	2U	2U	2U	2U	2U	1.2U	1.5U	3,200	6.2	0.176U	25U	10U	30	0.0098J	6.8	0.03U	6.10	0.33	139.3	0.034	12	16.26
Area 1/FDSA	G6M-07-02X	10/6/2010	26J	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	28	3.4J	0.1U	25U	10U	32	0.21	5.6	0.03U	5.31	6.13	170	0.053	5.48	12.95
Area 1/FDSA	G6M-07-02X	10/4/2011	700	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	46,000	4.6J	0.1U	79.8	10U	31	0.13U	4.4J	0.03U	5.17	0.09	176.5	0.045	8.2	10.89
Area 1/FDSA	G6M-07-02X	10/11/2012	90	190	6.4	5.0U	5.0U	5.0U	1.2U	1.5U	46,000J	5U	0.286	40.1	10U	20U	0.056J	6.4	0.03U	6.28	1.60	76.1	0.068	11.31	19.81
Area 1/FDSA	G6M-07-02X	10/17/2013	1,000	8.7J	20U	20U	20U	20U	1.2U	1.5U	520J	5U	0.1U	31.7	10U	21	0.13U	4.5J	0.03U	6.03	4.25	143	0.060	1.17	20.19
Area 1/FDSA	G6M-07-02X	11/3/2014	14,000	40J	31J	50U	50U	50U	1.2U	1.5U	6,200	2.2J	0.421J	43.3	5U	22	0.13U	4.2J	0.03U	5.85	0.23	70.2	0.040	12.1	9.22
Area 1/FDSA	G6M-07-02X	12/11/2014	6,200	57	50U	50U	50U	50U	-	-	-	-	-	-	-	-	-	-	-	5.39	0.51	218.1	0.098	0.85	7.38
Area 1/FDSA	G6M-07-02X	10/13/2015	482	13.0	1.0 U	3.1 J	1.0 U	1.0 U	10 U	10 U	3,200 J	4.0 U	0.303	32.8	1.0 U	10.3	0.11 U	10.2	2.0 U	5.86	0.27	59.3	0.055	5.95	15.55
Area 1/FDSA	G6M-07-02X	6/14/2016	1,400	10 J	20 U	20 U	20 U	20 U	1.1 U	1.0 UJ	970	3.0 U	0.110	37	1.2	12	0.05 U	6.6	1.0 U	5.56	1.86	94.3	0.06	0.92	10.27
Area 1/FDSA	G6M-07-02X	11/9/2016	3,200	20 U	20 U	20 U	20 U	20 U	1.1 U	1.0 U	100	3.0 U	0.10	41	0.93 J	15	0.062 J	6.0	1.0 U	5.91	1.18	39.5	0.042	2.63	8.23
Area 1/FDSA	G6M-07-02X	5/16/2017	1,800	20 U	20 U	20 U	20 U	20 U	1.1 U	1.0 U	1.8	3.0 U	0.05 U	17	1.0 U	14	0.32	6.2	1.0 U	5.70	3.69	213.3	0.04	2.73	9.73
Area 1/FDSA	G6M-07-02X	10/10/2017	910 J	20 U	20 U	20 U	20 U	20 U	24 J	4.3 J	1,200	37 J	220 J	14,000 J	3,400	520	2.0	20	1.0 U	6.21	0.51	-161.2	2.08	overrange	11.07
Area 2	G6M-02-01X	2/28/2002	11	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.91	4.7	66.6	0.624	14	13.53
Area 2	G6M-02-01X	9/23/2004	24	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.64	2.54	145	0.784	6.11	19.41
Area 2	G6M-02-01X	9/30/2005	110	2U	3.1	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.07	3.82	384.8	0.555	10.9	18.04
Area 2	G6M-02-01X	9/20/2006	1,300	12	91	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.19	3.68	-108.2	0.708	9.07	17.33
Area 2	G6M-02-01X	12/14/2006	1,600	18	120	2U	1U	2U	-	-	-	-	-	-	5U	-	-	-	-	6.54	3.64	-34.8	0.831	2.81	14.32
Area 2	G6M-02-01X	3/30/2007	1,700	19	120	2U	1U	2U	0.012J	0.081	-	5U	0.1U	120J	3.3J	-	-	9.43	1U	6.64	4.22	-35.3	0.8	0.78	14.06
Area 2	G6M-02-01X	6/14/2007	1,700	16	97	2U	1U	2U	-	-	-	-	-	-	1.9J	-	-	-	-	6.72	3.3	69.6	0.853	10.4	14.82
Area 2	G6M-02-01X	9/14/2007	1,900	24	150	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.57	3.32	102.4	0.747	0.1	14.44
Area 2	G6M-02-01X	12/13/2007	1,600	21J	130J	2U	1U	2U	-	-	-	-	-	-	3.6J	-	-	-	-	6.61	2.73	128	0.807	0	12.57
Area 2	G6M-02-01X	3/14/2008	520	70	600	2U	2.2	2U	0.052	0.16	12	150	26	23000	180	-	-	5U	1U	6.45	0.38	-99.2	1.62	2.7	13.35
Area 2	G6M-02-01X	10/7/2008	180	49	360	10U	10U	10U	6.3U	9.5	5,000	141	14.5	5,880	17.7	200	0.13U	11	0.03UJ	6.97	0.18	-112.9	1.193	8.4	12.07
Area 2	G6M-02-01X	1/21/2009	280	76U	170	1.3U	1.2J	94U	1.3U	24	4,000	148	11,200J	4,500	11J	170	0.13U	7.0U	0.03U	7.13	0.39	-142.7	1.279	1.2	11.08
Area 2	G6M-02-01X	5/6/2009	610	190	100	10U	10U	54	1.2U	29	29,000	133	18.7	3,950	13	220J	0.059J	8.4	0.03U	6.69	0.2	-127.7	1.085	1.15	11.42
Area 2	G6M-02-01X	10/20/2009	820	180	76	40U	40U	47	1.3U	9	5,000J	108	11.8	2,470	4.6J	130	0.074J	7.6	0.03UJ	6.66	1.24	32.9	0.925	3.52	11.45
Area 2	G6M-02-01X	4/21/2010	37J	53J	95J	2U	2U	69J	1.3U	43	12,000J	164	20.5J	4,480	40	280J	0.024J	4.0J	0.03U	6.70	0.42	-122.0	1.180	1.60	11.63
Area 2	G6M-02-01X	10/6/2010	470	120	72	1.4	1.4	84	1.2U	49	25,000	133	13.7	3,050	10U	120	0.13U	5.2	0.03U	6.39	0.28	-77.8	1.039	3.65	12.53
Area 2	G6M-02-01X	6/9/2011	0.5U	4.3	11	0.69	0.5U	12	1.2U	230	71,000	173	45.9	7,380	90	400	0.11J	3.3J	0.03U	6.42	0.3	-86.3	1.423	0	14.56
Area 2	G6M-02-01X	10/5/2011	0.5U	0.88	3.6	0.5U	0.5U	7.3	1.2U	290	72,000J	271	27.3	5,470	18	190	0.13U	1.4J	0.03U	6.6	0.02	-106	0.681	0.87	12.53

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 2	G6M-02-01X	5/9/2012	250	310	65	8.0U	8.0U	63	1.1U	260	41,000	271	10.8	2,050	2.3J	86	0.13U	6.8	0.081	6.66	0.07	-79.2	0.798	1.6	12.38
Area 2	G6M-02-01X	10/10/2012	350	120	75	10U	10U	160	1.2U	250	37,000J	220	10.4	2,080	10U	120 J	0.13U	6.5	0.36 J	6.64	0.5	-80.5	0.906	3.71	13.24
Area 2	G6M-02-01X	5/21/2013	0.25J	4.7	8.4	0.67	0.5U	5.2	1.2U	220	22,000	272	35.6	7,450	43	240J	0.13UJ	3.0J	0.076J	6.57	0.14	-91.7	1.439	0.71	14.22
Area 2	G6M-02-01X	10/17/2013	0.5U	2.4	11	0.58	0.5U	14	1.2U	450J	52,000	323	40.3	4,000	2.6J	140	0.13U	5.0U	0.078	6.66	0.22	-117.5	0.753	2.24	13.12
Area 2	G6M-02-01X	6/11/2014	0.5U	0.5U	1.4	0.5U	0.5U	2.6	1.3UJ	16J	5,300J	449	83.9J	4,260	9.5J	210J	0.13U	1.2U	0.030U	6.73	0.25	-103.1	1.174	4.68	13.08
Area 2	G6M-02-01X	10/30/2014	0.5U	0.21J	1.5	0.5U	0.5U	0.87	15	40	24,000	384	47.9	1,820	5U	86	0.13U	2.3J	0.03U	6.57	0.23	-130.8	0.959	1.81	12.73
Area 2	G6M-02-01X	6/17/2015	0.50 U	0.50 U	0.53 J	0.50 U	0.50 U	0.50 U	5.0 U	6.0 J	712	418	61.9	1,760	6.20	66.6	0.11 U	0.50 U	1.0 U	6.80	0.25	-91.1	0.671	8.45	13.66
Area 2	G6M-02-01X	9/10/2015	1.0 U	0.5 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.3 J	8,550	374	60.9	1,750	2.10	-	0.061 J	0.96 J	2.0 U	6.77	0.24	-110.5	0.807	0.81	16.00
Area 2	G6M-02-01X	10/16/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	14,200	360	56.2	1,750	2.14	54.6	0.11 U	1.1 J	2.0 U	6.86	0.11	-128.2	1.109	2.79	16.08
Area 2	G6M-02-01X	2/18/2016	1.0 U	1.0 U	0.89 J	1.0 U	1.0 U	0.53 J	10 U	10 U	12,500	347	52.5	2,420	6.8	155	0.10 U	1.5 J	2.0 U	7.01	0.8	31.9	1.659	3.95	10.29
Area 2	G6M-02-01X	6/13/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 UJ	22,000	450	100	2,700	7.7	150	0.021 J	0.8 U	1.0 U	6.87	0.21	-145.7	1.691	5.91	17.21
Area 2	G6M-02-01X	11/9/2016	1.0 U	1.0 U	0.69 J	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	18,000	430	62	2,100	3.1	140	0.05 U	1.0 U	1.8	6.92	0.23	-13.04	1.743	4.67	13.12
Area 2	G6M-02-01X	5/19/2017	1.0 U	1.0 U	0.52 J	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	24,000	500	110	2,600	4.9	220	0.09 J	0.51 J	1.0 U	6.85	0.42	-132.4	1.59	7.23	14.39
Area 2	G6M-02-01X	10/13/2017	1.0 U	1.0 U	0.77 J	1.0 U	1.0 U	0.52 J	1.1 U	3.8	12,000	400	76	1,300	3.3	64	0.10	0.57 J	1.0 U	6.66	0.46	-107.4	0.96	7.14	12.14
Area 2	G6M-04-01X	9/23/2004	250	3.6	21	2U	1U	2U	-	-	-	5U	1U	220	-	-	-	-	-	6.82	3.92	245.2	2.391	9.42	15.38
Area 2	G6M-04-01X	9/28/2005	140	2U	9.2	2U	1U	2U	-	-	-	5.1	1U	170	-	-	-	-	-	6.49	5.85	202.3	2.699	7.29	13.21
Area 2	G6M-04-01X	9/20/2006	150	2U	7.2	2U	1U	2U	-	-	-	5U	0.10U	220	-	-	-	-	-	5.87	4.88	-91.4	2.92	3.53	11.85
Area 2	G6M-04-01X	9/14/2007	290	2U	8.6	2U	1U	2U	-	-	-	6U	0.1U	130	-	-	-	-	-	6.00	5.21	155.3	2.055	35.8	12.16
Area 2	G6M-04-01X	10/20/2008	270J	11J	10UJ	10UJ	10UJ	10UJ	-	-	-	8UJ	0.2UJ	53.1J	-	-	-	-	-	7.32	3.37	96.2	0.999	3.5	17.25
Area 2	G6M-04-01X	10/20/2009	190	130	360	13U	13U	15	-	-	-	8U	0.107U	113	-	-	-	-	-	5.79	2.25	342.4	0.908	4.8	13.38
Area 2	G6M-04-01X	10/7/2010	27	19	120	0.68	0.29J	140	-	-	-	5U	1.05	164	-	-	-	-	-	6.14	0.29	124.3	1.312	1.55	11.53
Area 2	G6M-04-01X	10/5/2011	14	7.6	36	0.71	0.5U	160	-	-	-	3.7J	0.381	261	-	-	-	-	-	6.27	0.48	69.9	1.132	3.3	12.65
Area 2	G6M-04-01X	10/12/2012	5.5	4.0U	18	4.0U	4.0U	130	-	-	-	3.5 J	0.742	925	-	-	-	-	-	6.36	0.38	19.1	1.7	1.85	12.4
Area 2	G6M-04-01X	10/17/2013	0.5U	0.78	0.99	0.29J	0.5U	14	-	-	-	6.0	1.06	8,890	-	-	-	-	-	6.46	0.40	17.4	2.509	2.49	14.53
Area 2	G6M-04-01X	10/31/2014	0.39J	0.52	0.56	0.37J	0.5U	7.9	-	-	-	164	59.4	28,900	-	-	-	-	-	6.69	0.48	-95.3	1.85	19.6	13.34
Area 2	G6M-04-01X	9/10/2015	1.0 U	1.0 U	0.93 J	1.0 U	1.0 U	0.75 J	10 U	10 U	6,240	162	31.7	9,040	18.9	-	0.12	3.6 J	2.0 U	7.15	0.45	-152.7	1.880	41.6	15.91
Area 2	G6M-04-01X	10/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	382	96.4	24,400	-	-	-	-	-	6.78	0.10	-133.0	2.878	4.83	12.46
Area 2	G6M-04-01X	2/18/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	7,060	75.5	16.4	7460	11.8	411	0.10 U	13.8	2.0 U	6.68	1.67	182.6	1.624	6.39	9.49
Area 2	G6M-04-01X	6/13/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	380	80.0	19,000	-	-	-	-	-	6.69	0.65	-120.3	3.639	17.6	17.67
Area 2	G6M-04-01X	11/9/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	320	95	19,000	-	-	-	-	-	6.76	0.42	-82	2.631	4.6	11.4
Area 2	G6M-04-01X	10/13/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	450	81	18,000	--	--	--	--	--	6.66	0.87	-99.2	3.54	11.5	13.49
Area 2	G6M-04-03X	9/23/2004	440	2U	3.3	2U	1U	2U	0.22	0.036	100	5U	1U	3,100	1.4	53	5.1	23	2.2	6.37	3.41	446.5	1.236	12.2	12.85
Area 2	G6M-04-03X	9/27/2005	680	14	10	1U	1U	1U	0.19	0.32	52	5U	0.6J	3,500	6.0	81.5	0.35	38J	1U	6.29	0.79	377.5	1.361	9.62	12.87
Area 2	G6M-04-03X	9/22/2006	2,600	420	6.3	2U	1U	2U	0.049	0.3	17	5U	0.10U	2,900	7.2	190	0.2U	16.6	1U	6.30	0.43	152.1	0.524	3.52	15.12
Area 2	G6M-04-03X	9/14/2007	770	68	2.7	2U	1U	2U	0.062	0.11	3	38	0.87	2,300	1.6J	100	0.2U	24	1U	7.29	0.49	-110.3	0.294	3.6	14.18
Area 2	G6M-04-03X	10/16/2008	160	18	7.6	5U	5U	5U	1.3U	1.6U	6.2J	94.8	0.2U	930	10U	150J	0.10U	8.0	0.03U	10.48	2.01	18	0.539	5.8	14
Area 2	G6M-04-03X	10/15/2009	16	8.4	8.6	0.5U	0.5U	0.5U	1.3U	1.6U	2,000	148	2.02	3,270	10U	240	0.13U	7U	0.03U	8.80	1.49	-46.9	0.227	5.0	13.3
Area 2	G6M-04-03X	10/7/2010	300	52	94	0.62	0.25J	29	1.2U	3.5	29,000	133	5.47	3,910	10U	120	0.13U	4.8J	0.03U	6.67	2.47	-35.2	0.345	9.09	14.76
Area 2	G6M-04-03X	10/5/2011	7.3	1.8	7.5	0.5U	0.5U	4.6	1.2U	1.5U	29,000	72.9	0.19U	559	3.1J	130	0.13U	6.0	0.03U	10.63	0.49	6.3	0.307	0	12.74
Area 2	G6M-04-03X	10/10/2012	8.7	1.9	6.3	0.5U	0.5U	16	1.2U	170	38,000	65.8	0.261	1,320	10U	160	0.096J	8.0	0.03U	10.65	1.09	-18.4	0.556	6.84	13.84
Area 2	G6M-04-03X	10/17/2013	190	87	200	4U	4U	86	1.2U	270	51,000	31.6	32.7	8,450	2.5J	67	0.13U	8.6	0.03U	6.55	0.69	-77.3	0.583	28	15.41
Area 2	G6M-04-03X	10/30/2014	20	15	53	0.38J	0.5U	19	1.2U	17	6,700	14.4	0.29	114	4.7J	420	0.13U	7.5	0.03U	10.60	1.99	-70.1	1.152	24.3	13.53
Area 2	G6M-04-03X	9/11/2015	11	9.3	39.6	1.0 U	1.0 U	5.5	10 U	10 U	3,450	105	22.9	2,720	5.30	-	0.068 J	7.0 J	2.0 U	7.71	0.36	-194.0	1.079	11.6	14.60
Area 2	G6M-04-03X	10/14/2015	5.0	3.20	43.0	1.0 U	1.0 U	6.8	10 U	10 U	8,190	232	75.1	11,300	8.2	337	0.13 J	7.0 J	2.0 U	6.79	1.03	-68.4	1.208	9.64	12.80
Area 2	G6M-04-03X	2/18/2016	0.60 J	0.59 J	25.3	1.0 U	1.0 U	7.3	10 U	10 U	12,500	673	97.0	15,200	8.1	456	0.10 U	1.2 J	2.0 U	8.56	0.99	212.9	0.799	11.2	6.66
Area 2	G6M-04-03X	11/10/2016	1.0 U	0.65 J	5.8	1.0 U	1.0 U	4.1	1.1 U	25 J	20,000	380	110	31,000	9.8	390	0.05 U	2.2	1.0 U	6.47	0.43	-74.1	1.018	6.66	11.47
Area 2	G6M-04-03X	10/20/2017	1.0 U	1.0 U	2.2	1.0 U	1.0 U	1.6	1.1 U	1.0 U	9,100	260	85	20,000	5.1	160	0.06 J	19	1.0 U	6.45	0.38	-55.0	2.75	5.87	12.73
Area 2	G6M-97-08B	10/18/2001	92	6.1	36	1.6J	1U	2U	-	-	-	-	-	-	-	-	-	0	-	5.60	4.8	224	0.13	18	14.17
Area 2	G6M-97-08B	2/26/2002	100	5.9	32	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.87	5.13	186.4	1.157	5.3	12.77
Area 2	G6M-97-08B	9/22/2004	220	9.3	41	2U	1U	2U	0.0075	0.005U	1.3	5U	1U	26	1U	10U	6.1	12	1.5J	5.69	4.66	252.8	1.516	18.3	12.89
Area 2	G6M-97-08B	12/16/2004	200	7.7	41	2U	1U	2U	0.13	0.072	0.92	5U	1U	25	5U	10U	6.1	12	5.4	5.79	8.78	165	1.633	3.81	16.41

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 2	G6M-97-08B	3/30/2005	95	3.4J	16	4U	2U	4U	0.015	0.032	0.54	5U	1U	21	0.4J	12	0.8	7	2U	5.58	8.06	202.8	0.999	9.42	15.56
Area 2	G6M-97-08B	6/28/2005	140	8	36	1.4	1U	2U	0.016	0.041	35	2U	1J	27	7.1	16.7	1.4	12	1U	11.30	4.94	173.7	1.506	8.16	13.88
Area 2	G6M-97-08B	9/27/2005	180	7.5	42	2U	1U	2U	0.013J	0.027	0.39	5U	1U	33	4.4	15.9	1.3	16	1U	5.60	5.73	319.2	1.713	2.82	13.47
Area 2	G6M-97-08B	12/12/2005	120	5.7	27	2U	1U	2U	0.04	0.11	26	5U	1U	28.1	0.6J	23	0.05UJ	13	1U	5.87	4.19	171.1	1.11	0.7	15.76
Area 2	G6M-97-08B	3/23/2006	240	8.8	44	2U	1U	2U	0.022J	0.13	12	5U	0.1U	46	5U	13	1.25	13.7	1U	5.85	5.13	181.5	1.44	3.16	14.21
Area 2	G6M-97-08B	6/21/2006	220	11	35	2U	1U	2U	0.019J	0.086	24	5U	0.17	1,300	16	66	0.809	13.5	1	5.90	2.39	141.1	2.015	1.48	-
Area 2	G6M-97-08B	9/19/2006	190	14	55	2U	1U	2U	0.078	0.13	18	130	21	13,000	270	300	0.2U	23.6	2.8	5.79	1.58	47.6	2.287	4.58	12.47
Area 2	G6M-97-08B	12/13/2006	200	11	75	2U	1U	2U	0.004J	0.038	1,700	160	83	20,000	440	-	-	49.6	2.8	6.07	1.43	-72.8	3.107	5.21	13.56
Area 2	G6M-97-08B	3/30/2007	200	8.5	46	2U	1U	2U	0.028	0.19	6,000	130	170	26,000J	620	-	-	126	4.6	5.36	0.46	14.8	3.626	1.13	12.47
Area 2	G6M-97-08B	6/14/2007	140	5.5	37	2U	1U	2U	0.025U	0.021J	7,900	100	370	24,000	760	-	-	120	6.4	5.66	1.68	-45.4	3.659	1.0	9.9
Area 2	G6M-97-08B	9/12/2007	170	8.4	43	2U	1U	3	0.004J	0.05	8,400	120	370	18,000	630	650	0.2U	1500	3.2	5.66	2.72	-31.4	3.924	5.5	11.04
Area 2	G6M-97-08B	12/14/2007	150J	5.7J	31J	2UJ	1UJ	4.5J	0.006J	0.054	10,000	150	280	12,000	520	-	-	92	5.6	5.84	0.75	-45.3	3.673	0	11.83
Area 2	G6M-97-08B	3/12/2008	150	6.5	32	2U	1U	6.8	0.008J	0.15	9,800	160	190	8,100	270	-	-	38	2.8	5.94	2.15	-66.4	3.091	0	12.36
Area 3	G6M-03-07X	5/12/2003	1,200	7.2	34	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.74
Area 3	G6M-03-07X	9/24/2004	1,700	6.3	31	2U	1U	2U	0.035	0.28	5.7	5U	1UJ	20	1U	10U	4.3J	12	1.6J	5.77	7	168.3	0.341	84.6	16.04
Area 3	G6M-03-07X	12/16/2004	1,500	6	35	2U	1U	2U	0.026	0.08	0.39	5U	1U	190	5U	10U	4.2	12	2.9	6.02	17.09	321.7	0.348	8.46	14.01
Area 3	G6M-03-07X	3/30/2005	1,100	91	140	40U	20U	40U	0.078	0.21	1.8	18	18	10,000	29	76	0.33	8	2U	6.33	1.9	-54.6	0.671	0.7	14.14
Area 3	G6M-03-07X	6/29/2005	940	78	940	40U	20U	40U	0.06	0.34	3.9	31	39J	15,000J	83	118	0.079	6.4	1U	11.97	1.12	-20.1	0.915	5.93	8.48
Area 3	G6M-03-07X	9/29/2005	300	44	1000	2.3	2.7	1U	0.068	0.45	660	46	210J	30,000	290	307	0.05U	3.2	12	6.20	2.7	-62	1.266	7.68	14.74
Area 3	G6M-03-07X	12/12/2005	92	22	710	20U	10U	20U	0.078	0.13	13,000	96.1	190	46,600	220	320	0.05UJ	2U	6.2	6.5	0.22	-82.1	1.038	3.6	14.16
Area 3	G6M-03-07X	3/24/2006	110	23	430	2U	2	270	0.010J	2	22,000	130	280	48,000	260	590	0.2U	1	8.6	6.87	0.17	-130.5	1.39	10.1	11.35
Area 3	G6M-03-07X	6/21/2006	9.5	3.6	180	2U	1U	310	0.073	21	21,000	140	460	59,000	280	570	0.2U	1U	4.8	5.13	0.7	-170.4	2.258	31.4	13.04
Area 3	G6M-03-07X	9/19/2006	47	7.9	260	2U	1U	300	0.037	9.2	25,000	140	470	44,000	290	460	0.926	1.27	5	6.48	0.27	-147.2	2.15	15.1	12.69
Area 3	G6M-03-07X	12/14/2006	190	30	310	2U	1.3	160	0.025	5.9	26,000	220	400	38,000	300	-	-	2.44	2.8	6.37	0.17	-160	2.155	6.19	12.57
Area 3	G6M-03-07X	3/29/2007	2U	2U	35	2U	1U	360	0.08	5.1	15,000	190	420	20,000J	130	-	-	1U	4.4	6.32	2.46	-69.3	1.787	39.6	13.39
Area 3	G6M-03-07X	6/14/2007	37	8.1	190	2U	1U	200	0.025U	2.3	25,000	220	490	37,000	310	-	-	10.5	2.4	6.40	1.31	-159	2.386	9.7	13.63
Area 3	G6M-03-07X	9/13/2007	27	13	290	2.2	1.1	140	0.008J	12	26,000	210	500	29,000	72	560	0.2U	420	4.8	6.26	3.08	-174.9	2.743	117.6	14.45
Area 3	G6M-03-07X	12/14/2007	2.6	2U	9.8	3.0	1U	120	0.010J	34	25,000	270	320	12,000	140	-	-	10U	4.0	6.51	0.99	-123.7	2.138	70.9	13.23
Area 3	G6M-03-07X	3/14/2008	2U	2U	2.3	2U	1U	4.3	0.11	26	30,000	210	230	11,000	130	-	-	5U	4.0	6.41	1.06	-85.5	1.897	235.9	14.9
Area 3	G6M-03-07X	10/7/2008	5U	2.2J	5U	21	5U	5U	6.3U	12	14,000	246	348	5,370	64.3	190	190	24	0.03UJ	6.24	0.10	-44.4	1.742	16	14.09
Area 3	G6M-03-07X	1/22/2009	1.4U	2.3U	1.7J	15	1.7U	3.6	1.2U	10	16,000	227	338J	5,000	110J	20U	0.13U	37	0.03U	6.6	1.20	-74.9	1.743	30	14.38
Area 3	G6M-03-07X	5/6/2009	0.5U	0.5U	1.8	20	0.5U	2.6	1.2U	9.9	28,000	351	361	5,500	66	720J	0.025J	32	0.03U	5.88	0.21	-117.9	1.735	20.3	14.21
Area 3	G6M-03-07X	10/15/2009	0.27J	0.5U	2.3	19	0.5U	2.2	1.1U	7.3	16,000	318	251	4,870	44	550	0.13U	30	0.03UJ	6.25	0.88	-100.4	1.362	5.6	13.4
Area 3	G6M-03-07X	4/21/2010	0.5U	0.5U	0.88	5.3	0.5U	1.3	1.3U	6.3	27,000	339	176J	2,000	46	320	0.13U	0.11J	0.03U	6.46	0.69	-106.3	1.086	8.9	16.20
Area 3	G6M-03-07X	10/5/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	14	48,000	346	164	4,650	16	35	0.13U	0.27J	0.03U	6.35	0.11	-106.1	1.276	4.56	-
Area 3	G6M-03-07X	6/8/2011	0.5U	0.5U	1.7	7.8	0.5U	2.1	1.2U	13	72,000	381	158	3,540	41	460	0.13U	5.0U	0.10	6.25	0.08	-87	0.841	9.82	15.28
Area 3	G6M-03-07X	10/5/2011	0.5U	0.5U	0.86	5.6	0.5U	1.4	1.2U	1.5U	48,000	375	133	2,500	39	320	0.13U	5.0U	0.049	6.4	0.02	-42	0.764	6.0	9.73
Area 3	G6M-03-07X	5/9/2012	0.5U	0.5U	1.2	4.4	0.5U	0.92	1.2U	200	74,000	388	131	3,090	31	320	0.13U	0.35J	0.063	6.52	0.14	-111.7	1.046	2.43	12.88
Area 3	G6M-03-07X	10/11/2012	0.5U	0.5U	0.74	3.4	0.5U	1.5	1.2U	800	97,000	365	116	2,900	26	270	0.027J	5.0U	0.04	6.5	0.34	-96.2	0.962	4.81	15.32
Area 3	G6M-03-07X	5/21/2013	0.5U	0.5U	1	3.4	0.5U	0.77	1.2U	1.5U	22,000	413	114	2,150	23	180J	0.13UJ	5.0U	0.03UJ	6.01	0.17	-64.9	0.923	1.28	14.79
Area 3	G6M-03-07X	10/16/2013	0.5U	0.5U	0.86	2.9	0.5U	1.3	1.2U	33	31,000	434	120	2,340	26	340	0.13U	5.0U	0.065	6.53	0.21	-102.4	0.901	1.01	9.71
Area 3	G6M-03-07X	6/11/2014	0.40J	0.5U	0.72	3	0.5U	2.5	1.3UJ	3.5J	10,000J	422	105J	1,670	45	260J	0.13U	0.52U	0.03J	6.32	0.28	-48.4	0.787	2.54	11.63
Area 3	G6M-03-07X	10/30/2014	0.5U	0.5U	0.69	2.8	0.5U	1.1	1.2U	1.8	54,000	355	78.5	1,400	22	180	0.13U	0.38J	0.03U	6.49	0.24	-120.7	0.532	5.63	12.93
Area 3	G6M-03-07X	6/18/2015	0.50 U	0.50 U	0.62 J	2.10	0.50 U	0.77 J	5.0 U	5.7 J	12,400	97.1	107	1,810	27.1	262	0.15 U	0.50 U	1.0 U	6.40	0.16	-94.9	0.626	15.1	16.20
Area 3	G6M-03-07X	9/14/2015	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	10 U	6.0 J	11,900	436	103	1,700	25.2	-	0.086 J	0.94 J	2.0 U	6.45	0.56	-112.8	0.545	5.16	14.23
Area 3	G6M-03-07X	10/14/2015	1.0 U	1.0 U	0.59 J	1.80	1.0 U	0.73 J	10 U	6.5 J	16,600	441	102	1,660	243	161	0.085 J	2.3 J	2.0 U	6.61	0.24	-76.2	0.754	5.37	12.30
Area 3	G6M-03-07X	2/10/2016	1.0 U	1.0 U	1.0 U	1.80	1.0 U	0.78 J	10 U	5.0 J	12,800	461	96.7	1,360	24.7	194	0.18	10 U	2.0 U	6.49	0.84	-68.8	0.704	16.1	11.20
Area 3	G6M-03-07X	6/16/2016	1.0 U	0.61 J	0.73 J	1.50	1.0 U	0.73 J	1.1 U	1.0 U	28,000	440	90	1,600	26	200	0.05 U	0.8 U	1.0 U	6.46	0.29	-71.9	0.759	9.0	17.00
Area 3	G6M-03-07X	11/10/2016	1.0 U	1.0 U	0.44 J	1.4	1.0 U	0.63 J	1.1 U	16	23,000	420	81	1,400	22	170	0.05 UJ	1.0 U	1.0 U	5.50	0.29	-86	0.48	17.4	14.89
Area 3	G6M-03-07X	5/16/2017	1.0 U	1.0 U	0.51 J	0.76 J	1.0 U	1.0 U	1.2	7.2	14,000	370	84	1,600	19	200	0.14	1.0 U	1.0 U	6.59	0.35	-91.3	0.59	11.0	17.46
Area 3	G6M-03-07X	10/23/2017	1.0 U	1.0 U	0.55 J	0.97 J	1.0 U	0.72 J	2.7	14	21,000	450	94	1,800	24	170	0.13	1.0 U	1.0 U	6.32	0.07	-75.1	0.66	5.78	13.52

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 3	G6M-04-02X	9/23/2004	1,900	2U	3.8	2U	1U	2U	-	-	-	5U	1U	86	-	-	-	-	-	6.59	7.25	152.4	0.704	9.52	13.09
Area 3	G6M-04-02X	9/28/2005	1,800	5U	5U	5U	5U	5U	-	-	-	5U	1U	15U	-	-	-	-	-	5.21	6.54	294	0.607	12	18.36
Area 3	G6M-04-02X	9/20/2006	1,100	170	2.2	2U	1U	2U	-	-	-	5U	0.10U	24	-	-	-	-	-	5.22	2.88	-101.5	0.696	10.61	17.15
Area 3	G6M-04-02X	9/14/2007	710	98	290	21	1U	2U	-	-	-	48	16	13,000	-	-	-	-	-	6.52	2.91	-31.3	1.356	2.3	15.3
Area 3	G6M-04-02X	10/16/2008	320	47	290	5U	5U	5U	-	-	-	135	56.6	6,530	-	-	-	-	-	6.32	0.74	-143.6	1.302	3.8	15.75
Area 3	G6M-04-02X	10/15/2009	400	110	15	8U	8U	8U	-	-	-	78.3	20.8	3,580	-	-	-	-	-	6.19	0.9	-25	1.011	4.0	14.12
Area 3	G6M-04-02X	10/6/2010	380	54	27	20U	20U	20U	-	-	-	182	40.2	5,530	-	-	-	-	-	6.25	0.51	-50.1	1.071	3.53	13
Area 3	G6M-04-02X	6/8/2011	-	-	-	-	-	-	-	-	-	317	42.7	4,540	-	-	-	-	-	6.44	0.76	-95.9	0.678	1.9	13.61
Area 3	G6M-04-02X	10/5/2011	630	93	13U	13U	13U	13U	-	-	-	172	18.1	4,370	-	-	-	-	-	6.24	0.41	1	0.669	6.6	15.18
Area 3	G6M-04-02X	5/8/2012	-	-	-	-	-	-	-	-	-	225	15.5	3,980	-	-	-	-	-	6.36	0.2	-25.6	0.475	1.12	14.93
Area 3	G6M-04-02X	10/12/2012	160	30	5.0U	5.0U	5.0U	5.0U	-	-	-	228	16.9	4,890	-	-	-	-	-	6.33	0.44	-33.5	0.534	2.02	15.92
Area 3	G6M-04-02X	5/21/2013	-	-	-	-	-	-	-	-	-	143	7.29	5,400	-	-	-	-	-	5.98	0.36	18.3	0.699	0.74	13.55
Area 3	G6M-04-02X	10/17/2013	140	31	5.7	4.0U	4.0U	4.0U	-	-	-	231	20.6	6,800	-	-	-	-	-	5.70	0.37	-12.3	0.485	3.75	15.8
Area 3	G6M-04-02X	6/11/2014	-	-	-	-	-	-	-	-	-	137	13.9J	5,900	-	-	-	-	-	6.15	0.62	4.5	0.795	2.48	18.26
Area 3	G6M-04-02X	10/30/2014	480	70	33	0.5U	0.5U	2.7J	-	-	-	160	40.5	5,980	-	-	-	-	-	6.34	0.28	-63.1	0.628	1.86	19.03
Area 3	G6M-04-02X	6/18/2015	62	20.3	15.7	0.50 U	0.50 U	1.8	-	-	-	362	82.4	7,220	-	-	-	-	-	6.30	0.32	-101.0	0.500	10.9	13.09
Area 3	G6M-04-02X	9/11/2015	16	7.4	8.8	1.0 U	1.0 U	1.8	10 U	10 U	7,390	343	91.4	6,920	3.3	-	0.067 J	0.87 J	2.0 U	6.59	0.39	-147.8	0.663	2.50	14.02
Area 3	G6M-04-02X	10/16/2015	105	30.5	1.0 U	1.0 U	1.0 U	1.6	-	-	-	237	65.8	7,570	-	-	-	-	-	6.32	0.23	-56.1	0.818	2.43	12.79
Area 3	G6M-04-02X	2/10/2016	333	60.2 J	12.3	2.0 U	2.0 U	1.5 J	10 U	10 U	4,410 J	118	28.3	8,730	2.1	118.0	0.11	10.1	2.0 U	6.74	0.87	-112.9	0.536	10.8	10.04
Area 3	G6M-04-02X	6/13/2016	120	48.0	23.0	1.0 U	1.0 U	3.40	-	-	-	200	44.0	8,000	-	-	-	-	-	6.43	0.34	-56.2	0.875	1.59	13.40
Area 3	G6M-04-02X	11/10/2016	160	60	58	0.37 J	1.0 U	8.40	-	-	-	180	48	9100	-	-	-	-	-	6.62	0.51	-67.3	0.629	4.32	10.3
Area 3	G6M-04-02X	5/16/2017	280	120	22 J	0.39 J	1.0 U	2.3 J	1.1 U	2.2	4,800	42	15	11,000	2.5 J	130	0.065 J	10	1.0 U	6.00	2.09	29.5	0.96	3.90	13.17
Area 3	G6M-04-02X	10/20/2017	97	26	13	2.0 U	2.0 U	1.8 J	1.1 U	1.0 U	16,000	260	66	10,000	3.3	160	0.08 J	6.2	1.0 U	6.36	0.28	-66.9	0.91	4.26	12.51
Area 3	G6M-04-04X	9/24/2004	2,300	7.8	24	2U	1U	2U	0.037	0.12	13	5U	1UJ	560	1U	10U	5.5	20	2U	5.75	5.05	197.3	1.637	169	12.51
Area 3	G6M-04-04X	9/29/2005	1,600	5.4	15	2.5U	2.5U	2.5U	0.018J	0.06	0.44	5U	1U	430	0.5J	5.3	1.4	23	1U	5.34	5.66	295.9	1.666	7.39	13.87
Area 3	G6M-04-04X	9/19/2006	1,600	45	260	2U	1U	2U	0.12	0.095	33	110	84	31,000	120	190	0.2U	10.2	1.6	6.22	0.32	-71.5	1.765	7.64	13.53
Area 3	G6M-04-04X	9/13/2007	600	130	210	2.0	1.2	300	0.005J	7.0	18,000	280	130	25,000	63	270	0.2U	890	1.2	6.57	3.2	-186.6	2.398	3.5	13.04
Area 3	G6M-04-04X	10/16/2008	6.0	8.1	48	2.8	2.5U	150J	1.3U	62	18,000	523	248	19,300	34.6U	520	0.10U	7	0.03UJ	6.40	2.39	-106.2	2.239	4.0	13.16
Area 3	G6M-04-04X	10/15/2009	0.5U	0.5U	4.8	5.2	0.5U	6.9	1.3U	61	38,000J	615	239	16,800	32	520	0.13U	23J	0.03UJ	6.47	0.86	-123.0	1.744	5.0	14.24
Area 3	G6M-04-04X	10/5/2010	0.5U	0.5U	2.8	2.6	0.5U	3.2	1.2U	210	52,000J	529	155	16,900	15	81J	0.13U	5.0U	0.03U	6.35	0.40	-112.0	2.133	3.1	13.59
Area 3	G6M-04-04X	10/5/2011	0.5U	0.5U	1.1	4.1	0.5U	2.7	1.2U	160	31,000J	615	145	16,400	17	350J	0.13U	5.0U	0.049	6.61	0.10	-88	1.042	5	12.99
Area 3	G6M-04-04X	10/11/2012	0.5U	0.5U	0.80	3.7	0.5U	2.6	1.3U	460	51,000	590	133	15,700	13	220	0.13U	5.0U	0.052	6.66	0.39	-108.6	1.693	1.53	14.02
Area 3	G6M-04-04X	10/16/2013	0.5U	0.5U	1.8	3.1	0.5U	3.0	3.5	420	44,000	601	114	11,000	11	240	0.13U	0.94J	0.049	6.57	0.24	-109.9	1.345	4.75	10.96
Area 3	G6M-04-04X	10/30/2014	0.5U	0.5U	0.5U	1.7	0.5U	0.39J	1.2U	85	43,000	453	113	8,520	9.0J	180	0.098J	0.18J	0.03U	6.59	0.42	-145.8	1.537	6.54	11.41
Area 3	G6M-04-04X	9/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.91 J	10 U	32.6	9,170	486	11.9 J	10,700 J	7.50	-	0.068 J	3.4 J	2.0 U	6.7	0.28	-180.4	1.264	3.25	14.95
Area 3	G6M-04-04X	10/16/2015	0.76 J	1.0 U	1.0 U	1.0 U	2.80	1.0 U	10 U	61.3	20,000	505	115	10,000	8.5	167	0.11 U	1.6 J	2.0 U	5.99	0.57	-114.6	1.727	3.13	10.70
Area 3	G6M-04-04X	2/19/2016	1.0 U	1.0 U	0.50 J	2.8	1.0 U	1.0	10 U	65.1	13,900	550	114	9,760	7.3	278	0.10	1.3 J	2.0 U	7.68	1.29	-38.7	1.173	3.97	11.53
Area 3	G6M-04-04X	6/16/2016	1.0 U	1.0 U	0.65 J	1.0 U	1.0 U	1.1	9.2	86	31,000	580	120	10,000	8.6	160	0.05 U	30.0	1.0 U	6.51	1.46	-108.1	1.407	4.2	16.19
Area 3	G6M-04-04X	11/8/2016	1.0 U	1.0 U	0.43 J	1.2	1.0 U	0.57 J	3.0	38	20,000	530	120	9,700	7.3	180	0.05 UJ	1.0 U	4.4	6.01	0.32	-106.9	1.402	3.49	13.83
Area 3	G6M-04-04X	10/20/2017	1.0 U	1.0 U	0.51 J	1.4	1.0 U	1.0 U	3.8	39	19,000	600	170	17,000	11	250	0.11	0.72 J	1.0 U	6.64	0.24	-111.1	0.94	4.39	12.69
Area 3	G6M-13-03X	1/30/2014	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	5.58	0.69	205	0.2483	1.11	10.87
Area 3	G6M-13-03X	10/30/2014	0.5J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5U	0.0285U	407	-	-	-	-	-	6.39	1.65	183.6	0.1922	15.3	6.67
Area 3	G6M-13-03X	10/16/2015	0.57 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	100 U	362	-	-	-	-	-	5.53	1.58	157.6	2.539	36.6	11.90
Area 3	G6M-13-03X	11/10/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	2.2 J	0.45	420	-	-	-	-	-	4.15	0.43	40	1.54	31.6	12.48
Area 3	G6M-13-03X	10/18/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.075 U	550	--	--	--		--	5.61	0.58	170.1	2.25	4.69	11.89
Area 4	G6M-02-03X	2/26/2002	210	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	11.61	2.21	11	1.154	18.1	18.88
Area 4	G6M-02-03X	9/23/2004	48	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	4.95	1.17	632.1	1.374	3.8	17.6
Area 4	G6M-02-03X	9/29/2005	12	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.70	2.9	204.9	1.138	10.67	17.62
Area 4	G6M-02-03X	9/18/2006	10	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.20	0.35	219.4	0.993	4.32	14.39
Area 4	G6M-02-03X	9/14/2015	0.82 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	284	4.0 U	0.10 U	79	1.10	-	1.30	9.7 J	2.0 U	5.67	5.09	93.2	0.722	3.00	14.06
Area 4	G6M-02-03X	6/16/2016	-	-	-	-	-	-	-	-	-	3.0 U	0.05 U	310	-	-	-	-	-	4.87	0.45	139.6	1.658	19.87	16.74

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 4	G6M-02-03X	11/8/2016	-	-	-	-	-	-	-	-	-	3.0 U	0.029 J	99	-	-	-	-	-	7.58	1.03	-53.7	0.96	3.88	11.73
Area 4	G6M-02-04X	2/26/2002	470	0.88J	1.3J	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.47	3.4	189.5	0.26	24	17.99
Area 4	G6M-02-04X	9/23/2004	170	2U	2.9	2U	1U	2U	-	-	-	5U	1U	15U	-	-	-	-	-	6.29	3.03	175.5	0.453	8.48	19.59
Area 4	G6M-02-04X	9/28/2005	150	2U	6.2	2U	1U	2U	-	-	-	5U	1U	15U	-	-	-	-	-	5.61	2.75	302.3	0.502	12.6	17.26
Area 4	G6M-02-04X	9/20/2006	48	2U	2U	2U	1U	2U	-	-	-	5U	0.10U	15U	-	-	-	-	-	5.84	4.57	189	0.467	8.45	14.49
Area 4	G6M-02-04X	9/13/2007	21	4.2	2U	2U	1U	2U	-	-	-	6U	0.1U	15	-	-	-	-	-	6.39	3.13	93	0.927	4.8	14.85
Area 4	G6M-02-04X	10/16/2008	9.0	2.5U	150	2.5U	2.5U	2.5U	-	-	-	78.2	8.56	7,370	-	-	-	-	-	6.91	1.05	-80	1.126	4.0	12.08
Area 4	G6M-02-04X	10/15/2009	5U	17	120	5U	5U	10	-	-	-	309	82	10,900	-	-	-	-	-	6.55	1.52	-139.8	0.766	2.18	15.6
Area 4	G6M-02-04X	10/4/2010	5.3	2.6	2.1	0.5U	0.5U	0.5U	-	-	-	101	20.2	1,240	-	-	-	-	-	6.48	0.98	-86.9	0.975	2.8	14.68
Area 4	G6M-02-04X	6/9/2011	-	-	-	-	-	-	-	-	-	246	28.2	3,180	-	-	-	-	-	6.67	0.28	-88.3	0.856	0	13.32
Area 4	G6M-02-04X	10/6/2011	0.69	0.80	0.67	0.5U	0.5U	0.5U	-	-	-	292	35.6	2,480	-	-	-	-	-	6.84	0.26	-112.5	0.601	3.71	12.68
Area 4	G6M-02-04X	5/9/2012	-	-	-	-	-	-	-	-	-	451	43.4	2,510	-	-	-	-	-	6.94	0.52	-114.8	0.487	2.9	13.7
Area 4	G6M-02-04X	10/9/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	374	30	1,860	-	-	-	-	-	6.87	0.43	-129.3	0.591	0	13.4
Area 4	G6M-02-04X	5/21/2013	-	-	-	-	-	-	-	-	-	313	28.1	1,890	-	-	-	-	-	6.88	0.3	-110.5	0.745	2.26	13.62
Area 4	G6M-02-04X	10/16/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	370	23.9	1,390	-	-	-	-	-	6.92	0.38	-124.4	0.522	1.32	13.21
Area 4	G6M-02-04X	6/11/2014	-	-	-	-	-	-	-	-	-	175	14.2	997	-	-	-	-	-	6.60	0.59	-10.8	0.956	3.35	13.12
Area 4	G6M-02-04X	11/3/2014	0.5U	0.24J	0.5U	0.5U	0.5U	0.5U	-	-	-	350	15.6	971	-	-	-	-	-	7.08	1.42	-111.1	0.55	1.38	14.70
Area 4	G6M-02-04X	6/26/2015	0.60 J	0.52 J	0.91 J	0.50 U	0.50 U	0.50 U	-	-	-	157	10.4	1,060	-	-	-	-	-	7.39	0.71	-55.4	1.238	1.55	14.70
Area 4	G6M-02-04X	9/14/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	4,350	408	20.4	995	1.60	-	0.057 U	9.6 J	2.0 U	7.01	0.40	-152.4	0.40	1.30	14.56
Area 4	G6M-02-04X	10/16/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	320	15.1	1,000	-	-	-	-	-	6.78	0.43	-97.3	0.665	0.86	13.02
Area 4	G6M-02-04X	2/12/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	964	353	22	1,370	1.1	42.3	0.12	8.0 J	2.0 U	7.08	0.79	-79.7	0.711	1.94	11.26
Area 4	G6M-02-04X	6/15/2016	1.0 U	0.59 J	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	470	27	1,400	4.4	250	0.05 U	0.8 U	1.0 U	6.88	0.30	-106.2	1.031	2.84	16.74
Area 4	G6M-02-04X	11/8/2016	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	-	-	-	470	21	1,100	-	-	-	-	-	7.00	0.89	-153.6	0.268	2.57	13.15
Area 4	G6M-02-04X	10/16/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	440	22	1,300	--	--	--	--	--	7.07	0.42	-119.3	0.63	4.31	12.63
Area 4	G6M-02-13X	8/2/2002	4,600	4	2U	2U	1U	2U	-	-	-	5U	-	-	-	-	-	-	-	6.17	0.54	141	0.665	7.62	13.98
Area 4	G6M-02-13X	9/23/2004	5,000	13	16	2U	1U	2U	0.27	0.15	57	5U	1U	1,200	1U	31	2.3	17	1.8J	6.37	0.34	170.8	0.618	2.14	16.73
Area 4	G6M-02-13X	12/13/2004	4,600	14	21	2U	1U	2U	0.27	0.11	88	5U	1U	1,300	5U	34	2.5	16M	2U	5.79	0.89	274.8	0.518	2.63	18.3
Area 4	G6M-02-13X	3/30/2005	2,100	64J	210	100U	50U	100U	0.16	0.11	38	36	4.2	4,000	8.1	60	0.23	13	2U	5.97	0.89	-22.6	0.735	2.91	15.02
Area 4	G6M-02-13X	8/11/2005	2,300	190	460	5.9	2U	2U	0.026	0.045	46	150	34J	12,000J	66	230	0.05U	2.3	1U	5.82	0.74	-68.8	0.897	5.6	14.76
Area 4	G6M-02-13X	9/29/2005	3,700	120	470	10U	10U	10U	0.16	0.12	420	74	22	6,800	37	110	0.05U	8.9	2.4	6.41	1.26	-89.1	0.71	6.99	15.48
Area 4	G6M-02-13X	12/14/2005	210	50	850	2U	2	2U	0.057	0.087	11,000	477	200J	36,200	290	420	0.083	2U	8.2	6.6	0.11	-134.4	1.389	0.6	15.43
Area 4	G6M-02-13X	3/22/2006	660	37J	640	2U	1U	2U	0.025U	0.009J	21,000	320	170	29,000	280	480	0.2U	8.08	3.0	6.67	0.9	-214.4	1.379	2.37	14.28
Area 4	G6M-02-13X	6/22/2006	160	8.8	440	2U	1U	280	0.025J	0.51	25,000	750	420	30,000	140	480	0.2U	1.15	20	6.54	0.28	-138.7	2.175	16.1	14.68
Area 4	G6M-02-13X	9/18/2006	550	52	160	2U	1U	280	0.15	1.1	24,000	420	160	9,900	52	140	0.2U	8.09	2.8	6.12	0.36	-119.3	1.19	6.9	13.37
Area 4	G6M-02-13X	12/14/2006	460	20	190	2U	1U	220	0.025	0.35	23,000	460	260	12,000	140	-	-	4.25	3.6	6.49	0.19	-73.7	1.748	8.3	10.99
Area 4	G6M-02-13X	3/27/2007	460	39	120	2U	1U	170	0.031	3.7	27,000	400	170	8,400J	37	-	-	9.74	1.6	6.08	0.12	-14.6	1.378	11.2	13.81
Area 4	G6M-02-13X	6/13/2007	440	45	48	2U	1U	46	0.025U	6.3	26,000	380	300	9,400	78	-	-	12.7	3.6	6.58	0.46	-178.7	1.926	47.5	12.34
Area 4	G6M-02-13X	9/13/2007	510	150	120	2U	1U	53	0.14	26	20,000	230	88	4,800	18	74	0.2U	480	1U	6.54	0.45	-145.3	1.332	18.2	13.69
Area 4	G6M-02-13X	12/14/2007	690	84J	58J	2U	1U	21J	0.068	21	16,000	210	46	4,500	11	-	-	13	1U	6.51	0.27	-133.2	1.133	3.6	14.17
Area 4	G6M-02-13X	3/12/2008	130	96	29	2U	1U	12	0.092	35	21,000	260	68	7,600	17	-	-	9	1U	6.48	0.57	-140.5	1.221	7.7	14.51
Area 4	G6M-02-13X	10/6/2008	5U	9.7	7.9	5U	5U	7.5	6.5U	8.8	14,000	380	91	4,940	24.3	300	0.13U	11	0.03UJ	6.56	0.28	-173.6	1.071	5.2	13.58
Area 4	G6M-02-13X	1/21/2009	1.4U	5	5.4	1.3U	1.7U	5.7	.25U	3.8	17,000	371	72.1J	3,990	11J	200	0.13U	14	0.03U	6.88	0.28	-121.2	0.821	4	13.07
Area 4	G6M-02-13X	5/6/2009	0.5U	5.1	9.8	0.24J	0.5U	6.2	1.2U	2.6	26,000	351	69.4	3,820	9.4J	300J	0.012J	12	0.03U	6.01	0.29	-93.4	0.916	2.09	14.16
Area 4	G6M-02-13X	10/15/2009	0.92	8.6	16	0.7	0.5U	8.5	1.2U	2.2	7,400	369	93.3	6,800	7J	370	0.13U	13	0.03UJ	6.47	0.24	-148.8	0.932	1.71	14.48
Area 4	G6M-02-13X	4/20/2010	0.5U	0.29J	14	0.42J	0.5U	13	1.3U	6.4	44,000	322	134J	5,790	36	500	0.13U	5.0U	0.03U	6.47	0.28	-7.3	1.219	2.98	14.34
Area 4	G6M-02-13X	10/4/2010	0.30J	1.6	8.3	0.24J	0.5U	8.4	1.2U	9.5	48,000	281	58.5	4,690	10U	370	0.046J	3.3J	0.03U	6.57	0.18	-124.5	1.168	0.90	13.69
Area 4	G6M-02-13X	6/9/2011	-	-	-	-	-	-	-	-	-	302	72.3	6,820	-	-	-	-	-	6.49	0.21	-110.8	1.21	2.19	13.41
Area 4	G6M-02-13X	10/6/2011	0.5U	0.5U	0.96	0.5U	0.5U	2.4	1.2U	1.5U	12,000	258	36.2	5,690	6.7J	110	0.13U	0.45J	0.056	6.65	0.07	-94.6	1.235	2	14.62
Area 4	G6M-02-13X	5/9/2012	-	-	-	-	-	-	-	-	-	205	25.9	6,670	-	-	-	-	-	7	0.16	-118.5	1.281	1.01	11.53
Area 4	G6M-02-13X	10/11/2012	0.5U	0.83	0.69	0.5U	0.5U	0.5U	1.3U	87	22,000	159	24.9	8,190	2.7J	380	0.013J	5.0U	0.03U	6.68	0.34	-109.8	1.195	0	12.32
Area 4	G6M-02-13X	5/21/2013	-	-	-	-	-	-	-	-	-	212	22.3	12,500	-	-	-	-	-	6.88	0.12	-118	0.9	4.89	11.97

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 4	G6M-02-13X	10/16/2013	0.5U	0.78	1.8	0.27J	0.5U	1.1	1.8	3.9	34,000	140	19.1	11,400	2.5J	350	0.13U	5.0U	0.037	6.87	0.37	-110	0.916	0	11.96
Area 4	G6M-02-13X	6/11/2014	-	-	-	-	-	-	-	-	-	195	20.4	15,800	-	-	-	-	-	6.74	0.27	-85	0.958	3.92	13.63
Area 4	G6M-02-13X	10/29/2014	0.5U	1.3	2.8	0.5U	0.5U	1.8	1.2U	1.5U	7,300	128	12J	7,920J	5U	280	0.13U	0.61J	0.03U	6.86	0.26	-81	0.822	6.49	-
Area 4	G6M-02-13X	6/23/2015	0.50 U	1.7	3.4	0.50 U	0.50 U	2.5	5.0 U	5.0 U	1,840	142	12.5	11,100	2.90	250	0.11 U	2.6 J	1.0 U	6.74	1.24	-107.2	0.817	5.37	14.62
Area 4	G6M-02-13X	9/11/2015	1.0 U	2.8	5.2	1.0 U	1.0 U	4.9	10 U	10 U	832	142	10.5	9,980	2.30	-	0.067 J	0.52 J	2.0 U	6.45	0.25	-76.0	0.619	2.85	13.41
Area 4	G6M-02-13X	10/16/2015	1.0 U	3.6	1.0 U	1.0 U	1.0 U	3.3	10 U	10 U	473	114	9.77	12,300	3.2	261	0.11 U	1.5 J	2.0 U	6.84	0.31	-87.2	0.667	2.90	8.40
Area 4	G6M-02-13X	2/12/2016	4.5	13.7	13.2	0.51 J	1.0 U	7.7	10 U	10 U	500	145	10.2	11,100	2.1	252	0.11	10 U	2.0 U	7.02	0.59	-102.3	0.671	2.00	9.48
Area 4	G6M-02-13X	6/16/2016	1.0 U	22.0	20.0	0.65 J	1.0 U	9.4	0.87 J	8.2	3,400	96	7.90	11,000	2.4	210	0.05 U	0.8 U	1.0 U	7.03	0.66	-86.6	0.618	4.63	16.47
Area 4	G6M-02-13X	11/8/2016	1.0 U	9.7	65	0.59 J	1.0 U	23	1.1 U	7.8	1,500	110	7.70	12,000	1.7	190	0.05 U	0.63 J	1.0 U	6.98	0.77	-152.9	0.383	2.97	12.31
Area 4	G6M-02-13X	10/19/2017	3.3	21	57	0.47 J	1.0 U	17	0.73 J	5.9	1,500	120	6.4	8,500	1.8	180	0.05 U	3.0	1.0 U	6.75	0.22	-58.1	0.50	5.52	12.40
Area 4	G6M-06-01X	3/30/2006	30	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.03	3.73	-87.8	0.652	70.7	8.22
Area 4	G6M-06-01X	3/30/2007	72	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.73	2.87	138.5	1.005	10.21	10.01
Area 4	G6M-06-01X	9/13/2007	83	2U	2.1	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.60	10.68	-93.9	0.967	6.3	12.69
Area 4	G6M-06-01X	12/14/2007	110	2U	2.3	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.96	2.43	132.9	0.991	3.9	17.46
Area 4	G6M-06-01X	10/16/2008	71	1.8	1.4	1U	1U	1U	-	-	-	-	-	-	-	-	-	-	-	5.51	3.08	118.6	0.956	20	10.8
Area 4	G6M-06-01X	10/15/2009	170	28	6.3J	8U	8U	8U	-	-	-	8U	0.321	50U	-	-	-	-	-	5.82	2.69	85.3	0.832	0.13	13.69
Area 4	G6M-06-01X	10/4/2010	120	3.4J	7.2	4U	4U	4U	-	-	-	5U	0.211U	33.2U	-	-	-	-	-	6	1.72	57.1	1.16	25.1	13.21
Area 4	G6M-06-01X	6/8/2011	190	7.7	7.2	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	5.81	1.39	122	0.979	4.01	17.13
Area 4	G6M-06-01X	10/6/2011	96	30	46	1.3U	1.3U	3.5	-	-	-	3.7J	0.139	38.5	-	-	-	-	-	6.22	0.59	40.8	0.825	13.1	11
Area 4	G6M-06-01X	5/8/2012	310	18	16	10U	10U	10U	-	-	-	5U	0.1U	9.4J	-	-	-	-	-	6.14	0.65	87.4	0.943	2.59	13.07
Area 4	G6M-06-01X	10/10/2012	180	7.6	9.1	4.0U	4.0U	4.0U	-	-	-	5U	0.0522 J	8.8 J	-	-	-	-	-	5.94	0.54	56.2	0.819	2.61	10.6
Area 4	G6M-06-01X	5/21/2013	170	30	17	5.0U	5.0U	2.0J	-	-	-	5U	0.1U	25U	-	-	-	-	-	5.96	0.36	81	1.058	8.89	13.06
Area 4	G6M-07-01X	10/15/2008	26	0.24J	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	7.78	2.22	53.9	0.591	608	12.35
Area 4	G6M-07-01X	10/20/2009	21	15	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	7.44	4.11	171.9	0.532	283	27.28
Area 4	G6M-07-01X	10/7/2010	50	0.31J	0.25J	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	7.03	3.62	139	0.414	4.78	10.05
Area 4	G6M-07-01X	10/5/2011	11	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	11.5J	-	-	-	-	-	7.06	4.43	72.9	0.285	130	11.95
Area 4	G6M-07-01X	10/12/2012	19	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	.0886 J	10.8 J	-	-	-	-	-	6.92	3.56	59	0.437	30.2	11.92
Area 4	G6M-07-01X	10/17/2013	15	0.37J	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	5.4J	-	-	-	-	-	6.86	4.34	95.1	0.45	16.4	12.71
Area 4	G6M-13-02X	1/30/2014	120	20	34	0.34J	0.5U	14	-	-	-	-	-	-	-	-	-	-	-	6.44	0.88	53.9	1.099	3.11	16.01
Area 4	G6M-13-02X	6/11/2014	170	54	81	0.53	0.29J	6	-	-	-	3.2J	0.472	32.5	-	-	-	-	-	6.05	0.71	144.8	0.9	4.29	11.56
Area 4	G6M-13-02X	11/3/2014	210	39	95	5U	5U	6.7	-	-	-	2.5U	0.146UJ	20.3J	-	-	-	-	-	6.31	1.3	75.8	0.625	2.27	5.69
Area 4	G6M-13-02X	6/26/2015	105	49.6	38.1	0.50 U	0.50 U	1.10	-	-	-	2.1 J	0.050 U	9.4 J	-	-	-	-	-	5.99	1.03	101.6	0.917	9.69	17.13
Area 4	G6M-13-02X	10/16/2015	70	31	1.0 U	1.0 U	1.0 U	1.4 J	-	-	-	4.0 U	0.087	15	-	-	-	-	-	6.27	0.35	72	1.069	2.97	8.03
Area 4	G6M-13-02X	2/22/2016	85.8	24.6	21.1	0.54 J	1.0 U	0.65 J	10 U	10 U	3,560	4.0 U	0.10 U	21.9	0.81 J	56.4	0.28	15.9	2.0 U	6.23	0.9	21.6	0.818	4.89	11.54
Area 4	G6M-13-02X	6/16/2016	77	34	61.0	0.89 J	1.0 U	1.50	-	-	-	1.8 J	0.190	20	-	-	-	-	-	6.17	1.29	3.6	0.937	11.33	16.70
Area 4	G6M-13-02X	11/8/2016	84	27	38	1.0 U	1.0 U	0.93 J	-	-	-	3.0 U	0.05 U	4.7 J	-	-	-	-	-	6.30	0.94	-136.1	0.689	2.01	11.9
Area 4	G6M-13-02X	5/16/2017	79	25	30	0.39 J	1.0 U	0.90 J	0.64 J	1.0 U	4,300	3.0 U	0.05 U	16	1.0 U	54	0.34	12	1.0 U	6.07	0.47	89.7	0.84	5.79	12.93
Area 4	G6M-13-02X	10/19/2017	65	15	13	0.50 J	1.0 U	0.99 J	1.1 U	1.0 U	4,100	1.5 J	0.23	50	2.2	75	0.47	12	1.0 U	6.33	0.22	51.1	1.00	8.18	13.41
Area 4	G6M-97-28X	9/14/2015	0.57 J	62.8	37.3	1.60	1.0 U	22.3	10 U	10 U	85.0	4.0 U	0.23	2,110	1.10	-	0.11 U	12.10	2.0 U	6.21	0.30	67.7	0.256	-	14.43
Area 4	G6M-97-28X	2/12/2016	1.0 U	1.1	1.4	1.0 U	1.0 U	0.53 J	10 U	10 U	235	47.9	2.49	5,690	1.6	111	0.085 J	4.2 J	2.0 U	6.92	1.99	72.8	0.21	8.64	6.05
Area 4	G6M-97-28X	6/16/2016	-	-	-	-	-	-	-	-	-	190	6.0	2,200	-	-	-	-	-	6.68	0.28	-85.3	0.312	2.15	23.12
Area 4	G6M-97-28X	11/8/2016	-	-	-	-	-	-	-	-	-	27	2.2	18,000	-	-	-	-	-	6.72	0.86	-70.9	0.537	11.87	12.8
Area 5	G6M-02-05X	2/28/2002	130	2U	1.9J	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.15	6.61	181.1	0.597	11	15.72
Area 5	G6M-02-05X	1/30/2003	170	2U	2.3	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.65
Area 5	G6M-02-05X	9/30/2005	200	2U	2.6	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	4.73	3.61	441.8	0.512	7.9	15.78
Area 5	G6M-02-05X	9/22/2006	350	2U	2.2	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	5.52	2.14	94.8	0.543	7.38	12.66
Area 5	G6M-02-05X	9/12/2007	510	50	7.9	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.39	0.78	-57.8	0.723	30.6	12.27
Area 5	G6M-02-05X	10/20/2008	390	17	4.4J	10U	10U	10U	-	-	-	-	-	-	-	-	-	-	-	7.00	1.83	-41.9	0.588	3.0	12.42
Area 5	G6M-02-05X	10/19/2009	370	53	10U	10U	10U	10U	1.3U	1.6U	410	49.2	3.82	2,490	10U	57	0.26	19	0.03U	6.22	0.31	30.6	0.699	1.4	12.53
Area 5	G6M-02-05X	10/5/2010	240	100	4.0J	5U	5U	5U	1.2U	1.5U	160	71.2	5.42	2,420	10U	20U	0.025J	13	0.03U	6.25	0.25	-37.5	0.749	5.99	12.27
Area 5	G6M-02-05X	6/8/2011	200	230	78	3.7	0.62	18J	1.2U	10	5,400	105	8.58	2,700	2.6J	180	0.13U	11	0.03U	6.16	0.24	-42.8	0.708	0	12.27

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-02-05X	10/6/2011	37	140	59	2.0U	2.0U	25	1.2U	15	6,600	125	10.8	2,300	2.1J	530	0.012J	14	0.03U	6.18	0.73	-4.0	0.959	1.4	11.6
Area 5	G6M-02-05X	10/6/2011	37	140	59	2.0U	2.0U	25	1.2U	15	6,600	125	10.8	2,300	2.1J	530	0.012J	14	0.03U	6.18	0.73	-4.0	0.959	1.4	12.36
Area 5	G6M-02-05X	5/9/2012	140	68	17	0.5U	0.5U	0.5U	1.3U	1.6U	3,900	103	8.63	2,060	10U	75	0.13U	14	0.03U	6.19	0.78	9.0	0.682	1.52	12.56
Area 5	G6M-02-05X	10/10/2012	94	44	16	2.0U	2.0U	2.0U	1.2U	1.5U	4,400	73	6.78	1,460	10U	64	0.11J	14	0.03U	6.14	1.92	15.2	0.809	0	11.16
Area 5	G6M-02-05X	5/21/2013	38J	33J	78	0.48J	0.30J	2.3	1.2U	1.5U	2,200	84.1	8.43	1,310	10U	100J	0.13UJ	12	0.03UJ	6.26	0.75	-19.1	0.753	0.77	14.01
Area 5	G6M-02-06X	3/1/2002	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.16	8.91	134.8	0.135	32	12.18
Area 5	G6M-02-06X	9/24/2004	5.5	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.33	9.48	152.8	0.09	0.02	12.31
Area 5	G6M-02-06X	9/30/2005	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.22	8.22	66.4	0.107	4.39	13.26
Area 5	G6M-02-06X	9/21/2006	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.30	7.84	139.3	0.098	10.85	11.26
Area 5	G6M-02-06X	9/14/2007	2U	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	6.94	8.5	-140.7	0.149	7.7	10.88
Area 5	G6M-02-06X	10/20/2008	0.47J	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	7.09	7.71	88.8	0.109	6.5	11.28
Area 5	G6M-02-06X	10/14/2009	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	8U	0.2U	50U	-	-	-	-	-	6.98	8.96	26.1	0.115	0.2	11.43
Area 5	G6M-02-06X	10/5/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	6.90	7.66	63.6	0.128	4.38	11.62
Area 5	G6M-02-06X	10/7/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5J	0.1U	25U	-	-	-	-	-	6.87	6.3	24.7	0.076	18.6	11.76
Area 5	G6M-02-06X	10/10/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	7.11	8.89	16.8	0.134	10.53	11.39
Area 5	G6M-02-06X	10/15/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	7.36	9.84	110.9	0.134	2.62	12.86
Area 5	G6M-02-06X	10/30/2014	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.155U	6.0J	-	-	-	-	-	7.21	7.73	73.1	0.101	2.18	13.93
Area 5	G6M-02-06X	10/19/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.10 U	15 U	-	-	-	-	-	7.29	8.05	82.5	0.114	2.23	12.89
Area 5	G6M-02-06X	11/11/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05 U	3.0 U	-	-	-	-	-	7.86	6.8	-32.7	0.84	4.92	9.57
Area 5	G6M-02-06X	10/19/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.075 U	5.0 U	--	--	--	--	--	7.02	5.72	40.2	0.12	4.41	11.94
Area 5	G6M-02-07X	2/26/2002	24	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.34	-0.68	110.3	0.259	46	11.54
Area 5	G6M-02-07X	9/23/2004	26	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.26	1.72	332.8	0.423	25	12.39
Area 5	G6M-02-07X	9/30/2005	16	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.69	6.98	121.2	0.389	7.7	11.08
Area 5	G6M-02-07X	9/21/2006	11	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.58	3.72	143.6	0.251	14.3	10.8
Area 5	G6M-02-07X	9/13/2007	12	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.68	3.78	43.3	0.334	3	10.49
Area 5	G6M-02-07X	10/20/2008	9.8J	0.27J	0.5UJ	0.5UJ	0.5UJ	0.5UJ	-	-	-	-	-	-	-	-	-	-	-	7.46	3.15	42.8	0.271	12	10.50
Area 5	G6M-02-07X	10/15/2009	6.7J	210	10U	10U	10U	10U	-	-	-	8U	0.127U	50U	-	-	-	-	-	7.41	1.15	-14	0.413	3	11.54
Area 5	G6M-02-07X	1/15/2010	5.7	0.5U	0.5U	0.75U	0.75U	1.0U	-	-	-	-	-	-	-	-	-	-	-	7.53	3.26	150.2	0.344	1.88	11.62
Area 5	G6M-02-07X	10/5/2010	4.7	0.24J	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	7.39	2.57	60.3	0.296	1.33	11.83
Area 5	G6M-02-07X	10/3/2011	3.6	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	7.54	1.58	26.6	0.198	5.12	11.79
Area 5	G6M-02-07X	10/11/2012	4.6	0.5U	0.57	0.5U	0.5U	0.5U	-	-	-	5U	0.0278J	25U	-	-	-	-	-	7.68	1.31	98.1	0.352	2.69	-
Area 5	G6M-02-07X	10/15/2013	1.1	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.9J	0.1U	5.1J	-	-	-	-	-	7.62	2.39	99.8	0.911	1.05	-
Area 5	G6M-02-07X	10/29/2014	3.9	0.27J	0.62	0.5U	0.5U	0.5U	-	-	-	2.4J	0.025U	7.8J	-	-	-	-	-	7.41	0.22	10.9	0.535	3.71	11.44
Area 5	G6M-02-07X	10/19/2015	4.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.10 U	15 U	-	-	-	-	-	7.64	0.35	75.3	0.362	3.69	15.95
Area 5	G6M-02-07X	11/11/2016	5.4	0.75 J	1.0	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05	11	-	-	-	-	-	7.86	6.8	-32.7	0.084	4.92	9.57
Area 5	G6M-02-07X	10/23/2017	4.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	1.9 J	0.11	12	--	--	--		--	7.57	0.29	-39.4	0.34	9.82	11.93
Area 5	G6M-02-11X	8/1/2002	450	2.8	2U	2U	1U	2U	-	-	-	5U	-	-	-	-	-	-	-	6.01	0.46	184	0.984	8.13	13.9
Area 5	G6M-02-11X	8/28/2002	540J	2U	2U	2U	1U	2U	-	-	-	5U	-	-	5U	44	-	-	-	6.05	0.51	173	0.905	6.49	10.7
Area 5	G6M-02-11X	10/29/2002	970	22	3	2U	1U	2U	-	-	-	5U	1U	1700	5U	51	0.10U	17	2.0U	6.02	0.49	51	0.92	5.04	13.2
Area 5	G6M-02-11X	2/3/2003	710	22	2U	20U	1U	2U	-	-	-	5U	1U	-	5U	65	-	-	-	6.22	0.71	178	0.971	12.7	14.12
Area 5	G6M-02-11X	7/16/2003	530	54	33	2U	1U	2U	0.005U	0.014	460	5U	1U	-	5U	120	-	16M	2.0U	6.31	0.86	166	0.813	11.9	16.05
Area 5	G6M-02-11X	9/26/2003	590	31	37	2U	1U	2U	0.005U	0.005U	1,200	5U	-	1,700	19	-	-	-	-	6.60	0.41	146	0.921	7.2	8.61
Area 5	G6M-02-11X	1/8/2004	300	15	49	2U	1U	2U	0.005U	0.0093	2,300	5U	1U	1,900	5U	150	-	12J	2.0U	6.29	0	104	0.729	0.6	6.55
Area 5	G6M-02-11X	3/10/2004	160	11	53	2U	1U	2U	0.005U	0.068	14,000	5U	1U	2,200	1.8	130	-	9.6	2U	6.39	0.82	103	0.847	7.5	15.58
Area 5	G6M-02-11X	6/4/2004	440	23	54	2U	1U	2U	0.005U	0.01	2,300	5U	1U	1,900	2.4J	110	-	12	1.9J	6.72	12.13	54.5	0.807	21.3	13.72
Area 5	G6M-02-11X	9/22/2004	540	50	140	2U	1U	2U	0.005U	0.005U	13,000	5U	1U	2,400	1.2	100	0.5U	12	1.5J	6.19	0.96	412.7	0.996	1.25	11.09
Area 5	G6M-02-11X	12/15/2004	760	47	120	2U	1U	2U	0.005U	0.021	9,700	5U	1U	2,100	5U	95	1	15	2U	6.35	1.36	200.1	0.675	21.2	13.83
Area 5	G6M-02-11X	3/28/2005	1,100	41	45	40U	40U	40U	0.005U	0.065	10,000	5U	1U	2,200	3.6J	90	0.2U	13	2UJ	6.19	1.02	84.3	0.938	48.3	16.04
Area 5	G6M-02-11X	7/1/2005	1,500	90	280	10U	10U	10U	0.028	0.42	15,000	2.1	1UJ	1,800	9.4	98.4	0.05U	14	1U	5.78	0.37	221.6	0.806	6.66	14.87
Area 5	G6M-02-11X	9/27/2005	240	78	260	2U	1U	16	0.020J	8.1	21,000	5U	1U	2,500	3.4	148	0.05U	5.9J	1U	5.92	0.4	93.6	0.755	0.69	13.00
Area 5	G6M-02-11X	12/12/2005	220	28	50	2U	1U	9.1	0.082	29	24,000	7.8	0.2J	3,100	5.5	270	1.3J	3.5	1U	6.28	0.18	64.8	1.107	8.9	12.95

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-02-11X	3/21/2006	520	94	230	2.3	1U	60	0.025U	34	17,000	5U	0.1U	1,500	8.2	120	0.2U	8.81	1U	6.45	12	326.6	0.765	7.15	14.52
Area 5	G6M-02-11X	6/22/2006	130	44	20	20	1U	9.2	0.051	78	22,000	5U	1U	6,300	6.1	210	0.2U	2.45	1U	6.19	0.27	59.7	1.231	5.04	14.02
Area 5	G6M-02-11X	9/22/2006	37	17	8.6	2.8	1U	4	0.089	15	21,000	6.9	0.58	9,300	9.8	180	0.2U	4.87	1U	5.93	1.22	-158.9	1.079	4.55	12.97
Area 5	G6M-02-11X	12/13/2006	45	7.9	3.6	4.4	1U	2U	0.24	19	28,000	22	1	16,000	9.3	-	-	1.06	1.2	6.39	0.19	169.6	1.277	6.94	13.71
Area 5	G6M-02-11X	3/27/2007	38	21	3.6	9.8	1U	2U	6.8	28	23,000	120	7.1	24,000J	10	-	-	-	-	6.25	0.61	-39.6	0.912	19	12.57
Area 5	G6M-02-11X	6/13/2007	30	28	12	10	1U	2.8	4.8	33	27,000	310	6.8	18,000	12	-	-	9.62	1.6	6.22	0.65	-36.4	1.198	2.1	11.24
Area 5	G6M-02-11X	9/11/2007	4.4	24	7.9	12	1U	4.3	2.8	36	30,000	420	18	18,000	14	270	0.2U	470	1U	6.24	3.52	-11.1	1.423	9.7	10.99
Area 5	G6M-02-11X	12/13/2007	2.8J	19J	6J	5.5J	1U	4.4J	8.3	16	29,000	470	47	18,000	15	-	-	5U	1	6.36	0.52	-117.9	1.409	0.5	11.79
Area 5	G6M-02-11X	3/11/2008	2U	6.2	2.5	9.7	1U	2U	24	5.8	28,000	570	59	27,000	17	-	-	5U	2.8	6.35	0.41	-90.5	1.56	0.3	11.69
Area 5	G6M-02-11X	10/16/2008	1.3	7.3	6.9	0.8	0.5U	2.2	1.2U	5.4	39,000	1,170	116	8,420	21.2U	240	0.10U	9.3	0.03U	5.8	1.51	-20.6	0.1535	4.0	13.68
Area 5	G6M-02-11X	5/7/2009	0.5U	0.76	0.47J	0.92	0.5U	0.5U	3.1	3.5	42,000	1,060	125	3,950	31	370J	0.13U	17	0.03U	6.04	0.24	-117.5	1.605	0.32	12.08
Area 5	G6M-02-11X	10/14/2009	0.23J	1.4	0.58	0.63	0.5U	0.46J	1.2U	1.5U	55,000	1,070	126	2,390	8.7J	430	0.13U	9.7	0.03U	6.46	0.52	-114.9	1.342	5.0	11.1
Area 5	G6M-02-11X	4/20/2010	0.5U	1.6	24	0.24J	0.5U	5.8	1.2U	2.0	17,000	1,050	106J	3,760	8.7J	500	0.13U	5U	0.03U	6.75	0.38	-130.5	0.778	1.5	11.58
Area 5	G6M-02-11X	10/5/2010	0.5U	0.94	0.52	0.38J	0.5U	0.66	1.2U	1.5U	47,000	956	93.8	1,590	10U	700	0.13U	1.4J	0.03U	6.51	0.72	-136	1.368	0.86	11.57
Area 5	G6M-02-11X	6/9/2011	-	-	-	-	-	-	-	-	-	804	91.6	2,480	-	-	-	-	-	6.6	0.1	-111.1	1.131	4.53	11.66
Area 5	G6M-02-11X	10/3/2011	0.5U	0.5U	0.64	0.5U	0.5U	1.2	1.2U	1.5U	19,000	901	99.9	2,670	7.6J	520	0.13U	5U	0.03U	6.58	0.44	-114.4	0.74	0.95	11.7
Area 5	G6M-02-11X	5/8/2012	-	-	-	-	-	-	-	-	-	769	84.2	2,560	-	-	-	-	-	6.83	0.14	-128.1	1.014	1.03	11.58
Area 5	G6M-02-11X	10/10/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	3.9	1.5U	12,000	683	69.9	1,840	4.2J	390	0.11J	1.3J	0.03U	6.52	0.28	-122.8	1.341	0.84	12.54
Area 5	G6M-02-11X	5/21/2013	-	-	-	-	-	-	-	-	-	649	59.5	3,660	-	-	-	-	-	6.7	0.24	-124.88	1.247	0	18.2
Area 5	G6M-02-11X	10/16/2013	0.5U	0.5U	0.26J	0.20J	0.5U	0.5U	17	1.6U	56,000	616	53	3,230	4.2J	320	0.13U	5.0U	0.03U	6.8	0.22	-114.8	1.243	0.39	14.2
Area 5	G6M-02-11X	6/11/2014	-	-	-	-	-	-	-	-	-	573	50	8,010	-	-	-	-	-	6.84	0.32	-104.4	1.069	1.38	13.5
Area 5	G6M-02-11X	10/29/2014	0.5U	0.5U	0.42J	0.34J	0.5U	0.44J	8.1J	1.5U	15,000	624	64.3J	4,860J	5U	340	0.13U	0.17J	0.03U	6.96	0.35	-156.8	1.224	0.65	12.8
Area 5	G6M-02-11X	6/26/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	8,180	578	51.1	10,800	5.80	312	0.17	2.0 J	1.0 U	5.98	2.49	-62.1	0.934	9.2	12.54
Area 5	G6M-02-11X	9/10/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.5 J	10 U	11,500	546	44.4	9,920	5.30	-	0.087 J	0.78 J	2.0 U	6.29	3.21	44.2	0.570	5.37	14.62
Area 5	G6M-02-11X	10/15/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.8 J	10 U	9,710	551	44.2	10,400	4.9	229	0.062 J	10 U	2.0 U	7.03	0.26	-132.7	0.942	1.12	14.83
Area 5	G6M-02-11X	2/11/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	4,980	584	45.9	9,880	5.1	219	0.10 J	10 U	2.0 U	7.02	0.6	-117.2	0.717	2.14	10.14
Area 5	G6M-02-11X	6/15/2016	1.0 U	1.0 U	0.63 J	1.0 U	1.0 U	1.0 U	4.6	1.0 UJ	11,000	550	35.0	9,000	4.4	250	0.05 U	0.80 U	1.0 U	6.81	2.29	-130.1	0.861	20.9	18.18
Area 5	G6M-02-11X	11/14/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.6	1.0 U	11,000	530	32.0	7,600	4.1	220	0.05 U	1.0 U	1.0 U	7.16	0.92	-127.9	0.632	5.71	11.82
Area 5	G6M-02-11X	10/19/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2	1.0 U	6,500	530	33	7,300	3.9	190	0.03 J	1.0 U	1.0 U	6.91	0.22	-115.9	0.82	12.1	12.07
Area 5	G6M-02-12X	8/1/2002	330	2U	2U	2U	1U	2U	-	-	-	5U	-	-	-	-	-	-	-	6.24	0.64	19	0.924	37.6	14.01
Area 5	G6M-02-12X	8/28/2002	520	6.5	2U	2U	1U	2U	-	-	-	5U	-	-	5U	54	-	-	-	6.15	0.19	156	0.868	2.96	14.12
Area 5	G6M-02-12X	10/29/2002	790	10	2U	2U	1U	2U	-	-	-	5U	1U	1,100	2.0J	40	0.10U	17	2.0U	6.14	0.27	68	0.927	2.08	14.83
Area 5	G6M-02-12X	2/3/2003	580	4	2U	2U	1U	2U	-	-	-	5U	1U	-	5U	52	-	-	-	6.04	-	78	0.947	5.06	12.49
Area 5	G6M-02-12X	7/14/2003	-	-	-	-	-	-	-	-	-	-	-	-	5U	-	-	-	-	-	-	-	-	-	11.03
Area 5	G6M-02-12X	9/22/2004	1,000	43	110	2U	1U	2U	0.005U	0.005U	2,900	5U	1U	450	1U	84	0.5U	13	2U	5.87	0.35	570.2	0.873	4.95	11.59
Area 5	G6M-02-12X	9/27/2005	1,100	38	250	1.4	1U	5.4	0.025U	1.1	14,000	5U	1U	690	3.5	106	0.05U	13J	1U	6.11	1.17	238.5	6.92	24.5	11.73
Area 5	G6M-02-12X	9/21/2006	190	88	64	23	1U	67	0.038	46	15,000	5U	0.37	3,200	7.6	170	0.2U	5.72	1U	6.23	0.17	78	0.799	60.6	11.65
Area 5	G6M-02-12X	9/12/2007	62	50	28	4.4	1U	18	0.4	8.4	11,000	20U	0.58	5,500	2.6J	180	0.2U	340	1.0	6.52	3.06	52.8	0.934	5.8	11.75
Area 5	G6M-02-12X	10/16/2008	0.37J	7.1	18	1.6	0.5U	4.8	1.2U	3.1	19,000	174	11.8	15,800	10U	310	0.10U	7U	0.03U	6.09	0.53	-67.4	1.091	10	11.66
Area 5	G6M-02-12X	10/14/2009	0.5U	0.3J	13	0.74	0.5U	1.6	1.3U	1.6U	6,900	540	24.4	11,000	4.6J	350	0.13U	7U	0.03U	6.27	1.27	-40.0	1.025	1.5	19.7
Area 5	G6M-02-12X	10/5/2010	0.5U	0.5U	5.6	0.27J	0.5U	1.5	1.2U	2	40,000	1,040	72.2	13,700	10U	810	0.050J	2.8J	0.03U	6.34	0.58	-88.1	1.217	1.11	17.11
Area 5	G6M-02-12X	10/4/2011	0.5U	0.5U	6.3	0.5U	0.5U	4.3	1.2U	1.5U	21,000	1,020	71.2	9,540	6.4J	440	0.13U	0.33J	0.03U	6.65	0.48	-89.1	0.807	1.9	13.11
Area 5	G6M-02-12X	10/10/2012	0.5U	0.5U	1.0	0.5U	0.5U	1.0	1.8	1.5U	14,000	865	65.8	5,010	4.0J	320	0.13U	0.59J	0.03U	6.76	0.7	-111.4	1.068	1.68	14.37
Area 5	G6M-02-12X	10/16/2013	0.5U	0.5U	0.7	0.21J	0.5U	0.54	10	1.5U	55,000	809	61.3	4,910	4.2J	83	0.13U	5.0U	0.03U	6.85	0.45	-127.7	1.01	1.87	21.32
Area 5	G6M-02-12X	10/29/2014	0.5U	0.5U	0.9	0.56	0.5U	0.79	9.2	1.5U	25,000	760	56J	4,870J	6.2J	330	0.13U	0.22J	0.03U	6.96	0.83	-103.4	0.995	2.48	15.51
Area 5	G6M-02-12X	10/15/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	11,300	714	42.6	8,540	6.4	243	0.11 U	10 U	2.0 U	7.26	1.07	-108.0	0.63	6.17	13.71
Area 5	G6M-02-12X	11/14/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	1.0 U	9,400	720	40.0	7,700	4.5	210	0.05 U	2	1.0 U	6.90	1.24	-131	0.53	13.9	11.88
Area 5	G6M-02-12X	10/23/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0	1.0 U	8,000	670	41	8,100	4.3	200	0.055 J	1.0 U	1.0 U	6.90	0.29	-117.9	0.68	7.49	12.24
Area 5	G6M-03-08X	5/14/2003	750	2U	2U	2U	1U	2U	-	-	-	5U	1U	-	-	-	-	-	-	-	-	-	-	-	13.25
Area 5	G6M-03-08X	9/22/2004	690	6.3	5.4	2U	1U	2U	0.005U	0.005U	1.8	5U	1U	15U	1U	16	8.3	13	1.5J	5.89	1.81	247.6	0.463	3.22	14.12
Area 5	G6M-03-08X	12/16/2004	1,100	11	9.6	2U	1U	2U	0.069	0.03	4.7	5U	1U	17	5U	20	5.7	13	2.9	5.93	0.7	135.7	0.495	8.98	13.25

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AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-03-08X	3/31/2005	340	20U	9.6J	20U	20U	20U	0.011	0.45	14	5U	1U	15U	0.3J	12	2.3	17	2U	5.94	1.96	166.3	0.205	0.93	12.82
Area 5	G6M-03-08X	7/6/2005	780	8.2	15	2U	1U	2U	0.11	0.068	410	4U	1U	10U	5.5	28.6	1.8	14	1U	5.85	0.78	236.1	0.463	5.37	13.36
Area 5	G6M-03-08X	9/28/2005	620	4.8	14	1U	1U	1U	0.025U	0.009J	2,400M	5U	1U	15U	5U	28.3	1.6	12	1U	5.60	3.56	172.3	0.352	8.3	10.8
Area 5	G6M-03-08X	12/14/2005	700	8	17	2U	1U	2U	0.025U	0.025U	7,000	5U	1U	15UJ	5U	32	1.2	12	1U	6.16	0.54	153.8	0.404	3.7	11.48
Area 5	G6M-03-08X	3/22/2006	1,100	21J	34	2.6	1U	2U	0.025U	0.006J	12,000	5U	0.1U	15U	6.5	29	0.586	11.7	1U	6.28	5.43	394.2	0.299	9.75	10.71
Area 5	G6M-03-08X	6/21/2006	610	16	48	2U	1U	2U	0.004J	0.14	16,000	5U	1.8	42	5U	41J	0.33	10.2	1U	5.91	0.29	141.6	0.49	21.4	10.62
Area 5	G6M-03-08X	9/21/2006	660	47	110	2U	1U	5.2	0.023J	0.55	14,000	5U	0.10U	15U	3.2J	41	0.228	9.64	1U	6.00	2.36	122.5	0.325	17.1	11.03
Area 5	G6M-03-08X	12/12/2006	750	45	120	2U	1U	7.8	0.013	0.59	16,000	5U	.01U	15U	5U	-	-	-	-	5.98	0.22	145	0.350	7.0	11.9
Area 5	G6M-03-08X	3/29/2007	570	37	74	2U	1U	11	0.006J	0.72	14,000	5U	0.1U	15U	5U	-	-	-	-	5.79	0.07	21.3	0.392	1.41	11.59
Area 5	G6M-03-08X	6/12/2007	740	55	88	2U	1U	14	0.025U	0.7	15,000	5U	0.1U	15U	0.6J	-	-	-	-	5.93	0.25	135.2	0.413	41.3	10.18
Area 5	G6M-03-08X	9/10/2007	520	75	75	2U	1U	21	0.025U	1.7	14,000	2U	0.1U	15U	5U	42	0.2U	200	1U	5.92	2.55	154.2	0.385	9.7	11.35
Area 5	G6M-03-08X	12/11/2007	390	53	49	2U	1U	15	0.004J	1.6	15,000	5U	0.1U	20	5U	-	-	-	-	5.76	0.23	129.3	0.437	0.8	11.11
Area 5	G6M-03-08X	3/13/2008	390	5	10	2U	1U	2U	0.003J	0.051	2,800	5U	0.1U	20	5U	-	-	-	-	5.89	0.22	111.6	0.195	0.3	11.55
Area 5	G6M-03-08X	10/20/2008	290	61	140	5U	5U	26	1.3U	2.1	21,000	8U	0.2U	33.2	10U	110	0.13U	14	0.03U	6.42	1.58	68.9	0.548	2.0	12.1
Area 5	G6M-03-08X	5/6/2009	120	38	150	4.0U	4.0U	15	1.2U	1.6	37,000	3.1J	0.2U	144	10U	190J	0.13U	10	0.03U	5.93	0.32	100.8	0.701	1.5	13.18
Area 5	G6M-03-08X	10/14/2009	5U	20	120	5U	5U	11	1.3U	1.6U	7,300J	8.0U	0.139U	1,470	10U	240	0.13U	8.3	0.03U	5.91	0.33	152.3	0.643	2.11	-
Area 5	G6M-03-08X	4/20/2010	26J	9.9J	88J	2UJ	2UJ	1.5J	1.3U	1.6U	3,500	9.0	0.194U	6,520	10U	250	0.13U	7.8	0.03U	6.31	0.90	87.9	0.382	0.3	14.33
Area 5	G6M-03-08X	10/4/2010	8.2	5.2	80	2U	2U	3.5	1.2U	1.5U	890	3.4J	0.132U	11,300	10U	360	0.13U	5.5	0.03U	6.07	0.68	84.9	0.549	0.0	10.23
Area 5	G6M-03-08X	6/8/2011	-	-	-	-	-	-	-	-	-	14.1	0.266	16,100	-	-	-	-	-	6.28	0.21	49.5	0.686	0.5	11.28
Area 5	G6M-03-08X	10/3/2011	4.3	3.4	62	2.5U	2.5U	9.6	1.2U	1.5U	590	5.1J	0.194J	16,800	10U	360	0.13U	3.2J	0.03U	6.17	0.43	77.2	0.603	0.51	15.19
Area 5	G6M-03-08X	5/8/2012	-	-	-	-	-	-	-	-	-	5.0U	0.127U	17,700	-	-	-	-	-	6.58	1.87	39.7	0.618	0.55	13.06
Area 5	G6M-03-08X	10/9/2012	0.5U	0.78	9.8	0.76	0.5U	7.4	1.3U	3.6	110	5U	0.152	18,600	2.5J	380	0.13U	1.4J	0.03U	6.34	0.43	53.9	0.648	1.42	11.87
Area 5	G6M-03-08X	5/22/2013	-	-	-	-	-	-	-	-	-	3.1J	0.117U	12,500	-	-	-	-	-	6.56	1.4	36.5	0.591	0.14	11.9
Area 5	G6M-03-08X	10/15/2013	0.5U	0.87	2.8	1.2	0.5U	1.6	1.8	1.5U	360	5.2	0.121U	12,300	3.0J	450	0.13U	5.0U	0.03U	6.57	0.39	82.7	0.851	0.0	16.01
Area 5	G6M-03-08X	6/12/2014	-	-	-	-	-	-	-	-	-	4.3J	0.152	9,850	-	-	-	-	-	6.57	1.84	58.9	0.592	6.31	13.03
Area 5	G6M-03-08X	6/18/2015	0.50 U	0.51 J	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	5.0 U	2.5 J	0.05 U	2,320	5.40	83.2	0.11 U	8.4 J	1.0 U	6.32	1.11	113.0	0.273	8.42	13.18
Area 5	G6M-03-08X	10/14/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area 5	G6M-03-08X	2/24/2016	1.0 U	1.0 U	3.0	1.0 U	1.0 U	1.0 U	10 U	10 U	90.7	8.2	1.03	4,710	1.8	155	0.10 U	3.1 J	2.0 U	6.79	1.03	-54.7	0.244	3.93	7.53
Area 5	G6M-03-08X	11/14/2016	1.0 U	0.96 J	0.84 J	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	170	12	0.18	4,200	1.3	140	0.053 J	9.8	1.0 U	7.03	1.19	-99.6	0.339	7.46	8.32
Area 5	G6M-03-08X	10/4/2017	1.0 UJ	1.0 UJ	0.50 J	1.0 UJ	1.0 UJ	1.0 UJ	1.1 U	0.90 J	91	6.6	0.23	6,900	0.84 J	110	0.05 U	9.5	1.0 U	6.70	0.65	-29.9	0.37	5.94	13.29
Area 5	G6M-03-09X	5/14/2003	2U	2U	2U	2U	1U	2U	-	-	-	5U	1U	-	-	-	-	-	-	-	-	-	-	-	13.34
Area 5	G6M-03-09X	9/23/2004	3.7	2U	2U	2U	1U	2U	0.005U	0.005U	1.9	5U	1U	15U	1U	23	19	15	2.2	6.23	8.67	176.2	0.13	4.57	13.22
Area 5	G6M-03-09X	12/14/2004	2U	2U	2U	2U	1U	2U	0.015	0.026	2	5U	1U	15U	5U	25	11	15	2U	6.08	8.17	417.6	0.106	12.1	12.43
Area 5	G6M-03-09X	3/29/2005	1.5J	2U	2U	2U	1U	2U	0.013	0.26	1.4	5U	1UM	15U	0.3J	18	1.5	13	2U	6.18	6	113.2	0.123	72.4	13.27
Area 5	G6M-03-09X	6/30/2005	5.8	2U	2U	2U	1U	2U	0.077	0.032	1.2	2U	1UJ	10U	15	25.1	1.3	13	1U	5.75	2.81	160.2	0.135	53.6	10.23
Area 5	G6M-03-09X	9/28/2005	2U	2U	2U	2U	1U	2U	0.006J	0.009J	29	5U	1U	15U	4J	38.2	3.7	13	1U	5.90	10.56	181	0.108	7.6	11.2
Area 5	G6M-03-09X	12/13/2005	2U	2U	2U	2U	1U	2U	0.005J	0.014J	790	5U	1U	15U	5U	53	0.05U	13	1U	6.21	3.06	259.3	172	4.9	10.62
Area 5	G6M-03-09X	3/22/2006	2U	2U	2U	2U	1U	2U	0.006J	0.016J	39	5U	0.1U	20	7.9	36	1.81	12.1	1U	6.40	3	415.5	0.102	10.83	10.99
Area 5	G6M-03-09X	6/23/2006	2U	2U	2U	2U	1U	2U	0.025U	0.042	390	5U	0.1U	15U	5U	39	2.65	13.2	1U	5.92	4.55	164.9	0.156	16.9	11.02
Area 5	G6M-03-09X	9/21/2006	2U	2U	2U	2U	1U	2U	0.014J	0.12	140	5U	0.10U	15U	0.8J	36	2.51	9.19	1UJ	6.71	2.24	127.6	0.212	4.56	13.75
Area 5	G6M-03-09X	12/13/2006	2U	2U	2U	2U	1U	2U	0.025U	0.019J	870	5U	0.10U	15U	5U	-	-	-	-	6.21	3.38	142.8	0.162	5.6	11.45
Area 5	G6M-03-09X	3/29/2007	2U	2U	2U	2U	1U	2U	0.006J	0.032	1,600	5U	0.1U	15U	1.8J	-	-	-	-	6.08	0.16	16.4	0.217	2.45	10.57
Area 5	G6M-03-09X	6/13/2007	3.8	2U	2U	2U	1U	2U	0.005J	0.011J	870	5U	0.1U	15U	0.5J	-	-	-	-	6.26	0.36	111	0.154	7.6	11.36
Area 5	G6M-03-09X	9/10/2007	2U	2U	2U	2U	1U	2U	0.025U	0.025U	18,000	6U	0.1U	15U	5U	53	2.01	20	1U	6.26	2.74	128	0.193	9.9	11.07
Area 5	G6M-03-09X	12/11/2007	2U	2U	2U	2U	1U	2U	0.006J	0.022J	2,200	5U	0.1U	15U	5U*	-	-	-	-	6.03	0.11	110.3	0.19	2.1	11.41
Area 5	G6M-03-09X	3/12/2008	2U	2U	2U	2U	1U	2U	0.027	0.016J	5,200	5U	0.11	18	5U	-	-	-	-	6.33	0.24	24.6	0.159	0.5	11.51
Area 5	G6M-03-09X	10/20/2008	0.37J	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	1,600	8U	0.2U	50U	10U	48	0.84	19	0.03U	5.98	0.24	177.8	0.129	6.5	11.28
Area 5	G6M-03-09X	5/6/2009	0.78	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	340	8U	0.2U	50U	10U	52J	0.9	14	0.03U	5.99	0.33	104	0.171	1.0	11.35
Area 5	G6M-03-09X	10/14/2009	0.35J	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	230	8U	0.2U	50U	10U	53	0.32	13	0.03U	5.49	0.26	-89.9	0.161	0	-
Area 5	G6M-03-09X	4/20/2010	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	1.3U	1.6U	700	5U	0.1U	25U	10U	90	0.13U	12	0.03U	6.19	0.40	166	0.102	0.6	15.41
Area 5	G6M-03-09X	10/4/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	35J	5U	0.1U	25U	10U	44	0.86	12	0.03U	5.90	1.18	146.6	0.159	0.6	12.1

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-03-09X	6/8/2011	-	-	-	-	-	-	-	-	-	5U	1.68	11.4J	-	-	-	-	-	5.99	0.42	122.8	0.154	0.4	11.09
Area 5	G6M-03-09X	10/3/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	230	20U	0.2U	50U	10U	35	0.39	11	0.03U	5.82	0.61	163.2	0.107	0.23	16.6
Area 5	G6M-03-09X	5/8/2012	-	-	-	-	-	-	-	-	-	5.0U	0.1U	25U	-	-	-	-	-	6.12	2.27	186.4	0.095	0.71	13.41
Area 5	G6M-03-09X	10/9/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	2.6	5U	0.1U	6.2 J	10U	25	2.8	8.9	0.03U	5.71	4.36	167.9	0.136	0.58	12.12
Area 5	G6M-03-09X	5/22/2013	-	-	-	-	-	-	-	-	-	5U	0.1U	25U	-	-	-	-	-	6.01	0.46	172.9	0.084	1.83	13.94
Area 5	G6M-03-09X	10/15/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	7,600	5U	0.1U	9.6J	10U	29	0.82	10	0.03U	6.08	1.16	150.3	0.144	0	15.96
Area 5	G6M-03-09X	6/12/2014	-	-	-	-	-	-	-	-	-	5U	0.0219U	7.4J	-	-	-	-	-	5.89	0.54	163.9	0.102	2.49	14.07
Area 5	G6M-03-09X	10/28/2014	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.4	1.5U	20	2.5U	0.268J	13.4J	5U	35	1.6	11	0.03U	6.24	1.65	124.1	0.139	2.78	13.61
Area 5	G6M-03-09X	6/18/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	30	2.0 U	0.05 U	20	0.70 U	27.0	0.057 U	8.6 J	1.0 U	5.39	0.45	169.7	0.191	2.25	11.35
Area 5	G6M-03-09X	10/15/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1,090	4.0 U	0.10 U	57	1.0 U	27.8	0.11 U	11.4	2.0 U	6.06	0.22	123.1	0.144	0.81	15.66
Area 5	G6M-03-09X	2/19/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14.1	6.4 J	270	4.0 U	0.10 U	99.5	1.0 U	36.9	0.19	10.5	2.0 U	8.64	2.29	513.6	0.100	3.99	9.63
Area 5	G6M-03-09X	6/16/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	8.8	3.0 U	0.05 U	81	0.78 J	43.0	0.05 U	16.0	1.0 U	6.02	1.8	131.6	0.22	3.32	11.76
Area 5	G6M-03-09X	11/14/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.58 U	3.0 U	0.05 U	90	0.78 J	31	1.5	8.4	1.0 U	6.23	1.27	8.0	0.119	4.19	9.4
Area 5	G6M-03-09X	10/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.48 J	3.0 U	0.075 U	180	1.0 U	24	1.7	11	1.0 U	6.10	2.03	143.1	0.16	3.92	10.69
Area 5	G6M-03-10X	5/14/2003	15	2U	2U	2U	1U	2U	-	-	-	5U	1.0U	-	-	-	-	-	-	-	-	-	-	-	14.23
Area 5	G6M-03-10X	9/22/2004	27	2U	2U	2U	1U	2U	0.05	0.68	680	5U	1U	340	1U	51	2.8	12	1.5J	6.28	1.28	-77.2	0.539	20.5	13.06
Area 5	G6M-03-10X	12/14/2004	19	2U	44	2U	1U	2U	0.02	0.025	1.9	5U	1U	880	5U	110	3.8	21	2U	6.52	0.94	62	0.801	1.57	13.92
Area 5	G6M-03-10X	3/29/2005	14	0.98J	68	1.2J	1U	2U	0.005U	0.38	2,600	5U	1UM	1,200	5.9	146	0.2U	12	2U	6.44	0.59	-14.5	0.869	6.77	11.8
Area 5	G6M-03-10X	6/30/2005	3.6	2U	2U	2U	1U	2U	0.026	0.021	8,600	2U	1UJ	1,900	19	199	0.1	11	1U	5.18	0.39	273.2	0.702	5.06	12.45
Area 5	G6M-03-10X	9/28/2005	6.7	2U	2U	2U	1U	2U	0.025U	0.020J	1,100	5U	1U	720	0.6J	140	0.2	16	1U	6.43	4.3	74.1	0.588	7.36	11.31
Area 5	G6M-03-10X	12/13/2005	3.4	2U	2U	2U	1U	2U	0.009J	0.027	12,000	6.9	1U	3,020	5U	250	0.48	8.4	1U	6.73	0.15	57.2	1.032	1.3	12.28
Area 5	G6M-03-10X	3/23/2006	9.9	2U	2U	2U	1U	2U	0.020J	0.052	7,000	5U	0.22	3,800	3.5J	170	0.2U	8.9	1U	6.64	0.67	36.6	0.663	5.39	12.15
Area 5	G6M-03-10X	6/22/2006	2.6	2U	2U	2U	1U	2U	0.004J	0.042	14,000	5U	0.74	7,300	5J	200	0.2U	4.44	1U	4.87	0.64	610.8	0.77	0.64	13.95
Area 5	G6M-03-10X	9/20/2006	2.2	2U	2U	2U	1U	2U	0.006J	0.14	14,000	5U	0.21	6,200	6	180	0.2U	6.95	1U	6.41	1.26	-140.2	0.856	3.9	12.27
Area 5	G6M-03-10X	12/13/2006	2.8	2U	3.4	2U	1U	2U	0.025U	0.025U	20,000	5U	0.27	8,500	2J	-	-	-	-	6.45	0.26	168.2	0.870	5.0	11.38
Area 5	G6M-03-10X	3/29/2007	2.2	2.1	4.2	2U	1U	2U	0.007J	0.16	24,000	8.6	0.3	9,100J	4.8J	-	-	-	-	6.20	0.32	-60.7	0.97	2.99	12.14
Area 5	G6M-03-10X	6/11/2007	2.5	2U	4.1	2U	1U	2U	0.025U	0.095	29,000	23	1	11,000	6.7	-	-	-	-	6.27	0.41	45.5	0.947	8.5	11.61
Area 5	G6M-03-10X	9/10/2007	2U	2U	3.8	2U	1U	2U	0.1	0.057	620	29	0.4	8,100	3.5J	150	0.2U	290	1U	6.28	0.24	61.3	0.859	13.6	12.27
Area 5	G6M-03-10X	12/12/2007	2U	2U	2.8	2U	1U	2U	0.025U	0.043	20,000	26	0.33	9,200	5.8	-	-	-	-	6.14	0.66	69.8	0.755	7.5	12.45
Area 5	G6M-03-10X	3/11/2008	16	8.7	16	2U	1U	4	0.04	59	28,000	91	15	9,200	5J	-	-	-	-	6.32	0.22	-62.9	1.029	7.3	11.74
Area 5	G6M-03-10X	10/20/2008	1.0	2.0	5.4	0.5U	0.5U	1.0	1.3U	1.6U	21,000	248	7.07	10,300	170	170	0.13U	8.3	0.03U	5.98	0.21	-10.9	0.781	8.2	18.11
Area 5	G6M-03-10X	5/6/2009	1.0	5.0	9.1	0.5U	0.5U	1.5	1.2U	1.5U	31,000	522	54.4	9,210	11	230J	0.0076J	9.3	0.03U	5.91	0.33	-64.0	1.04	0.5	18.59
Area 5	G6M-03-10X	10/14/2009	0.61	3.7	10	0.5U	0.5U	2.2	1.3U	1.6U	9,000J	518	57.8	7,410	7.4J	310	0.13U	21	0.03U	6.32	0.67	-62.2	0.896	1.2	19.1
Area 5	G6M-03-10X	4/20/2010	1.2	5.6	2.0	0.21J	0.5U	1.1	1.2U	1.5U	4,100	648	60.5J	4,910	4.7J	130	0.13U	6.5	0.03U	6.78	0.77	-101.1	0.799	1.4	16.25
Area 5	G6M-03-10X	10/4/2010	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	6.2	20,000	475	58.1	5,650	10U	230	0.13U	5.9	0.03U	6.52	0.22	-115.6	0.729	0.5	11.33
Area 5	G6M-03-10X	6/9/2011	-	-	-	-	-	-	-	-	-	520	53.9	2,550	-	-	-	-	-	6.74	0.58	-118.8	0.704	4.62	12.12
Area 5	G6M-03-10X	10/3/2011	0.5U	2.7	1.2	0.5U	0.5U	0.53	1.2U	1.5U	9,800	528	54.5	3,980	3.0J	100	0.21	7.6	0.030U	6.75	0.10	-85.8	0.633	0.85	12.31
Area 5	G6M-03-10X	5/8/2012	-	-	-	-	-	-	-	-	-	480	56	4,070	-	-	-	-	-	7	0.15	-119.1	0.817	0.77	13.02
Area 5	G6M-03-10X	10/9/2012	0.5U	0.55	0.5U	0.5U	0.5U	0.5U	22	1.6U	13,000	456	47.5	2,280	10U	100	0.13U	8.4	0.03U	6.88	0.43	-109.6	0.94	0	12.11
Area 5	G6M-03-10X	5/22/2013	-	-	-	-	-	-	-	-	-	514	57.1	2,340	-	-	-	-	-	6.8	0.16	-137.6	1.111	0.4	12
Area 5	G6M-03-10X	10/15/2013	0.5U	0.68	0.52	0.5U	0.5U	0.5U	1.8	1.5U	23,000	452	50.6	2,770	10U	80	0.042U	9.2	0.03U	6.87	4.57	-122.7	1.018	0.19	12.22
Area 5	G6M-03-10X	6/12/2014	-	-	-	-	-	-	-	-	-	510	51.9	2,400	-	-	-	-	-	6.82	0.51	-88	0.857	Overrange	22.11
Area 5	G6M-03-10X	10/29/2014	0.5U	0.77	0.92	0.5U	0.5U	0.41J	1.2U	1.5U	14,000	418	42.9J	3,090J	5U	92	0.13U	8.6	0.03U	7.02	0.29	-122.4	0.787	4.94	19.6
Area 5	G6M-03-10X	9/10/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	8,910	453	68.1	2,020	1.50	-	0.080 J	10.8	2.0 U	6.56	0.51	-107.5	0.787	3.00	12.58
Area 5	G6M-03-10X	10/15/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	11,500	457	69.3	2,410	1.9	64.9	0.11 U	7.8 J	2.0 U	7.03	0.49	-128.0	1.206	1.74	19.32
Area 5	G6M-03-10X	2/11/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	7,550	492	72	2,370	3.3	105	0.11	2.0 J	2.0 U	7.02	0.4	-131.1	1.345	0.1	9.96
Area 5	G6M-03-10X	6/16/2016	16	0.65 J	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	14,000	400	61	1,600	1.8	88	0.05 U	3.3	1.0 U	6.18	1.16	-86.0	1.407	8.39	13.13
Area 5	G6M-03-10X	11/14/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	8,000	430	68	2,700	1.6	110	0.05 U	3.7	1.0 U	7.11	11.66	-101.7	0.745	6.94	7.4
Area 5	G6M-03-10X	10/23/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	6,500	420	62	2,100	1.4	62	0.07 J	5.5	1.0 U	6.88	0.22	-115	1.19	3.99	12.17
Area 5	G6M-04-05X	9/22/2004	140	2U	2U	2U	1U	2U	0.005U	0.0092	1.3	5U	1U	15U*	1U	14	4.9	14	2U	6.10	9.68	233.9	0.099	0.68	11.28
Area 5	G6M-04-05X	12/15/2004	17	2U	2U	2U	1U	2U	0.005U	0.016	1.4	5U	1U	15U	5U	14	7.5	13	2U	5.87	1.17	228.7	0.098	1.04	11.37

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-04-05X	3/30/2005	130	10U	10U	10U	5U	10U	0.0074	0.028	15	5U	1U	15U	0.5J	14	1.2	10	2U	6.04	2.8	123.1	0.093	1.92	11.81
Area 5	G6M-04-05X	6/30/2005	200	2U	2U	2U	1U	2U	0.041	0.022	96	2U	1UJ	10U	2.4	15.9	0.87	8.9	1U	5.48	0.88	207.1	0.094	8.19	11.49
Area 5	G6M-04-05X	9/29/2005	110	2U	2U	2U	1U	2U	0.006J	0.012J	220	5U	1U	33	5U	3.3	0.98	14	1U	6.08	0.2	215.3	0.061	2.1	10.48
Area 5	G6M-04-05X	12/14/2005	36	2U	2U	2U	1U	2U	0.007J	0.016J	550	5U	1U	15U	5U	21	1.6	11	1U	6.10	0.23	179.3	0.091	0.3	11.31
Area 5	G6M-04-05X	3/22/2006	330	2U	2U	2U	1U	2U	0.025U	0.019J	2,200	5U	0.1U	15U	3.4J	13	1.11	9.33	1U	6.21	0.77	343.3	0.062	0.86	11.08
Area 5	G6M-04-05X	6/22/2006	38	2U	2U	2U	1U	2U	0.025U	0.082	33	5U	0.1U	15U	5U	22J	1.82	9.01	1U	4.40	2.55	760.6	0.083	0	11.56
Area 5	G6M-04-05X	9/22/2006	30	2U	2U	2U	1U	2U	0.009J	0.084	140	5U	0.10U	15U	5U	15	1.51	10.8	1U	5.78	1.48	-127.3	0.123	0.34	11.56
Area 5	G6M-04-05X	12/12/2006	8.7	2U	2U	2U	1U	2U	0.025U	0.010J	850	5U	0.1U	15U	5U	-	-	-	-	5.66	0.39	156.7	0.105	0	11.24
Area 5	G6M-04-05X	3/29/2007	16	2U	2U	2U	1U	2U	0.025U	0.022J	460	5U	0.12	15U	1.4J	-	-	-	-	5.79	0.13	57.9	0.185	0.01	-
Area 5	G6M-04-05X	6/12/2007	12	2U	2U	2U	1U	2U	0.005J	0.041	330	5U	0.1U	15U	0.4J	-	-	-	-	5.89	0.52	168.2	0.116	4.4	15.84
Area 5	G6M-04-05X	9/10/2007	43	2U	2U	2U	1U	2U	0.24	0.089	340	2U	0.1U	15U	5U	20	1.61	17	1U	5.89	2.6	142.8	0.103	3.9	12.77
Area 5	G6M-04-05X	12/11/2007	7.2	2U	2U	2U	1U	2U	0.025U	0.013J	1,900	5U	0.19	15U	5U	-	-	-	-	5.75	0.23	134.1	0.118	0.6	15.25
Area 5	G6M-04-05X	3/13/2008	2.5	2U	2U	2U	1U	2U	0.009J	0.020J	1,300	5U	0.1U	17	5U	-	-	-	-	5.9	0.18	121	0.129	0.2	17.23
Area 5	G6M-04-05X	10/20/2008	3.7	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	3,300	8U	0.2U	50U	10U	30	1.5	10	0.03U	5.92	0.73	80	0.152	0	15.18
Area 5	G6M-04-05X	5/6/2009	16	0.38J	0.84	0.5U	0.5U	0.27J	1.3U	1.6U	2,200	8U	0.2U	50U	10U	49J	0.37	17	0.03U	5.72	0.2	125.5	0.187	0	11.92
Area 5	G6M-04-05X	10/14/2009	8.2	0.5U	0.29J	0.5U	0.5U	0.5U	1.3U	1.6U	2,000J	8.0U	0.127U	60U	10U	29	0.39	15	0.03U	5.62	0.5	184	0.203	0	14.07
Area 5	G6M-04-05X	4/20/2010	2.3J	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	1.2U	1.5U	3,200	5U	0.1U	25U	10U	80	0.30	15	0.03U	5.92	0.4	152.5	0.144	0.20	17.68
Area 5	G6M-04-05X	10/4/2010	0.28J	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	18	5U	0.1U	25U	10U	30	1.7	13	0.03U	5.67	1.51	145.5	0.131	0.8	15.25
Area 5	G6M-04-05X	6/8/2011	-	-	-	-	-	-	-	-	-	5U	0.1U	12.7J	-	-	-	-	-	5.78	0.12	134.1	0.193	1.0	13.15
Area 5	G6M-04-05X	10/3/2011	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	2,000	20U	0.2U	11.4J	2.3J	39	0.47	19	0.03U	5.76	0.20	158.9	0.174	0.44	14.14
Area 5	G6M-04-05X	5/8/2012	-	-	-	-	-	-	-	-	-	5.0U	0.1U	10.9J	-	-	-	-	-	6.01	0.83	157.2	0.16	0.56	14.76
Area 5	G6M-04-05X	10/9/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	1,800	5U	0.1U	21.8 J	10U	32	0.063J	16	0.03U	5.76	0.27	108.4	0.171	0.84	14.36
Area 5	G6M-04-05X	5/22/2013	-	-	-	-	-	-	-	-	-	2.7J	0.1U	25U	-	-	-	-	-	5.9	0.25	134.1	0.156	1.75	13.2
Area 5	G6M-04-05X	10/15/2013	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	28,000	5U	0.1U	15.4J	10U	60	0.13U	18	0.03U	6.01	0.47	145.8	0.199	0.00	14.17
Area 5	G6M-04-05X	6/12/2014	-	-	-	-	-	-	-	-	-	2.4J	0.195U	13.3J	-	-	-	-	-	6.09	0.41	86.2	0.193	0.68	12.29
Area 5	G6M-04-05X	10/28/2014	0.42J	0.5U	0.5U	0.5U	0.5U	0.5U	2.8	1.6	48	4.1J	0.029	12.2J	10U	39	0.31	13	0.03U	6.49	0.62	81.9	0.182	0.48	11.61
Area 5	G6M-04-05X	6/17/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	22.4 J	2.0 U	0.05 U	11.8 J	0.81 U	22.9	0.29	23.30	1.0 U	-	-	-	-	-	-
Area 5	G6M-04-05X	9/10/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	4.0 U	0.10 U	7.5 J	1.0 U	-	0.21	25.40	2.0 U	5.75	0.95	67.6	0.245	2.08	12.07
Area 5	G6M-04-05X	10/15/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	53	4.0 U	0.10 U	20	1.1	31.9	0.20	21.9	2.0 U	5.96	0.50	116.4	0.264	2.44	11.84
Area 5	G6M-04-05X	2/22/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	305	4.0 U	0.10 U	21.9	1.0 U	34.7	0.11 U	26.8	2.0 U	5.93	1.03	112.9	0.187	1.92	10.35
Area 5	G6M-04-05X	11/14/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	15	3.0 U	0.05 U	20	0.75 J	36	0.19	24	1.0 U	6.33	1.22	23.9	0.176	4.16	9.56
Area 5	G6M-04-05X	10/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	260	3.0 U	0.075 U	15	1.0 U	31	0.17	16	1.0 U	5.66	0.19	185.7	0.17	3.27	11.24
Area 5	G6M-04-06X	9/22/2004	160	2U	2U	2U	1U	2U	0.056	0.005U	3.4	5U	1U	15U	1U	110	5.3	8.7	2U	11.01	9.17	-0.6	0.341	1.34	11.37
Area 5	G6M-04-06X	12/16/2004	24	2U	2U	2U	1U	2U	0.017	0.028	0.47	21	1U	15U	5U	54	7.9	10	2.9	10.89	9.42	106.9	0.254	2.26	13.13
Area 5	G6M-04-06X	3/30/2005	37	2U	2U	2U	1U	2U	0.0087	0.051	0.58	7.5	1U	15U	5U	37	2	12	2U	9.47	10.46	10.6	0.235	0.32	11.56
Area 5	G6M-04-06X	7/1/2005	140	2U	2U	2U	1U	2U	0.034	0.056	9.7	2U	1UJ	190	2.8J	10.3	1.5	25	1U	9.08	9.77	457.2	0.214	0.95	11.76
Area 5	G6M-04-06X	9/29/2005	32	2U	2U	2U	1U	2U	0.009J	0.018J	0.7	11	1U	15U	5.4	70.4	1.9	12	1U	9.32	9.43	390.6	0.192	1.99	11.46
Area 5	G6M-04-06X	12/15/2005	26	2U	2U	2U	1U	2U	0.009J	0.022J	3.3	80.9	1U	150	7.6	39	1.9	12	1U	9.74	10.17	151.2	0.226	0.3	14.61
Area 5	G6M-04-06X	3/23/2006	100	2U	2U	2U	1U	2U	0.006J	0.036	3.1	5U	0.1U	15U	5U	23	1.71	9.29	1U	8.94	9.46	452.5	0.188	1.72	10.34
Area 5	G6M-04-06X	6/23/2006	190	2U	2U	2U	1U	2U	0.012J	0.041	10	13J	0.1U	15U	5U	41	1.69	9.43	1U	8.66	9.75	165.3	0.254	3.55	12.76
Area 5	G6M-04-06X	9/21/2006	45	2U	2U	2U	1U	2U	0.016J	0.11	6.3	5U	0.10U	15U	1.9J	31	1.03	10.9	1U	9.46	9.75	66.6	0.347	1.45	17.93
Area 5	G6M-04-06X	12/11/2006	37	2U	2U	2U	1U	2U	0.010J	0.044	4.3	5U	0.1U	15U	5U	-	-	-	-	9.67	9.67	108	0.257	4.4	14.21
Area 5	G6M-04-06X	3/29/2007	18	2U	2U	2U	1U	2U	0.011J	0.021J	13	5U	0.1U	15U	5U*	-	-	-	-	8.99	14.57	150.7	0.137	11.1	11.92
Area 5	G6M-04-06X	6/12/2007	25	2U	3.5	2U	1U	2U	0.010J	0.061	19	5U	0.1U	15U	5U	-	-	-	-	8.82	10.12	118.1	0.272	4.9	13.9
Area 5	G6M-04-06X	9/10/2007	23	2U	3	2U	1U	2U	0.005J	0.007J	0.13	8U	0.1U	15U	5U	38	1.32	82	1U	8.14	6.73	50.1	0.248	9.9	16.14
Area 5	G6M-04-06X	12/12/2007	22	2U	6.3	2U	1U	2U	0.004J	0.025U	0.21	5U	0.1U	15U	5U	-	-	-	-	7.36	12.25	81.7	0.335	0.2	13.66
Area 5	G6M-04-06X	3/14/2008	14	2U	2.4	2U	1U	2U	0.005J	0.025U	2.8	5U	0.1U	15U	5U	-	-	-	-	7.29	10.89	186.9	0.224	0.3	13.13
Area 5	G6M-04-06X	10/16/2008	24	0.68	2.2	0.5U	0.5U	0.5U	1.3U	1.6U	2	8.5	0.2U	11.5J	10U	34	1.47U	11	0.03U	7.69	9.11	209.6	0.198	1	13.01
Area 5	G6M-04-06X	5/6/2009	13	0.51	1.8	0.5U	0.5U	0.5U	1.3U	1.6U	1.6	6.9	0.2U	50U	10U	44	1.3	14	0.03U	7.35	9.41	9.2	0.209	1.9	15.25
Area 5	G6M-04-06X	10/14/2009	10	0.46J	1.8	0.5U	0.5U	0.5U	1.3U	1.6U	22J	7.4U	0.2U	50U	10U	44	1.3	11	0.03U	7.15	9.4	150	0.197	0	13.65
Area 5	G6M-04-06X	4/20/2010	3.0J	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	1.2U	1.5U	150	7.3	0.1U	25U	10U	60	1.8	11	0.03U	6.75	2.86	27.1	0.147	0.0	12.92

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-04-06X	10/4/2010	0.95	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	2,000	6.1	0.1U	25U	10U	57	1.8	9.1	0.03U	6.50	0.38	121.6	0.216	0.0	14.01
Area 5	G6M-04-06X	10/3/2011	4.0	0.5U	2.0	0.5U	0.5U	0.5U	1.2U	1.5U	9,200	4.7J	0.2U	10.7J	10U	71	0.74	11	0.03U	6.06	1.46	70.2	0.133	0.24	11.95
Area 5	G6M-04-06X	10/9/2012	3.7	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	14,000	5U	0.1U	21.2 J	10U	62	0.48	16	0.03U	6.05	0.31	135.7	0.239	0	11.64
Area 5	G6M-04-06X	10/15/2013	4.5	0.37J	0.55	0.5U	0.5U	0.5U	1.2U	1.5U	36,000	5U	0.1U	88.2	10U	140	0.13U	12	0.03U	6.09	1.07	171.1	0.242	0.04	10.6
Area 5	G6M-04-06X	10/28/2014	1.2	0.78	0.41J	0.5U	0.5U	0.5U	8.1J	1.5U	1,200	2.5U	0.0243U	157J	5U	70	0.29	15	0.03U	6.51	0.29	164.7	0.205	1.63	11.28
Area 5	G6M-04-06X	10/19/2015	1.7	0.70 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	4.0 U	0.10 U	74	1.0	59.7	0.11 U	13.0	2.0 U	-	-	-	-	-	-
Area 5	G6M-04-06X	11/14/2016	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.82	3.0 U	0.017 J	77	1.0	62	0.05 U	15	2.0	6.47	1.01	-8.6	0.189	5.87	9.97
Area 5	G6M-04-06X	10/17/2017	1.8	1.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.6	3.0 U	0.03 J	98	1.0 U	58	0.07 J	16	1.0 U	6.42	0.28	81.7	0.27	5.72	10.97
Area 5	G6M-04-07X	9/22/2004	900	2.7	8.4	2U	1U	2U	0.061	0.12	3.1	5U	1U	260	1U	56	5.4	32	2U	7.10	3.42	110.1	0.243	9.28	11.98
Area 5	G6M-04-07X	12/17/2004	1,100	2	9.3	2U	1U	2U	0.11	2.2	2.1	28	1U	47	0.6J	43	6.4	14	2U	7.51	1.98	-38.9	0.246	74.7	11.89
Area 5	G6M-04-07X	3/29/2005	240	10U	10U	10U	5U	10U	0.031	0.64	1.9	12	1UM	27	0.5J	43.2	1.5	14	2U	6.88	4.19	22	0.229	4.2	10.79
Area 5	G6M-04-07X	7/5/2005	170	2U	2U	2U	1U	2U	0.07	0.042	1.8	4	1U	37	5U	41.1	1.7	14	1U	5.83	5.44	369.9	0.186	23.4	11.51
Area 5	G6M-04-07X	9/29/2005	470	3.0	8.3	2U	1U	2U	0.010J	0.010J	2.4	5U	1U	43	5U	1U	1.9	16	1U	6.19	0.86	478.3	0.277	6.62	11.28
Area 5	G6M-04-07X	12/14/2005	390	2U	2	2U	1U	2U	0.006	0.016	7.9	3.8	1U	17.9	6.1	40	1.6	13	1U	6.65	4.72	149.3	0.218	34.1	11.66
Area 5	G6M-04-07X	3/23/2006	260	2U	2U	2U	1U	2U	0.005J	0.029	250	5U	0.1U	15U	5U	36	1.57	13.3	1U	6.28	2.14	619.7	0.267	4.09	12.09
Area 5	G6M-04-07X	6/23/2006	150	2U	2U	2U	1U	2U	0.005J	0.022J	22	5U	0.1U	24	0.3J	30	1.28	12.5	1U	6.29	5.5	117.8	0.24	8.07	11.75
Area 5	G6M-04-07X	9/21/2006	110	2U	2U	2U	1U	2U	0.014J	0.088	2.4	5U	0.10U	19	3.4J	32	2.54	10	1U	6.34	4.43	99.8	0.197	2.63	14.46
Area 5	G6M-04-07X	12/11/2006	87	2U	2U	2U	1U	2U	0.007J	0.033	2.2	5U	0.10U	15	5U	-	-	-	-	6.65	6.99	116.4	0.134	10.52	17.2
Area 5	G6M-04-07X	3/29/2007	45	2U	2U	2U	1U	2U	0.006J	0.018J	5.2	5U	0.1U	17J	5U	-	-	-	-	6.55	10.3	143.7	0.123	3.71	15.42
Area 5	G6M-04-07X	6/12/2007	44	2U	2U	2U	1U	2U	0.010J	0.079	46	5U	0.67	18	1.2J	-	-	-	-	6.26	8.12	162.7	0.129	16.1	13.18
Area 5	G6M-04-07X	9/10/2007	25	2U	2U	2U	1U	2U	0.006J	0.006J	0.11	2U	0.1U	15U	5U	19	1.89	45	1U	6.20	8.68	117.7	0.13	31.2	14.72
Area 5	G6M-04-07X	12/12/2007	23	2U	2U	2U	1U	2U	0.004J	0.013J	0.48	5U	0.1U	15U	5U	-	-	-	-	6.48	10.14	140.2	0.134	3.0	10.24
Area 5	G6M-04-07X	3/13/2008	19	2U	2U	2U	1U	2U	0.003J	0.025U	1.6	5.2	0.1U	15U	5U	-	-	-	-	6.54	10.52	83.4	0.143	0.3	10.47
Area 5	G6M-04-07X	10/16/2008	11	0.5U	0.5U	0.5U	0.5U	0.5U	1.2U	1.5U	390	8.0U	0.2U	15.1J	10U	28	1.81U	10	0.03U	5.85	1.62	205	0.129	0.45	10.72
Area 5	G6M-04-07X	5/6/2009	2.2	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	660	2.9J	0.2U	50U	10U	41J	2.3	12	0.03U	5.90	0.7	119.2	0.103	1.25	13.18
Area 5	G6M-04-07X	10/14/2009	1.3	0.5U	0.5U	0.5U	0.5U	0.5U	1.3U	1.6U	2,500J	8U	0.2U	50U	10U	32	1.9	15	0.03U	6.00	0.35	141.6	0.104	0	10.81
Area 5	G6M-04-07X	4/20/2010	13J	0.5UJ	0.5UJ	0.5UJ	0.5UJ	0.5UJ	1.3U	1.6U	630	5U	0.1U	31.8U	10U	50	1.5	12	0.03U	5.90	1.11	24.2	0.167	0	10.3
Area 5	G6M-04-07X	10/4/2010	19	2.2	4.5	0.5U	0.5U	0.5U	1.2U	1.5U	5,100	5U	0.1U	25U	10U	43	1.1	10	0.03U	6.06	0.94	116.9	0.181	0.32	10.45
Area 5	G6M-04-07X	6/8/2011	-	-	-	-	-	-	-	-	-	5U	0.148	67.9	-	-	-	-	-	5.81	1.06	34.1	0.172	0	10.36
Area 5	G6M-04-07X	10/3/2011	8.7	1.2	2.2	0.5U	0.5U	0.5U	1.2U	1.5U	8,300	20U	0.2U	68.0	10U	53	0.59	12	0.03U	5.76	0.28	-57.7	0.105	0.96	10.69
Area 5	G6M-04-07X	5/8/2012	-	-	-	-	-	-	-	-	-	4.0J	0.1U	27.2	-	-	-	-	-	6.26	0.35	122	0.198	0.48	10.51
Area 5	G6M-04-07X	10/9/2012	31J	6.2	33J	0.5U	0.5U	0.97	1.2U	1.5U	6,400	5U	0.1U	35.4	10U	99	0.5	10	0.03U	6.05	0.41	138.9	0.264	0	10.25
Area 5	G6M-04-07X	5/22/2013	-	-	-	-	-	-	-	-	-	3.9J	0.1U	51.4	-	-	-	-	-	6.14	0.39	154.1	0.22	0	14.03
Area 5	G6M-04-07X	10/15/2013	26	5.7	16	0.5U	0.5U	0.5U	1.2U	1.5U	37,000	3.8J	0.1U	3,480	10U	110	0.30	11	0.03U	6.24	0.37	218.4	0.262	0.05	13.59
Area 5	G6M-04-07X	6/10/2014	-	-	-	-	-	-	-	-	-	3.0J	0.021UJ	6,710	-	-	-	-	-	6.01	0.32	210.9	0.257	5.18	8.84
Area 5	G6M-04-07X	10/28/2014	55	11	54	0.31J	0.5U	0.61	1.3U	1.6U	4,900	9.5	0.195J	4,370J	5U	130	0.13	9.6	0.03U	6.57	0.24	108	0.254	4.69	10.62
Area 5	G6M-04-07X	10/19/2015	59	12	1.0 U	1.0 U	1.0 U	1.00	10 U	10 U	3,120	14.1	564	4,590	0.98 J	143	0.11 U	11.0	2.0 U	6.35	0.05	23.3	0.324	1.68	10.67
Area 5	G6M-04-07X	11/14/2016	78	18	73	0.42 J	1.0 U	1.8	1.1 U	1.0 U	1,000	29	1.9	4,400	1.2	160	0.05 U	9.4	1.0 U	6.42	1.01	-28.3	0.278	6.77	10.19
Area 5	G6M-04-07X	10/17/2017	38	20	56	0.39 J	1.0 U	3.1	1.1 U	1.0 U	760	18	1.7	5,200	1.1	170	0.05 U	7.6	1.0 U	6.47	0.38	37.8	0.41	9.59	10.78
Area 5	G6M-13-01X	1/30/2014	12	0.42 J	0.73	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	6.21	1.64	188.4	0.86	38	16.43
Area 5	G6M-13-01X	10/28/2014	150	2.8	7.80	0.5U	0.5U	0.5U	-	-	-	2.5U	0.025U	26.8J	-	-	-	-	-	6.25	1.77	100.3	0.495	9.14	12.81
Area 5	G6M-13-01X	6/22/2015	16	0.65 J	1.30	0.50 U	0.50 U	0.50 U	-	-	-	2.3 J	0.05 U	8.7 J	-	-	-	-	-	5.80	0.89	172.2	0.848	1.11	17.46
Area 5	G6M-13-01X	10/16/2015	26	1.10	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.0613 J	16	-	-	-	-	-	5.57	0.52	42.7	0.727	22.1	13.66
Area 5	G6M-13-01X	2/11/2016	10	0.69 J	1.6	1.0 U	1.0 U	1.0 U	10 U	10 U	126	4.0 U	0.10 U	10.3 J	1.0 U	31.5	0.31	16.7	2.0 U	6.05	0.57	38.8	0.880	1.02	10.34
Area 5	G6M-13-01X	5/18/2017	13	0.85 J	3.4	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	830	3.0 U	0.039 J	19	1.0 U	36	0.14	14	1.0 U	6.02	0.37	127.6	0.63	5.47	14.52
Area 5	G6M-13-01X	10/16/2017	10	0.79 J	0.65 J	1.0 U	1.0 U	1.0 U	--	--	--	3.6	0.83	34	--	--	--		--	6.09	0.40	49.7	0.81	38.9	12.11
Area 5	G6M-13-04X	1/30/2014	41	51	68	2.7	0.90 J	150	-	-	-	-	-	-	-	-	-	-	-	6.57	0.98	-36.4	1.414	4.6	12.6
Area 5	G6M-13-04X	6/10/2014	25	31	29	2.7	0.66	130	2.7J	12J	3,600J	360	49J	5,900	2.5J	280J	0.13U	9.3 B	0.030U	6.42	0.58	-49.4	1.212	12.9	-
Area 5	G6M-13-04X	10/29/2014	1.7	17	69	1.6	0.56	72	4.7	41	32,000	321	5.45J	6,170J	13	310	0.13U	3.5J	0.03U	6.65	0.42	-95.2	1.081	5.55	12.07
Area 5	G6M-13-04X	6/22/2015	0.50 U	1.80	2.20	0.50 U	0.50 U	1.40	5.0 U	5.0 U	719	360	29	3,840 J	3.20	129	0.11 U	30.5 J	1.0 U	6.95	0.7	-156.6	0.800	0.8	17.28
Area 5	G6M-13-04X	10/15/2015	19	19	52	0.76 J	1.0 U	32.7	10 U	18.6	9,470	388	33	7,930	2.8	269	0.16	5.8 J	2.0 U	6.6	0.29	-69.4	1.595	7.5	12.33

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	G6M-13-04X	2/11/2016	0.70 J	5.9	15	1.5	1.0 U	50.9	10 U	18.9	5,690	392	33.9	7,390	3.2	261	0.099 J	6.1 J	2.0 U	6.66	1.23	-2.9	1.086	9.5	8.53
Area 5	G6M-13-04X	6/15/2016	12	18	19	1.2	0.73 J	55.0	2.80	20 J	9,300	340	27	6,800	1.7	280	0.05 U	3.6	1.0 U	6.69	0.59	-54.2	1.669	11.54	14.90
Area 5	G6M-13-04X	11/11/2016	4.9	17	17	0.86 J	0.62 J	36	2.2	12	7,000	340	28	7,600	1.6	250	0.05 U	4.0	1.0 U	7.21	0.88	-80.4	1.175	24.1	12.73
Area 5	G6M-13-04X	5/18/2017	1.0 U	1.8	9.0	0.91 J	1.0 U	7.1	5.7	6.2	7,600	400	47.0	9,000	2.4	250	0.04 J	5.0 U	1.0 U	6.75	0.43	-100.9	1.28	21.0	13.59
Area 5	G6M-13-04X	10/16/2017	40	40	25	0.81 J	0.71 J	33	1.5	7.6	2,500	340 J	27	7,100	1.8	190	0.05 UJ	4.1	1.0 U	6.76	0.65	-79.1	1.41	4.96	12.07
Area 5	G6M-97-05B	10/3/2011	5.7	0.58	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	6.21	3.91	166.4	0.357	1.48	12.4
Area 5	G6M-97-05B	10/12/2012	13	0.73	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	0.0194 J	25U	-	-	-	-	-	6.19	4.13	132	0.649	0.41	14.61
Area 5	G6M-97-05B	10/16/2013	26	0.70	0.63	0.5U	0.5U	0.5U	-	-	-	5U	0.1U	25U	-	-	-	-	-	6.15	3.88	123.8	0.513	3.86	13.76
Area 5	G6M-97-05B	10/28/2014	83	1.8	1.7	0.5U	0.5U	0.5U	-	-	-	2.5U	0.0293U	25UJ	-	-	-	-	-	6.21	3.38	112.1	0.499	2.78	11.07
Area 5	G6M-97-05B	6/19/2015	89	4.8	2.3	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	5.0 U	3.1 J	0.05 U	7.5 U	-	27.0	1.00	7.8 J	1.0 U	6.26	2.73	106.3	0.63	1.72	17.20
Area 5	G6M-97-05B	10/15/2015	117	6.90	3.40	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.0615 J	19	-	-	-	-	-	5.43	3.41	86.9	0.687	1.05	18.92
Area 5	G6M-97-05B	2/11/2016	97	11	3.8	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	4.0 U	0.10 U	15 U	1.0 U	29.3	1.0	7.8 J	2.0 U	6.33	4.72	131.7	0.43	16.7	7.32
Area 5	G6M-97-05B	6/15/2016	87	13	4.2	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.05 U	3.0 U	-	-	-	-	-	6.26	2.75	81.7	669	1.15	15.93
Area 5	G6M-97-05B	11/15/2016	140	13	4.2	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.021 J	2.4 J	-	-	-	-	-	6.39	3.37	129.4	0.469	0.87	11.73
Area 5	G6M-97-05B	5/17/2017	190	15	8.6	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.84	3.0 U	0.05 U	3.0 U	1.0 U	31	0.94	7.0	1.0 U	6.20	2.00	120.8	0.55	9.59	15.17
Area 5	G6M-97-05B	10/11/2017	140	16	4.4	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	0.58 U	3.0 U	0.10 U	3.3 J	1.0 U	32	0.89	7.4	1.0 U	6.20	1.65	100.1	0.71	5.27	13.95
Area 5	IW-39	1/30/2014	180	4.4	15	4U	4U	4U	-	-	-	-	-	-	-	-	-	-	-	6.56	0.91	44.9	0.78	3.68	12.31
Area 5	MW-3	10/17/2001	4,300	1,500	540	20U	10U	20U	-	-	-	-	-	-	-	-	-	-	-	5.70	0.9	-127	1.4	3.1	13.73
Area 5	MW-3	12/19/2001	26	4,000	2,200	20U	6.5J	20U	-	-	-	-	-	-	92	-	-	0.43J	-	6.28	0.43	-46	0.912	7.28	12.98
Area 5	MW-3	1/3/2002	-	-	-	-	-	-	0.063	0.21	18	180	30	-	44	-	-	-	-	4.77	1.33	-48	2.795	4.4	11.19
Area 5	MW-3	1/31/2002	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	6.64	0	-293	0.999	-	12.17
Area 5	MW-3	2/13/2002	4,400	1,700	1,600	1.6J	3.7	2U	0.079	0.29	53	190	20	8,300	15	-	0.10U	14	1.0J	6.65	0.75	-71	0.893	1.3	13.54
Area 5	MW-3	3/13/2002	5,200	640	1,400	1.4J	2.8	2U	0.093	0.37	66	180	16	8,400	7.3	-	0.10U	15	2.0U	6.72	0.25	-75	0.795	1.04	12.21
Area 5	MW-3	4/2/2002	3,100	1,000	1,700	2.2	4	2U	-	-	-	-	-	-	3.3J	-	-	-	-	6.74	4.28	-120	0.634	2.08	13.17
Area 5	MW-3	4/17/2002	1,200	1,300	1,600	1.2J	3.4	2U	0.025	0.087	54	240	37	17,000	6.1	-	3	7.9J	1.6J	6.60	4.39	-102	0.771	0.81	12.69
Area 5	MW-3	5/15/2002	31	23	2,600	3.5	6.7	2U	0.052	0.24	560	260	42	19,000	96	-	0.10U	3.9	1.6J	6.66	0.31	-124	1.46	1.68	14.23
Area 5	MW-3	6/27/2002	200U	200UJ	1,800	200UJ	100UJ	200UJ	0.021	0.082	3,900	490J	140	37,000J	270	-	14	4.4J	2.0U	6.70	1.64	-107	3.804	2.9	13.8
Area 5	MW-3	7/31/2002	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-	-	-	6.76	0.15	-225	1.606	-	13.9
Area 5	MW-3	8/26/2002	990	640	580	2.1	4.4	2U	0.053	0.16	14,000	270	-	-	30	320	-	-	-	6.83	0.15	-138	1.285	6.5	18.8
Area 5	MW-3	10/28/2002	1,900	820	1,700	3.9	4.2	2U	0.3	0.23	6,300	330	39	9,700	6.3	190	0.10U	10	2.0U	6.70	0.4	-129	1.129	5.01	15.7
Area 5	MW-3	2/3/2003	3.0	2U	2,900	2U	7.1	2U	0.005U	0.26	28,000	330	120	-	180	580	-	1.0U	-	6.84	0.3	-159	1.322	6.7	18.2
Area 5	MW-3	7/16/2003	2.4	2U	2,700	2U	7.5	2.5	0.005U	0.1	23,000	520	170	-	17	450	-	4.0UB	2.0U	7.02	1.09	-138	1.464	39.2	16.1
Area 5	MW-3	9/24/2003	670	1,100	1,900	2.4	6.9	2U	0.005U	0.012	22,000	460	89	7,900	5.9	-	-	-	-	6.10	9.17	-138	1.222	18.9	15.3
Area 5	MW-3	1/9/2004	9.7	64	2,000	2U	5.6	2U	0.005U	0.005U	45,000	530	200J	15,000	130	500J	-	1.0U	2.0U	6.73	0.4	-195	1.347	14.6	-
Area 5	MW-3	3/11/2004	680	620	4,700	2U	7.6	2U	0.005U	0.005U	27,000	420	11	8,400	6.1	200	-	4.4	2U	6.58	0.62	-161	0.972	4.3	13.9
Area 5	MW-3	6/2/2004	2U	2U	1,800	2U	4.5	2U	0.005U	0.014	31,000	670MSA	150	23,000	290	810	-	0.98J	2U	6.95	0.1	-149	1.905	38.7	15.7
Area 5	MW-3	9/21/2004	210	250	1,900	2U	5.2	3.5	0.086	0.005U	28,000	660	200J	7,200	17	310	1J	4.3J	2U	6.66	0.95	-153.6	0.725	2.27	11.1
Area 5	MW-3	12/13/2004	2U	2U	750	2U	1U	610	0.092	3.5	17,000	510	160	5,400	8	210	1.1	1.4M	2U	6.62	1.6	-103.3	1.009	15.1	13.9
Area 5	MW-3	3/28/2005	23J	16J	1,000	50U	50U	280	0.005U	5.1	25,000	670	150	7,300	21	405	0.2U	1U	7.5J	6.49	0.34	-134.9	1.26	2.37	14.44
Area 5	MW-3	8/10/2005	440	80	120	2U	5.1	760	0.061J	13	22,000	680	180	4,400	43	338	0.05U	2U	8	11.13	0.71	-118.5	1.401	28.9	15.67
Area 5	MW-3	9/27/2005	1,100	240	180	1.8	9.1	360	0.020J	40	22,000	480	71J	2,500	5.6	96.8	0.05U	9.9J	3.4	6.36	0.21	-91.2	0.66	2.8	14.5
Area 5	MW-3	12/12/2005	37	67	52	20U	10U	480	0.055	100	26,000	566	100	-	18	180	0.083J	2U	5.6	6.66	0.11	-152.7	1.087	8	15.7
Area 5	MW-3	3/20/2006	620	350	120	3.1	3.9	220	0.025U	130	25,000	440	85	3,600	13	110	0.2U	6.31	1U	6.95	0.77	-106.2	0.871	3.71	14.88
Area 5	MW-3	6/22/2006	2U	2U	4	7.6	1U	6.1	0.023J	180	20,000	520	87	3,300	4J	98	0.2U	1U	1U	6.40	0.22	-127	1.012	4.18	12.97
Area 5	MW-3	9/20/2006	360	420	130	12	5.6	200	0.015J	95	17,000	580	70	3,300	9.6	70	0.2U	7.88	1.4	6.52	0.28	-108.5	0.729	3.56	13.28
Area 5	MW-3	12/12/2006	2U	3.1	3.1	16	1U	7.1	0.032	170	24,000	490	92	3,700	7.8	-	-	1U	1U	6.60	0.17	-116	0.99	4.36	12.34
Area 5	MW-3	3/27/2007	2U	31	19	12	1U	27	0.025U	130	18,000	560	110	3,300J	5.2	-	-	3.18	1U	6.28	0.19	21	0.944	2.64	13.6
Area 5	MW-3	6/11/2007	2U	5	5.4	15	1U	8	0.038	150	32,000	570	190	5,000	67	-	-	12.1	2.2	6.56	0.58	-124.7	1.405	17.3	12.26
Area 5	MW-3	9/11/2007	610	470	100	6.4	2.6	97	-	-	-	530	100	3,600	-	150	0.2U	400	1U	6.76	0.23	-130	1.016	6.8	13.48
Area 5	MW-3	10/12/2007	-	-	-	-	-	-	0.025U	120	34,000	-	-	-	3.8J	-	-	-	-	-	-	-	-	-	12.51
Area 5	MW-3	12/13/2007	250	180	59	8.8	2.4	78	0.016J	130	30,000	420	91	4,400	4.1J	-	-	10	1U	6.6	0.27	-159.8	1.04	15.7	19.2

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	MW-3	3/10/2008	2U	2U	2U	8.3	1U	2U	18	35	29,000	530	140	3,300	16	-	-	5U	2.4	6.46	0.12	-113	1.402	5.5	14.26
Area 5	MW-3	10/6/2008	5U	5U	5U	11	5U	5U	1.3U	72	28,000	482	112	3,720	10U	210	0.13U	7.0U	0.03UJ	6.49	0.24	-158.6	1.070	9.3	21.5
Area 5	MW-3	1/21/2009	1.4U	2.3U	1.6J	9.2	1.2U	1.9	3.2	58	40,000	556	114J	3,350	10UJ	160	0.13U	7.0U	0.03U	6.69	0.5	-79.9	1.044	4.01	15.5
Area 5	MW-3	5/7/2009	2.0U	59	48	17	2.0U	66	1.3	70	47,000	519	115	3,630	7.0J	360J	0.13U	22	0.03U	6.26	1.03	-89.9	1.205	4.54	18.86
Area 5	MW-3	10/19/2009	2U	35	25	9.4	2U	40	1.2U	36	25,000	551	120	5,330	6.7J	490	0.13U	28	0.03UJ	6.24	0.6	-62.6	1.494	25.6	15.54
Area 5	MW-3	4/20/2010	0.5UJ	0.48J	0.47J	4.7J	0.5UJ	2.5J	10	19	47,000	526	136J	3,200	9.0J	440	0.13U	3.4J	0.03U	6.33	0.16	5.4	1.445	0.09	11.12
Area 5	MW-3	10/5/2010	0.5U	4.8	3.4	7.5	0.5U	20	1.2U	69	32,000	444	76	3,560	10U	750	0.13U	4.5J	0.03U	6.20	0.20	-85.9	1.799	0.58	11.94
Area 5	MW-3	6/8/2011	0.5U	0.66	0.93	4.4	0.5U	17	4.5	18	100,000	374	53.6	2,570	12	690	0.13U	1.7J	0.03U	6.34	0.30	-91.1	1.232	3.56	11.96
Area 5	MW-3	10/3/2011	0.5U	0.5U	0.52	1.7	0.5U	1.0	1.2U	1.5U	40,000	385	45.8	2,760	10	730	0.13U	0.74J	0.03U	6.47	0.13	-88.1	1.544	0.9	12.14
Area 5	MW-3	5/8/2012	0.5U	0.5U	0.5U	0.5U	0.5U	0.5U	51	110	66,000	276	27	3,140	7.5J	600	0.13U	0.82J	0.03U	6.77	0.08	-107.2	1.856	4.6	12.24
Area 5	MW-3	10/10/2012	0.5U	0.5U	0.5U	0.54	0.5U	1.2	61	100	36,000	267	25.7	4,810	5.6J	520	0.13U	1.4J	0.03U	6.45	0.51	-87.6	1.738	0.92	12.1
Area 5	MW-3	5/21/2013	0.5U	0.5U	0.30J	0.39J	0.5U	0.75	1.2U	1.5U	10,000	281	24.7	6,460	4.3J	530J	0.13UJ	0.64J	0.03UJ	6.76	0.12	-105.2	1.277	2.75	11.48
Area 5	MW-3	10/16/2013	0.5U	0.21J	0.36J	0.32J	0.5U	0.94	12	11	38,000	298	26.6	7,970	5.2J	510	0.13U	1.9J	0.03U	6.75	0.40	-87.4	1.437	0	11.96
Area 5	MW-3	6/11/2014	0.5U	0.5U	0.5U	0.37J	0.5U	0.83	2.9J	1.6UJ	5,100J	354	34.3J	11,100	8.3J	330J	0.13U	1.2U	0.03U	6.70	0.51	-67.6	1.062	6.18	11.84
Area 5	MW-3	10/29/2014	0.5U	0.27J	0.68	0.38J	0.5U	0.53	3.8	1.5U	13,000	334	30.1J	10,500J	5.2J	370	0.13U	2.4J	0.03U	6.8	0.34	-110.1	0.756	3.79	11.95
Area 5	MW-3	6/23/2015	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	4,830	409	37.1	11,000	5.00	366	0.11 U	5.1 J	1.0 U	6.34	1.07	-89.4	1.262	5.85	14.23
Area 5	MW-3	10/15/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.54 J	10 U	10 U	4,570	420	41.9	12,600	4.9	349	0.071	10 U	2.0 U	6.97	0.48	-112.1	1.215	1.38	13.86
Area 5	MW-3	2/10/2016	1.0 U	1.0 U	1.0	1.0 U	1.0 U	0.88 J	10 U	10 U	7,260	423	49	12,000	5.4	341	0.094 J	10 U	2.0 U	6.72	1.12	-109.7	0.851	10.5	9.14
Area 5	MW-3	6/16/2016	1.0 U	1.0 U	1.5	1.0 U	1.0 U	0.89 J	3.0	1.0 U	20,000	410	45	9,800	6.1	350	0.05 UJ	1.3	1.0 U	6.81	0.66	-77.4	1.36	4.93	14.27
Area 5	MW-3	11/11/2016	1.0 U	0.96 J	1.7	1.0 U	1.0 U	1.6	2.9	1.0 U	7,000	410	47	9,500	6.4	370	0.05 U	1.4	1.0 U	7.22	0.83	-97.8	0.871	7.77	12.73
Area 5	MW-3	5/17/2017	1.0 U	1.0 U	0.75 J	1.0 U	1.0 U	1.0 U	1.8	1.0 U	10,000	500	56	9,400	5.2	310	0.073 J	2.2	1.0 U	6.78	0.63	-112.4	0.91	6.29	12.70
Area 5	MW-3	10/11/2017	1.0 U	1.0 U	1.0	1.0 U	1.0 U	0.60 J	1.9	1.0 U	5,500	440	56	9,200	5.0	280	0.06 J	0.62 J	1.0 U	6.60	0.69	-102.3	1.20	4.33	13.43
Area 5	MW-7	2/14/2002	5,900	4.5	2U	2U	1U	2U	0.12	0.08	8.4	5U	1U	170J	-	-	-	20	0.6J	6.12	1.58	104	0.787	90	18.84
Area 5	MW-7	3/14/2002	5,700	4.2	2U	2U	1U	2U	0.094	0.18	5.9J	5U	1U	1,000U	2.0J	-	4.1	22J	2.0U	6.12	2.29	203	0.808	8.85	12.76
Area 5	MW-7	4/17/2002	4,200	2.9	2U	2U	1U	2U	0.072	0.2	6	2.3J	1U	1,000U	5U	-	4.2	18J	1.6J	6.11	0.5	145	0.656	19.5	-
Area 5	MW-7	5/16/2002	5,700	4.3	2U	2U	1U	2U	0.097	0.2	9	5U	1U	1,000U	5U	-	4.3	18J	2.0UJ	6.05	0.21	185	0.759	23.9	10.92
Area 5	MW-7	6/27/2002	5,300	3.8J	2UH	2UH	10H	2UH	-	-	-	5U	1U	170UJ	5U	-	4.2	19J	2.0U	6.13	0.73	163	1.198	100	11.12
Area 5	MW-7	8/27/2002	4,700	3.5	2U	2U	1U	2U	-	-	-	5U	-	-	5U	29	-	-	-	6.13	0.29	136	0.632	1.86	12.02
Area 5	MW-7	10/30/2002	5,400	2.7	2U	2U	1U	2U	0.047	0.18	20	5U	1U	200J	5U	23	4.9	16	2.0U	6.05	0.37	66	0.779	3.63	11.85
Area 5	MW-7	12/14/2002	-	-	-	-	-	-	-	-	-	-	-	-	5U	-	-	-	-	-	-	-	-	-	12.04
Area 5	MW-7	1/30/2003	4,700	3.1	2U	2U	1U	2U	0.044	0.075	23	5U	1U	-	5U	19	-	16	-	5.80	2.2	171	0.773	1.08	13.43
Area 5	MW-7	9/24/2003	4,200	3.3	2U	2U	1U	2U	0.015	0.027	58	5U	1U	140	5U	-	-	-	-	3.40	1.43	522	0.691	0.3	-
Area 5	MW-7	1/8/2004	4,300	2.8	2U	2U	1U	2U	0.011	0.026	25	5U	1U	130	5U	27	-	14J	2.0U	6.02	0	198	0.481	15	11.59
Area 5	MW-7	3/12/2004	3,100	2.7	2U	2U	1U	2U	0.02	0.28	6.3	5U	1U	120	1U	24	-	15M	2U	6.04	0.47	162	0.556	1.0	13.99
Area 5	MW-7	6/3/2004	2,900	2.6	2U	2U	1U	2U	0.012	0.034	34	5U	1U	110	1.5J	24	-	15M	2U	5.96	0.31	205.2	0.58	1.92	-
Area 5	MW-7	9/21/2004	2,900	3.4	3.1	2U	1U	2U	-	-	-	5U	1U	110	-	-	-	-	-	5.98	0.21	240.4	0.58	0	11.09
Area 5	MW-7	9/27/2005	1,600	3.7	5.8	2.5U	2.5U	2.5U	-	-	-	5U	0.2J	110	-	-	-	-	-	4.49	0.93	304.1	0.593	3.39	11.86
Area 5	MW-7	9/22/2006	4,400	9.8	7.7	2U	1U	2U	-	-	-	5U	0.10U	100	-	-	-	-	-	5.99	1.19	140.9	0.503	3.01	12.70
Area 5	MW-7	9/11/2007	1,200	11	22	2U	1U	2U	-	-	-	6U	0.1U	110	-	-	-	-	-	5.98	0.32	139.9	0.691	5.9	-
Area 5	MW-7	10/20/2008	600	40	150	20U	20U	20U	-	-	-	8U	0.2U	166	-	-	-	-	-	5.97	1.39	71.9	0.804	2.0	14.72
Area 5	MW-7	10/19/2009	97	33	270	10U	10U	10U	-	-	-	4.2J	1.7	2,170	-	-	-	-	-	6.03	0.47	76.7	1.686	1.91	14.58
Area 5	MW-7	10/6/2010	45	9.5	120	2.5U	2.5U	3.1	-	-	-	5.7	1.46	2,090	-	-	-	-	-	6.53	0.21	-21.6	2.072	4.81	11.46
Area 5	MW-7	10/6/2011	1.6	3.7	20	0.5U	0.5U	6.8	-	-	-	52.9	5.44	5,070	-	-	-	-	-	6.6	0.49	-48.8	1.717	3.0	-
Area 5	MW-7	10/12/2012	2.3	2.3	9.9	0.70	0.5U	11	-	-	-	140	20.5	9,900	-	-	-	-	-	6.38	0.65	-65	1.253	0	-
Area 5	MW-7	10/17/2013	1.5	6.9	13	0.24J	0.5U	2.2	-	-	-	156	20.9	9,360	-	-	-	-	-	6.72	0.58	-68.2	1.152	0	10.50
Area 5	MW-7	11/3/2014	1.7	8.4	13	0.27J	0.5U	1.5	-	-	-	205	29.9	15,300	-	-	-	-	-	6.62	0.41	-74.2	0.878	1.94	10.28
Area 5	MW-7	10/15/2015	1.0 U	1.70	12.4	1.0 U	1.0 U	1.10	-	-	-	198	30.2	15,100	-	-	-	-	-	6.83	0.84	-68.2	0.926	1.50	11.26
Area 5	MW-7	11/14/2016	1.0 U	1.4	22	1.0 U	1.0 U	37	-	-	-	110	19	13,000	-	-	-	-	-	6.01	1.24	-63.5	0.77	7.42	13.2
Area 5	MW-7	10/11/2017	1.0 U	0.53 J	1.4	1.0 U	1.0 U	15	--	--	--	160	20	19,000	--	--	--	--	--	6.37	0.67	-30.1	0.73	2.75	12.73
Area 5	XSA-12-95X	10/12/2012	290	36	66	5.0U	5.0U	10	-	-	-	4.6J	9.53	11,800	-	-	-	-	-	6.53	2.04	-63.9	1.247	45	12.77
Area 5	XSA-12-95X	10/15/2013	160	51	100	4.7J	5.0U	6.5	-	-	-	12.8	5.17	9,890	-	-	-	-	-	6.59	0.3	-254.4	1.411	24.4	13.11

Historical Groundwater Analytical Results
AOC 50, Former Fort Devens Army Installation, Massachusetts

			Laboratory Parameters																	Field Parameters					
			PCE	TCE	*cis* -1,2-DCE	*trans* -1,2-DCE	1,1-DCE	VC	Ethane	Ethene	Methane	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	TOC	Alkalinity	Nitrate/ Nitrite	Sulfate	Sulfide	pH	DO	ORP	SpC	Turbidity	Temp
Area	Well ID	Date Sampled	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(SU)	(mg/L)	(mV)	(mS/cm)	(NTUs)	°C
Area 5	XSA-12-95X	10/28/2014	110	39	94	5.0	0.47J	9.0	-	-	-	8.3	4.47J	9,310J	-	-	-	-	-	6.9	0.18	-315.7	0.906	20.2	14.23
Area 5	XSA-12-95X	10/19/2015	27	20	1.0 U	1.0 U	6.70	7.20	-	-	-	4.0 U	4.77	10,600	-	-	-	-	-	7.97	1.77	-103.6	1.385	15.3	-
Area 5	XSA-12-95X	11/14/2016	23	9.8	78	4.3	1.0 U	7.4	-	-	-	3.0 U	1.9	8,400	-	-	-	-	-	6.58	1.21	-59.7	1.048	28.1	12.69
Area 5	XSA-12-95X	10/10/2017	36	11	26	3.1	1.0 U	5.6	--	--	--	3.2	7.8	9,700	--	--	--	--	--	6.65	0.35	-85.3	1.41	19.5	14.73
Area 5	XSA-12-96X	10/10/2012	120	4.4	14	2.0U	2.0U	2.0U	-	-	-	5U	3.13	96.8	-	-	-	-	-	6.52	0.72	-87.1	0.782	3.9	12.33
Area 5	XSA-12-96X	10/15/2013	100	11	17	2.5U	2.5U	3.7	-	-	-	3.7J	0.94	2,840	-	-	-	-	-	6.46	0.27	-271.6	0.824	0.90	15.90
Area 5	XSA-12-96X	10/28/2014	84	14	22	2.3	0.36J	6.0	-	-	-	3.2J	0.925J	5,720J	-	-	-	-	-	6.73	0.14	-300.6	0.625	4.83	12.11
Area 5	XSA-12-96X	10/26/2015	30	14	1.0 U	1.0 U	3.40	10.2	-	-	-	4.0 U	2.19	7,340	-	-	-	-	-	6.34	0.66	-77.9	0.787	9.41	12.98
Area 5	XSA-12-96X	11/14/2016	29	19	20	4.9	0.59 J	11	-	-	-	3.0 U	1.2	6,300	-	-	-	-	-	5.63	0.66	-25.5	0.733	9.26	11.67
Area 5	XSA-12-96X	10/10/2017	26	20	20	5.0	0.64 J	16	--	--	--	3.0 U	8.2	6,200	--	--	--	--	--	6.48	0.69	-38.6	1.12	9.27	14.23
Area 5	XSA-12-97X	10/9/2012	2.1	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	1.430 J	44.4	-	-	-	-	-	6.66	1.3	-11.9	0.673	33.8	11.73
Area 5	XSA-12-97X	10/16/2013	2.9	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	5U	2.25	29.3	-	-	-	-	-	6.74	1.74	-21.9	0.721	19.6	12.06
Area 5	XSA-12-97X	10/30/2014	5.6	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5U	0.435	9.1J	-	-	-	-	-	6.51	1.52	51.8	0.522	17.5	17.21
Area 5	XSA-12-97X	10/19/2015	7.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.771	15	-	-	-	-	-	6.62	1.39	31.9	0.614	13.9	10.02
Area 5	XSA-12-97X	11/14/2016	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.77	12	-	-	-	-	-	7.62	1.68	-57.9	0.526	18.4	11.61
Area 5	XSA-12-97X	10/10/2017	8.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	1.5	78	--	--	--	--	--	7.88	0.28	-130.3	0.81	9.83	16.81
Area 5	XSA-12-98X	10/11/2012	10	0.59	0.50	0.5U	0.5U	0.5U	-	-	-	5U	1.420	18.4 J	-	-	-	-	-	7.75	0.76	-60.1	0.308	8.89	13.14
Area 5	XSA-12-98X	10/16/2013	5.2	0.34J	0.47J	0.5U	0.5U	0.5U	-	-	-	3.1J	0.1U	6.6J	-	-	-	-	-	7.89	0.51	-39.8	0.413	51	10.53
Area 5	XSA-12-98X	10/29/2014	5.5	0.37J	0.76	0.5U	0.5U	0.5U	-	-	-	2.5U	0.313	5.6J	-	-	-	-	-	8	0.46	-293.1	0.258	44.8	10.63
Area 5	XSA-12-98X	10/19/2015	6.3	0.66 J	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	4.0 U	0.174	15 U	-	-	-	-	-	8.04	0.42	-194.4	0.31	3.62	10.70
Area 5	XSA-12-98X	11/11/2016	5.6	0.69 J	0.81 J	1.0 U	1.0 U	1.0 U	-	-	-	3.0 U	0.095	3.1 J	-	-	-	-	-	7.98	0.52	-140.7	0.233	16.1	9.67
Area 5	XSA-12-98X	10/23/2017	5.0	0.60 J	0.70 J	1.0 U	1.0 U	1.0 U	--	--	--	3.0 U	0.088 J	2.8 J	--	--	--	--	--	7.35	0.26	-55.5	0.39	5.42	11.48
Area 5	G6M-13-01X	6/15/2016	18	1.1	2.8	1.0 U	1.0 U	1.0 U	-	-	-	2.1 J	0.083	14	-	-	-	-	-	6.09	0.65	36.9	0.891	25.0	15.57
Area 5	G6M-13-01X	11/11/2016	27	3.5	6.5	1.0 U	1.0 U	2.8	-	-	-	3.5	1.2	29	-	-	-	-	-	5.63	1.11	83.3	0.638	22.1	12.35
Nashua River	G6M-04-08X	9/24/2004	4.2	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.29	0.81	-75.5	0.632	52.8	15.68
Nashua River	G6M-04-14X	11/16/2004	12	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.3
Nashua River	G6M-04-14X	9/27/2005	6.9	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.88	1.6	333	0.263	18	13.22
Nashua River	G6M-04-14X	9/21/2006	9.4	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.98	3	26.1	0.211	15.7	11.11
Nashua River	G6M-04-14X	10/1/2007	7.1	2U	2U	2U	1U	2U	-	-	-	-	-	-	-	-	-	-	-	7.69	2.56	80.4	0.363	13.9	10.71
Nashua River	G6M-04-14X	10/21/2008	7.1J	0.21J	0.5UJ	0.5UJ	0.5UJ	0.5UJ	-	-	-	-	-	-	-	-	-	-	-	7.78	2.51	138.8	0.237	45	12.98
Nashua River	G6M-04-14X	10/15/2009	4.5J	250	10U	10U	10U	10U	-	-	-	-	-	-	-	-	-	-	-	7.56	3.6	-69.7	0.25	4.58	11.54
Nashua River	G6M-04-14X	1/15/2010	4.5	0.22J	0.5U	0.75U	0.75U	1.0U	-	-	-	-	-	-	-	-	-	-	-	7.73	25.3	166.2	0.293	12.5	11.64
Nashua River	G6M-04-14X	10/8/2010	2.4	0.25J	0.5U	0.5U	0.5U	0.5U	-	-	-	-	-	-	-	-	-	-	-	7.55	1.92	72.7	0.307	100.4	12.54
Nashua River	G6M-04-14X	10/5/2011	2.2	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	6.8	0.1U	25U	-	-	-	-	-	7.68	2.62	99.9	0.172	20.4	11.07
Nashua River	G6M-04-14X	10/15/2012	3.3	0.5U	0.5U	0.5U	0.5U	0.5U	-	-	-	9.6	0.194	7.7J	-	-	-	-	-	7.71	2.58	-10.9	0.297	21.7	16.33
Nashua River	G6M-04-14X	10/18/2013	1.7	0.34J	0.5U	0.5U	0.5U	0.5U	-	-	-	8.2	0.1U	7.5U	-	-	-	-	-	7.89	1.25	94	0.479	27.1	15.03
Nashua River	G6M-04-14X	10/31/2014	1.8	0.40J	0.5U	0.5U	0.5U	0.5U	-	-	-	2.5U	0.0507U	7.5U	-	-	-	-	-	7.93	0.4	54.4	0.423	8.26	15.56
Nashua River	G6M-04-14X	10/26/2015	1.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	9.8	0.0731 J	15 U	-	-	-	-	-	7.89	1.44	79.2	0.482	18.9	13.11
Nashua River	G6M-04-14X	11/11/2016	2.5	1.4	1.2	1.0 U	1.0 U	1.0 U	-	-	-	8.3	0.05 U	2.1 J	-	-	-	-	-	7.48	0.84	-106.7	0.35	10.14	10.53
Nashua River	G6M-04-14X	10/6/2017	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--	7.1	0.017 J	3.2 J	--	--	--	--	--	7.50	0.46	69.9	1.00	5.26	12.91

Notes:
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCE = 1,1-Dichloroethene
VC = Vinyl chloride
TOC = Total Organic Carbon

Notes:
µg/L = microgram per liter
mg/l = milligram per liter
U = Non-detect
UJ = Estimated non-detect
J = Estimated result
ND (U) results are reported at the Limit of Detection (LOD)

APPENDIX E
ANNUAL LAND USE CONTROL PLAN CHECKLIST

Annual Land Use Control Plan Checklist for AOC 50

This checklist has been developed from the USEPA guidance document Comprehensive Five Year Review Guidance dated June 2001 (OSWER No. 9355.7-03B-P) and from Section 4.6 of the Remedial Action Work Plan, AOC 50, Devens, Massachusetts Site (Arcadis, 2005). The Checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will be completed annually and submitted with the AOC 50 annual operations, maintenance and monitoring report. The checklist will also be used to assist in compiling information for the five-year review.

I. Site Information	
Site Name/Location: AOC 50	Name/Affiliation: Laurie Ekes/KGS
Remedy Includes: Long Term Monitoring, Institutional Controls, ERD	

II. Documentation and Records			
Item	Yes	No	Comments
Any related notices filed with Town of Ayer, MassDEP or Nashoba BOH?		X	
Any related Department of Public Works permits found?		X	
Any related zoning permits or variances found?		X	
Any related Conservation Commission findings, proposals or notices of intent found?		X	
Any related notices or permits filed with the Devens Enterprise Commission?		X	

III. Physical On-Site Inspection			
Inspector: Kevin Anderson/KGS - Inspected AOC50 during Fall 2017 LTM sampling in October.			
Item	Yes	No	Comments
Any construction activities or new buildings present in the area of the remedy?		X	
Is there evidence of damage to the remedy?		X	
Any groundwater supply wells present?		X	No new wells have been added.
Any construction detention ponds?		X	
Is there sufficient access to the site for monitoring?	X		

IV. Interview			
Name of Interviewer: Laurie Ekes/KGS			
Name of Interviewee: Ron Ostrowski			
Position: Environmental Services, Mass Development			
Date/Location of Interview: 10/25/2017 Met with Ron O at Mass Development, 33 Andrews Parkway, Devens, MA .			
Contact Information: Phone (978) 784-2900 Email: Rostrowski@Massdevelopment.com			
Item	Yes	No	Comments
Has the interviewee received/read the annual IC notification/reinforcement letter from the Army?	X		IC letter was sent in May 2017.
Is interviewee familiar with the land use controls imposed upon the property & documentation of these controls?	X		
Are there any pumping wells or other sources of water other than those supplied by the Town at the property?		X	
Are there any proposed plans for property sale, future development, construction or demolition activities at the property?		X	MassDevelopment is considering repairs and upgrades for the Massachusetts State Police's use of the airfield, but the plans are still under development.
Are there any issues with site access for monitoring and remediation?		X	Sampling events are scheduled around Mass State Police training on the runway.
V. Response Actions			
Item	Yes	No	Comments
Were violations of the LUCs present ?		X	
Are there Response Actions necessary based on the violations?		X	
Are modifications/terminations of LUC's necessary?		X	
Have Enforcement Actions been taken during this reporting period?		X	

If any responses above are "Yes", please provide comments.

Annual Land Use Control Plan Checklist for AOC 50			
IV. Interview			
Name of Interviewer: Laurie Ekes/KGS			
Name of Interviewee: Mr. Tom Eagle			
Position: Project leader; Eastern Massachusetts NWR Complex; Oxbow National Wildlife Refuge			
Office: USFW, 73 Weir Road, Sudbury, MA 01776			
Location of Interview: Email: Tom_eagle@fsw.gov Phone (978) 579-4027.			
Notes: November 8, 2017 - Sent email to Mr. Tom Eagle and left phone message. November 9, 2017 - Mr. Eagle responded in an email that he was not aware of any land use violations or issues.			
Item	Yes	No	Comments
Has the interviewee received/read the annual IC notification/reinforcement letter from the Army?	X		IC Letter was sent in May 2017 to Ms. Herland; receipt was acknowledged in an email to James Ropp. Ms. Herland retired in September 2017. The new point of contact is Tom Eagle.
Is interviewee familiar with the land use controls imposed upon the property & documentation of these controls?	X		
Are there any pumping wells or other sources of water other than those supplied by the Town at the property?		X	
Are there any proposed plans for property sale, future development, construction or demolition activities at the property?		X	
Are there any issues with site access for monitoring and remediation?		X	
V. Response Actions			
Item	Yes	No	Comments
Were violations of the LUCs present ?		X	
Are there Response Actions necessary based on the violations?		X	
Are modifications/terminations of LUC's necessary?		X	
Have Enforcement Actions been taken during this reporting period?		X	

If any response above are "Yes", please provide comments.

Annual Land Use Control Plan Checklist for AOC 50			
IV. Interview			
Name of Interviewer: Laurie Ekes/KGS			
Name of Interviewee: Mr. Henry Woodle			
Position: Groton Ayer Realty Trust			
Office: Fitchburg Road, Ayer, MA (mailing address PO Box 353, Ayer, MA 01432)			
Location of Interview: Phone (978) 449-0100. Email: HTWoodle@gmail.com			
Notes: November 8, 2017 - sent email to Mr. Woodle. December 6, 2017 - sent follow up email. December 11, 2017 - Spoke to Mr. Woodle on the phone; he stated that there were no LUC violations in 2017.			
Item	Yes	No	Comments
Has the interviewee received/read the annual IC notification/reinforcement letter from the Army?	X		IC Letter was sent in May 2017 to Mr. Woodle.
Is interviewee familiar with the land use controls imposed upon the property & documentation of these controls?	X		Mr. Woodle inquired what needed to be done to remove the LUC restrictions on this area of the North Plume.
Are there any pumping wells or other sources of water other than those supplied by the Town at the property?		X	
Are there any proposed plans for property sale, future development, construction or demolition activities at the property?		X	
Are there any issues with site access for monitoring and remediation?		X	
V. Response Actions			
Item	Yes	No	Comments
Were violations of the LUCs present ?		X	
Are there Response Actions necessary based on the violations?		X	
Are modifications/ terminations of LUC's necessary?		X	
Have Enforcement Actions been taken during this reporting period?		X	

If any responses above are "Yes", please provide comments.

APPENDIX F
RESPONSES TO COMMENTS

U.S. ARMY RESPONSES TO MASSACHUSTTES DEPARTMEMENT OF ENVIRONMENTAL PROTECTION COMMENTS ON THE 2017 ANNUAL OPERATION AND MAINTENACE AND MONITORING REPORT AREA OF CONTAMINATION 50 FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MASSACHUSETTS July 2018

The following U.S. Army responses pertain to the Massachusetts Department of Environmental Protection (MassDEP) comments, dated 11 May 2018, on the *2017 Annual Operation and Maintenance (O&M) and Monitoring Report, Area of Contamination (AOC) 50* at the Former Fort Devens Army Installation, Devens, Massachusetts, dated March 2018.

Comment 1 – Section 2.1– For future reference, the report should note that the 2017 injection program was presented in the July 2017 injection program summary (KGS, 2017b).

Response: The second sentence of Section 2.1 has been revised to read as follows:

"*The 2017 injection event occurred from July 10-25, 2017 and was performed in accordance with the* Area of Contamination 50, 2017 Injection Program Summary *(KGS, 2017b), with exceptions described in the subsections below.*"

Comment 2 – **Section 6.0** – The report should present recommendations for the 2018 treatment program based on the results from the fall groundwater monitoring samples, or at least indicate that recommendations will be presented in a mid-year injection plan that will be submitted after the spring 2018 monitoring samples are analyzed and reviewed. Based on the sample results outlined in **Section 4.0**, it appears the 2018 treatment program should address:

- Area 1: treatment was effective; however, significant concentrations remain. Treatment similar in scope to that conducted during 2017 appears to be appropriate.
- Area 3: treatment was effective; however, remediation is not yet complete. Treatment similar in scope to that conducted during 2017 should be considered to drive remediation to completion.
- Areas 4 and 5: The increased PCE concentration reported in the sample collected from well G6M-13-04X suggests that a significant untreated zone exists between the Area 5 injection wells and the 2017 injection points located in the vicinity of well G6M-13-01X. In addition, as noted in Section 4.1.2, treatment in the area west of the Area 4 and 5 injection did not reduce the magnitude or extent of the plume that has emerged in this area since 2010 (Figure 4-3). These results suggest that remediation in this area should be completed by extending the existing Area 4 and Area 5 injection well transects northwestward beyond the limits of the plume delineated by the 2013 vertical profiling to establish treatment zones that intercept the full lateral extent of the plume.

Response: The bulleted comments on Areas 1, 3, 4, and 5 raise good points that were considered for the 2018 injection program. The 2018 injection program (KGS, June 2018) is based on the 2017, Spring 2018, as well as earlier results, of the long-term groundwater monitoring program. The 2018 injection program will include further treatment in Area 1, Area 3, and Areas 4/5, as discussed in the Army's 27 June 2018 responses to MassDEP's comments, and as approved by MassDEP on 29 June 2018.

Comment 3 – Figure 4-1, Area 1/Former Drum Storage Area – The inconsistency between the title and legend should be corrected.

Response: The inconsistency between the title and legend in Figure 4-1 has been corrected.

EPA Assessment (dated 23 August 2018) of Army Responses (dated July 2018) to EPA Comments (dated May 2018) on the 2017 Annual Operation and Maintenance and Monitoring Report Area of Contamination 50, Former Fort Devens Army Installation Devens, Massachusetts (dated March 2018)

GENERAL COMMENTS

Comment #1: Army concludes qualitatively that remedial actions are reducing groundwater concentrations of PCE and TCE. EPA appreciates that the 2017 Annual Report includes a discussion of TCE results. In the 2016 Annual Report, Army also predicted continued decreases in PCE and TCE concentrations, despite acknowledging that for five wells (G6M-07-02X, G6M-13-05X, G6M-04-02X, G6M-97-05B, and G6M-04-07X) these concentrations are not decreasing or stable. The 2017 Annual Report documents that most of these same wells are still not exhibiting decreasing concentrations of PCE. A steady decrease was noted only in G6M-07-02X, while two of the wells (G6M-04-02X and G6M-13-05X) showed increases in PCE concentration from November 2016 to May 2017 and only showed decreases after the July 2017 injections. As discussed in Army's response to Specific Comment 3 on the 2016 Annual Report, please provide a discussion of noteworthy trends in these five wells in future reports.

Army Response: Discussions of the 2017 PCE/TCE data in the five wells are provided in Sections 4.1.2 and 4.1.5, and trend graphs are provided on Figures 4-11 through 4-14. The 2018 injection plan (KGS, June 2018) includes additional treatment in the vicinity of wells G6M 07-02X, G6M-13-05X, G6M-04-02X, and G6M-97-05B. As noted in the 2017 Annual Report, PCE concentrations at G6M-04-07X decreased since 2016 (and both PCE and TCE decreased again during the Spring 2018 sampling event as will be reported in the 2018 Annual Report). As groundwater treatment and monitoring continues, any noteworthy trends at these wells will be further discussed in future Annual Reports.

EPA Assessment: Response accepted; these five wells are worthy of continued attention and discussion.

Comment #2: EPA agrees in general that the remedies applied in AOC 50 have succeeded in reducing PCE concentrations in many portions of the plume and have succeeded in segmenting the plume as illustrated by historical iso-concentration contour maps (Figures 4-2 through 4-5). However, the contours optimistically suggest definitive plume delineation in some areas where the contamination extent may still be unknown.

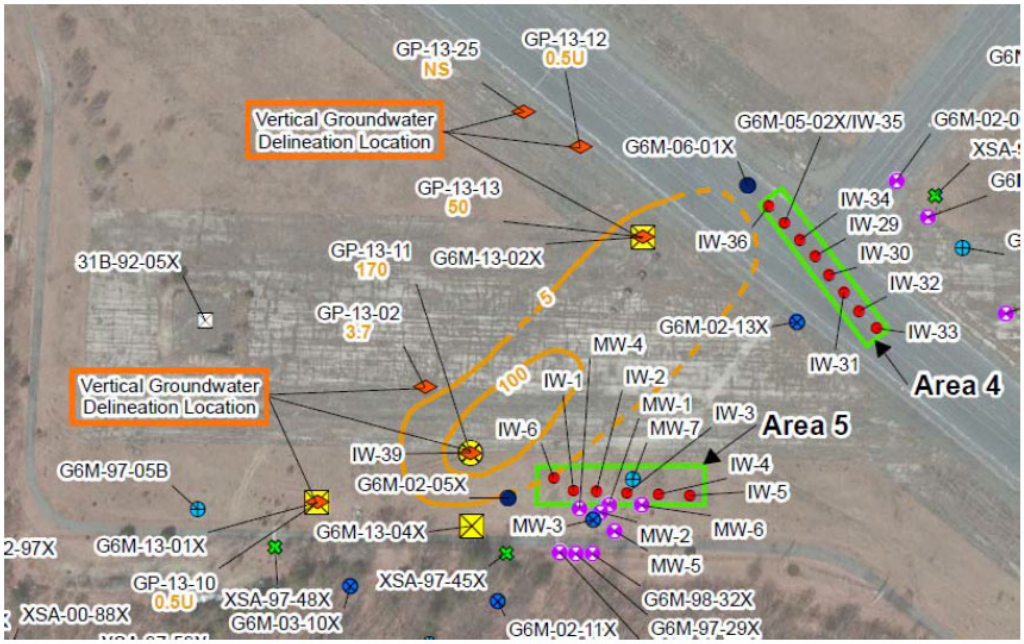
The 2014 and 2015 data showed that significant contamination either remained or was not fully characterized along the western edge of Area 1 and Transects 4 and 5. Based on the 2016 and 2017 data (including Army responses to EPA comments), the western edge of the plume is likely sufficiently characterized within Area 1. However, the location of the western plume edge remains uncertain at Areas 4 and 5. Within the November 2017 LTMMP, Army documented planned installation of new monitoring wells A and B within this area. If these wells have not yet been installed, please provide a schedule for installing and sampling these new wells. In addition, please note that as discussed in EPA's July 24, 2017 comments on the Draft LTMMP, EPA remains concerned that the two new wells may not be sufficient to define the western edge of the plume and that one or two additional wells may be needed in the future.

Army Response: A work plan for installing new wells west of Areas 4/5 was submitted to the regulatory agencies on 28 June 2018 for review, based on discussions with the agencies. The Army will address further delineation of the western edge of the plume in the future, if needed.

EPA Assessment: Response accepted; EPA has reviewed and commented upon the FSP Addendum dated June 28, 2018. The new wells should help delineate the plume boundary west of Transects 4 and 5.

Comment #3: The contour map presented in Figure 4-5 shows several instances of contours that are not justified by the data that are shown. This issue was discussed at length in EPA's July 20, 2017 comments on the Draft 2016 Annual Report and EPA October 2, 2017 review of Army's Response to Comments on the 2016 Annual Report. Within the Draft 2017 Annual Report, the 5 µg/L contour on Figure 4-5, along the northwest edge of the plume near Areas 4 and 5, is still not supported by any data points shown outside the 5 µg/L contour line. If other data points were used for contouring, they should be shown on the maps with data presented on the figure, discussed in the text, or provided in an appendix, similar to the Appendix provided in the Final 2016 Annual Report, containing 2013 vertical profiling data. Please address.

Army Response: As discussed in Section 4.1.2 "The plume contours are based on current and historic data presented in previous annual reports, groundwater flow patterns, and groundwater fate and transport processes." The western extent of the plume west of Areas 4 and 5 as shown on Figure 4-5 is supported by 2013 data (see Figure 4-6 and Appendix A of the 2013 Annual Report) as well as current and historic groundwater samples collected upgradient of this area, an estimation of concentrations gradients from G6M-13-02X and G6M-97-05B, from numerous rounds of groundwater level monitoring, and an understanding of groundwater fate and transport processes. Appendix A of the 2013 Annual Report presented the 2014 Performance Monitoring Data Report (Sovereign and HGL, June 2014) which included the following map showing PCE concentrations collected Sept/Oct 2013 west of Areas 4/5 and helped to define the western edge of the plume.



See also the response to General Comment 3. A work plan for installing additional wells west of Areas 4/5 was submitted to the regulatory agencies on 28 June 2018 for review.

EPA Assessment**:** The map that accompanies Army's comment response is helpful, as will be the work proposed in the FSP Addendum. EPA believes that the work proposed in the FSP Addendum will be very helpful in addressing the contouring questions along the west edge of the plume. Results of sampling the two new wells may add confidence in the existing contouring and plume edge, may prompt a re-delineation of the contours, or may indicate that additional wells are needed.

Comment #4: Based on a "hot spot" of elevated concentrations in monitoring well G6M-07-02X, EPA requested MiHPT (or other high-resolution site characterization) in the former drum storage area (FDSA) in comments on the 2015 and 2016 Annual Reports. In response, Army stated that it was planning five DPT injections in this area in 2017, and "Based on subsequent monitoring results of the effectiveness of the DPT injections, the Army will assess the need and value of conducting additional investigations in the FDSA."

PCE concentrations in FDSA well G6M-07-02X rebounded from 482 µg/L in 2015 to 1,400 µg/L in June 2016 and 3,200 µg/L in November 2016, but then declined to 1,800 µg/L in May 2017 and to 910 µg/L in October 2017, after the July 2017 injections. Since these results are encouraging, EPA agrees that further MiHPT or other high-resolution investigations are not needed at this time. However, the previous history of fluctuating concentrations in this well, in combination with the fact that wells cited by Army (response to EPA's Specific Comment 9 on the Draft 2017 LTMMP) as "appropriately screened to monitor PCE concentrations migrating from (the FDSA)" are actually screened significantly deeper than the injection depth, indicate that it is premature to conclude that the FDSA is adequately characterized or that future rebounds will not occur. Note that MiHPT and/or other investigations of the FDSA may be needed in the future.

Army Response: Comment noted.

Comment #5: EPA appreciates the inclusion of new cross section C-C' through the Source Area, which provides an illustration of the two remaining areas of high PCE concentration in Area 1 and the relative depths of the PCE occurrences and the geologic formation characteristics. Please include the depths at which injections occurred in July 2017 on all three cross sections by shading in the sections or brackets on the Y-axes.

Army Response: The 2017 injections were added to Figures 4-6, 4-7, 4-8, and 4-10.

EPA Assessment: Response accepted. The addition of injection intervals to the cross-sections is very helpful.

SPECIFIC COMMENTS

Comment #1: Page 2-1, Section 2.1.1 – The text states that of the 16 direct injection locations in the Building 3803/3840 area, 7 injections encountered refusal 5 to 7 feet shallower than the planned injection depth. This information is significant enough to guide future injection plans. Please include injection depths for locations on/nearby cross section C-C' on Figure 4-15.

Army Response: The injections were depicted on cross section C-C' (Figure 4-10) and show the depth of each injection. The injection locations were also added to Figure 4-15.

EPA Assessment: Response accepted. In future reports, it would be useful to show, on the cross section and on a map, such as Figure 4-15, the locations where refusal was encountered shallower than the planned injection depth.

Comment #2: Page 4-1, Section 4.1.1, 2nd paragraph – The second sentence references the IRZ and ERD treatment zones. A figure that labels and locates these features should be referenced here.

Army Response: The following text was added: *"IRZs are formed as a result of the ERD treatment, the placement of which is shown on Figure 2-1."*

EPA Assessment: Response accepted.

Comment #3: Page 4-2 and 4-3, Section 4.1.2 – Army should explain that comparing the historical contour maps should be done with caution and that the actual contours can vary significantly based on the monitoring wells that were available and that were sampled at the time. Also, interpretations by different Army consultants may affect the depicted plume extent and contouring details. For example, Figure 4-3 likely provides an unrealistically optimistic view of plume shrinkage as of 2010. On the other hand, Figure 4-4 may suggest concentration rebound and plume expansion as of 2015. However, the changes in contouring may be due primarily to changes in the number and location of wells sampled. Please address.

Army Response: The following text was added at the end of the first paragraph in Section 4.1.2: *"However, it should be noted that the interpretation of plume contours is affected by the distribution of data used to construct the contours, which changes over time, specifically the monitoring well network has changed from 2004 (Figure 4-2) to 2017 (Figure 4-5). The remediation of the groundwater plume at AOC 50 will continue to be monitored over time to verify that remedial goals are being achieved across the site."*

EPA Assessment: The added text is helpful; response accepted.

Comment #4: Page 4-3, Section 4.1.2, 4th bullet – Army points out the increase in PCE concentration in G6M-13-04X in Area 5 in 2017. This well east of the location of the 2017 direct push injections, but appears to be within the vicinity of permanent injection wells IW-1, IW-6 and IW-39. EPA suggests that Army either inject into these permanent injection wells or use direct push to target this area during the next round of injections. Please address.

Army Response: Per the AOC 50 Long-Term Monitoring and Maintenance Plan (2017), the injection plan will be based on the results of the ongoing long-term groundwater monitoring program. The 2018 injection plan (KGS, June 2018) is based on review of the Spring 2018 monitoring well sampling results along with other older data. The 2018 injection program includes further treatment in the area of G6M-13-04X

EPA Assessment: EPA recently reviewed the Army's "AOC 50, 2018 Injection Program Summary", dated June 11, 2018. Army's proposed injection plan appropriately targets the area immediately upgradient of G6M-13-04X.

Comment #5: Page 4-3, Section 4.1.2, 5th bullet – The text discusses that the wells with the highest PCE levels have seen decreases in concentrations and provides examples. However, PCE in well G6M-97-05B increased from 140 µg/L to 190 µg/L and then concentrations went back to 140 µg/L, displaying fluctuating conditions (not decreases). This well should be discussed in a separate sentence for clarity. Please address.

Army Response: The text has been revised to read as follows:

"The PCE concentrations in this portion of the plume have decreased in 2017 in G6M-13-02X from 84 µg/L (November 2016) to 79 µg/L (May 2017) and to 65 µg/L (October 2017) (Figure 4-14). The highest PCE concentrations in this portion of the plume at G6M-97-05B increased slightly from November 2016 (140 µg/L) to May 2017 (190 µg/L) and then decreased in October 2017 (140 µg/L)."

EPA Assessment: Revised text addresses the comment.

Comment #6: Page 4-4, Section 4.1.2, 3rd bullet – Army presents a detailed discussion of TCE trends and incomplete degradation in G6M-02-13X, located downgradient of the Area 4 transect. Army theorizes that lack of sufficient carbon may be the reason for the "minimal degradation." EPA notes that the well is downgradient of the part of the Area 4 transect that was not used for injection in 2017 (Figure 2-1). The three permanent injection wells that were used during the 2017 round and the direct injection locations are located northwest (side-gradient) of G6M-02-13X. EPA recommends that the next injection round include all of the permanent Area 4 injection wells, in addition to northwestern locations.

Army Response: Per the AOC 50 Long-Term Monitoring and Maintenance Plan (2017), the injection plan is based on the results of the ongoing long-term groundwater monitoring program. The 2018 injection plan (KGS, June 2018) is based on review of the Spring 2018 monitoring well sampling results along with other older data. The 2018 injection program includes further treatment in Area 4 by G6M-02-13X.

EPA Assessment: EPA recently reviewed the Army's "AOC 50, 2018 Injection Program Summary", dated June 11, 2018. Army's proposed injection plan appropriately targets the area immediately upgradient of G6M-02-13X. However, in comments on the Injection Plan, EPA expressed concern that well G6M-13-02X, located west of the Area 4 transect, has much higher PCE levels and was not targeted by planned 2018 injections.

Comment #7: Page 4-5, Section 4.1.3, 2nd and 3rd paragraphs – In the second paragraph, Army discusses the occurrence of arsenic above the MCL, including the eastern portions of Areas 4 and 5. Figure 4-15 shows three such wells in the eastern portion of Area 5, G6M-02-11X, G6M-02-12X, and G6M-03-10X. However, several other nearby, downgradient wells (e.g. G6M-03-09X, G6M-04-05X, G6M-03-08X) show arsenic below the MCL or non-detect. EPA agrees that G6M-03-09X, G6M-04-05X, G6M-03-08X appropriately monitor arsenic concentrations downgradient from G6M-02-11X and G6M-02-12X, and show the aquifer returning to aerobic

conditions (over a relatively short distance). However, elevated arsenic concentrations are also noted for G6M-03-10X and expected in G6M-97-05B (following the 2017 direct push injections upgradient of G6M-97-05B). There are no monitoring wells in the nearby downgradient vicinity of these areas to ensure the aquifer's return to aerobic conditions and decreased arsenic concentrations.

In addition, the end of the third paragraph Army refers to Area 5 downgradient wells XSA-12-95X, XSA-12-96X, XSA-12-97X, XSA-12-98X showing arsenic concentrations below the MCL in shallow groundwater. Based on well construction details in Table 4-1 and the cross section provided in Figure 4-8, all of these wells, with the exception of XSA-12-98X, do not appear to be shallow wells. This discussion should be revised appropriately.

Note, EPA intends to closely monitor dissolved arsenic concentrations downgradient of Area 5. For efficiency, it may be possible to gain further additional arsenic data from adding wells installed as part of the upcoming RI for PFAS to the AOC 50 LTM program.

Army Response: There are numerous monitoring wells downgradient of the treatment areas in Area 4 and 5 to monitor arsenic concentrations.

The text has been revised to read as follows:

"Groundwater monitoring performed at the Area 5 downgradient well locations, XSA-12-97X, XSA-12-96X, XSA-12-98X, and XSA-12-95X indicates dissolved arsenic concentrations in groundwater close to the Nashua River are below the regulatory limit of 10 µg/L. Also, groundwater monitoring performed at the Area 5 downgradient well locations G6M-02-06X and G6M-02-07X, indicates dissolved arsenic concentrations in shallow groundwater close to the Nashua River are below the regulatory limit of 10 µg/L."

EPA Assessment: The new text inserted by Army is useful and adds to the discussion. The proximity of wells with elevated arsenic (e.g. G6M-02-12X) to wells with low arsenic (e.g. G6M-03-09X) remains unexplained. EPA hopes these phenomena will be assessed and discussed in future reports.

Also, the three wells listed by Army as examples of shallow wells downgradient of Area 5 injections (G6M-04-05X, G6M-04-06X, and G6M-02-06X) are screened in the range of 30 - 60 feet below the water table in this area. Similarly, in the same report paragraph (third from last paragraph in Section 4.1.3), in the last sentence, G6M-02-06X and G6M-02-07X are reported as showing arsenic levels below 10 ug/L in shallow groundwater, even though these wells are screened greater than 20 feet below the water table. This part of Comment #7 has not been addressed.

Comment #8: Page 4-5, Section 4.1.3, last paragraph – Army predicts that arsenic concentrations will decrease in Area 2 and eastern portions of Areas 4 and 5. Please evaluate this prediction in future Annual Reports.

Army Response: Arsenic concentration trends will continue to be evaluated in future Annual Reports.

EPA Assessment: Response accepted.

Comment #9: Page 4-6, Section 4.1.4, 2nd paragraph – Army documents methane increases in G6M-07-02X and predicts these will continue as biodegradation continues in this area. Please evaluate this prediction in future Annual Reports.

Army Response: Contaminant concentrations and biodegradation at G6M-07-02X will continue to be evaluated in future Annual Reports.

EPA Assessment: Response accepted.

Comment #10: Page 4-6, Section 4.1.4, 5th paragraph – Army discusses remaining PCE concentrations at G6M-13-02X, located just downgradient of direct injection locations for Area 4. Army predicts future increases in methane and TOC as a result of the July 2017 injections. As shown on Figure 2-1, the well is only a short distance from the injection points. Please explain why the effects of the July injection had not yet been evidenced in the well by October 2017. EPA notes that injections in this area occurred at depths between 105 and 125 feet below ground surface (ft bgs), while the G6M-13-02X well is screened from 115 to 125 ft bgs. Therefore, injection depths appear to have been appropriate.

Army Response: The injections were conducted approximately 50 feet upgradient of G6M-13-02X. It is not anticipated that the injected material traveled sufficiently downgradient in the three months after the injection event to effect a change in the groundwater at G6M-13-02X. Based on preliminary review of results from other monitoring wells located downgradient of injection wells at AOC 50, a range of travel times for the effects of the ERD treatment (15 to 50 ft/year) were observed.

The following text will be added before the last sentence of the 5th paragraph on page 4-6:

"The July 2017 injections were conducted approximately 50 feet upgradient of G6M-13-02X. It is not anticipated that the injected material traveled sufficiently downgradient in the three months after the injection event to effect a change in the groundwater at G6M-13-02X."

EPA Assessment: Response accepted. By the time that 2018 sampling events occur, sufficient time should have elapsed for the injected material to travel to G6M-13-02X, if Army's theory that 3 months was insufficient travel time is correct. However, spring 2018 data, transmitted to EPA on May 21, 2018, indicated that PCE in G6M-13-02X had only dropped from 65 ug/L in autumn 2017 to 58 ug/L in spring 2018. An explanation other than insufficient travel time may be needed. In next year's report, please examine the latest data and discuss the implications.

Comment #11: Page 4-6, Section 4.1.4, last paragraph – Army discusses the locations in Areas 4 and 5 with the highest remaining PCE concentrations (and associated low methane and TOC concentrations). EPA appreciates the inclusion of data to back up the statements. Army predicts that "methane and TOC concentrations are anticipated to increase as biodegradation increases in the area due to the July 2017 injections." This prediction should be assessed in future Annual Reports. EPA urges caution regarding these expectations, however. The four wells listed by Army as examples are in different positions relative to 2017 injection locations. For example, G6M-04-07X appears to be obliquely side gradient of 2017 injection transects, and therefore, it is

unclear whether this well will ever show impacts from the 2017 injections. Other wells (G6M-13-02X and G6M-97-05B) are immediately downgradient from 2017 injection locations, so that effects might already be expected (as of October 2017).

Army Response: Biodegradation indicators within and downgradient of the treatment areas will continue to be evaluated in future Annual Reports. The last paragraph in Section 4.1.4 has been revised to read as follows:

"Currently the portions of the plume in Area 5 with the highest PCE concentrations have low TOC concentrations. Some of these locations have elevated, but not very high, concentrations of methane indicating that the injections may be causing biodegradation upgradient of those areas. Organic carbon may migrate to these wells given more time (i.e., with greater travel time) or after future injections. CVOCs are expected to decrease as biodegradation takes place in the areas around and downgradient of the injection points. Methane, TOC, and CVOCs will continue to be monitored to assess biodegradation in these areas."

EPA Assessment: Response accepted; new text accepted. However, much of the strike-out material contains good information; EPA expressed appreciation, in Comment #11, of the inclusion of data (this had been requested in comments on the 2016 Annual Report). EPA suggests that much of the strike-out material should be restored and used, along with the new text.

Comment #12: Page 4-7, Section 4.1.5, second paragraph – EPA agrees with Army's conclusion that additional investigation in the G6M-07-02X area is not warranted at this time, but believes it is premature to make this conclusion generally. This area should be monitored and assessed carefully in the future, especially if rebound occurs.

Army Response: Comment noted. This area will continue to be monitored in the future.

EPA Assessment: Response accepted.

Comment #13: Page 6-1, Section 6.0, 2nd sentence – As currently written, this sentence is unclear because it seems to imply that 64 different wells were sampled. The highest number of wells sampled in 2017 was 45 wells, in the fall round. Please address.

Army Response: The text has been revised to read as follows:

"LTM activities included semiannual groundwater sampling resulting in the collection of 64 samples across both events (Area 1 – 26 samples, Area 2 – 4 samples, Area 3 – 6 samples, Area 4 – 4 samples, and Area 5 – 24 samples)."

EPA Assessment: Response accepted.

Comment #14: Figure 1-2 – In the Legend, for the red Injection Well entry, EPA suggests adding "Prior to 2014." With the passage of time or for new readers unfamiliar with site history, it may not be clear that these wells preceded the ones installed in January 2014. This change should be carried through all figures that show injection wells. It is acceptable to EPA to wait until the 2018 Annual Report before making this change.

Army Response: Comment noted. The cited legend descriptions will be revised for the 2018 Annual Report.

EPA Assessment: Response accepted.

Comment #15: Figure 1-3 – In this figure, which shows a close-up of the Source Area, please label the building names as well as the numbers. Building names are referenced in the report text.

Army Response: The building names will be added to Figure 1-3 for the draft final Annual Report.

EPA Assessment: Response accepted.

Comment #16: Figure 4-1 – In the Area 1 graph (upper left of the figure), there is a discrepancy between the header and the legend. The header lists G6M-04-13X, but the legend labels G6M-13-05X. Please correct this inconsistency.

Army Response: Figure 4-1 has been corrected.

EPA Assessment: Response accepted.

Comment #17: Figure 4-5 – In Area 5, the data shown do not justify closing the 5 µg/L contour line to the west of G6M-13-04X. EPA suggests that given the data presented, the 5 µg/L contour line should simply be drawn as a southeastern bulge to the main plume in this area. In addition, the data shows that there appears to be a volume of the subsurface that is in between the areas downgradient of the Area 5 permanent injection wells and the 2017 direct injection locations that needs future treatment.

Army Response: Downgradient and cross-gradient location G6M-03-10X is along a flow path that is west of G6M-13-04X. The history of non-detect and PCE concentrations below the MCL at G6M-13-10X suggest flow path of groundwater with non-detect or PCE concentrations below the MCL west of G6M-13-04X. Based on the fluctuations at G6M-13-04X (PCE concentrations of 40 µg/L Oct. 2017, non-detect May 2017, 4.9 µg/L Nov. 2016) the PCE detected at G6M-13-04X does not appear to be part of a larger area of continuous PCE above the MCL. Based on those observations, the area of PCE concentrations above the MCL at G6M-13-04X was not shown as connected to the larger area of the PCE plume. In accordance with the updated AOC 50 LTMMP (KGS, October 2017), G6M-13-10X will continue to be monitored annually for VOCs and metals.

Per the AOC 50 LTMMP, the injection plan is based on the results of the ongoing long-term groundwater monitoring program. The 2018 injection plan (KGS, June 2018) is based on review of the Spring 2018 monitoring well sampling results along with other older data. The 2018 injection program includes further treatment in the areas of G6M-13-04X and G6M-97-05B.

EPA Assessment: EPA assumes that in the second and last sentences of the first response paragraph, Army means “G6M-03-10X” instead of “G6M-13-10X”, as typed. If this is the case, EPA appreciates and accepts Army’s rationale for contouring the PCE in this area as a separate occurrence rather than a southeastward bulge of the main plume. However, EPA also believes

that the latter scenario is possible and that either interpretation is allowed by available data. Future monitoring may favor one interpretation or the other.

The 2018 Injection Plan, recently reviewed by EPA, appears adequate to cover the area in question.

Comment #18: Figure 4-10 – New cross section C-C' is very helpful. Please show the depths at which injections occurred within the two portions of Area 1.

Army Response: The injections locations have been added to Figure 4-10.

EPA Assessment: EPA appreciates that the injection locations have also been added to Figure 4-8.

Comment #19: Figure 4-15 – Please show the 2017 injection locations on this figure (green rectangles and direct injection locations). Also, the IW-17D data box needs an arrow pointing to the well location. Please address.

Army Response: The ERD treatment areas have been added to Figure 4-15 and an arrow was added connecting the IW-17D data box to the well location.

EPA Assessment: Response accepted.