FINAL
ABBREVIATED
2013 LONG-TERM MONITORING REPORT
FOR
AIR FORCE PLANT 59
JOHNSON CITY, NEW YORK

Contract Number FA8903-10-D-8596
Task Order: 0080

Project Number:
ACHQ20135001
CDRL A001C

Prepared for

Air Force Civil Engineer Center

Prepared by

HydroGeoLogic, Inc.

April 2014

HGL
HydroGeoLogic, Inc

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LIST OF ACRONYMS AND ABBREVIATIONS

AFCEC	Air Force Civil Engineer Center
AFP 59	Air Force Plant 59
cis-1,2-DCE	*cis*-1,2-dichloroethene
COPC	chemicals of potential concern
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
FSP	Field Sampling Plan
HGL	HydroGeoLogic, Inc.
LTM	long-term monitoring
µg/L	micrograms per liter
MCL	maximum contaminant level
ND	non-detect
ng/L	nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
PCE	tetrachloroethene
TAL	Test America Laboratory
1,1,1-TCA	1,1,-trichloroethane
TCA	trichloroethane
TCE	trichloroethene
trans-1,2-DCE	*trans*-1,2-dichloroethene
USEPA	U.S. Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

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1.0 INTRODUCTION

In 2013, HydroGeoLogic, Inc. (HGL) completed the long-term monitoring (LTM) activities at Air Force Plant 59 (AFP 59) in Johnson City, New York (Figure 1). The Air Force Civil Engineer Center (AFCEC) contracted HGL to complete the LTM activities.

The objectives of this abbreviated monitoring report are to summarize:

- The purpose, collection procedures, and results of the LTM activities; and
- The conclusions and recommendations based on the results of the LTM activities.

2.0 LONG-TERM MONITORING ACTIVITIES

2.1 PURPOSE OF THE LONG-TERM MONITORING ACTIVITIES

Based on the conclusions presented in the *Final Remedial Investigation Report* (Earth Tech, 1996) and recommendations made by the New York State Department of Environmental Conservation (NYSDEC), it was determined that volatile organic compounds (VOC) represent the only chemicals of potential concern (COPC) in the groundwater at AFP 59. The LTM objectives for this project were to sample and evaluate VOC levels in groundwater that are above current maximum contaminant level (MCL) standards.

Groundwater samples were collected using the procedures found in the AFP 59 *Final Field Sampling Plan (FSP) Addendum* (HGL, 2014a). Samples were collected and analyzed at Test America Laboratory (TAL) for VOCs (U.S. Environmental Protection Agency [USEPA] Method 8260B) and 1,4-dioxane (USEPA Method 8270C). The LTM included sampling the following monitoring wells: SW1, DW1, SW3, DW3, SW4, SW7, BM-121, URS-2D, URS-2S, URS-3D, and URS-5S. The LTM additionally included sampling municipal well JC2 (before treatment) and the air stripper (after treatment). Monitoring wells SW1 and DW1 represent upgradient (background) wells, and monitoring wells SW3 and DW3 represent downgradient wells. Five monitoring wells (BM-121, URS-2D, URS-2S, URS-3D, and URS-5S) and one municipal well (JC2) are located off site, to the west and south of the site.

2.2 PROCEDURES USED FOR THE LONG-TERM MONITORING ACTIVITIES

Sampling activities followed protocols presented in the *Final Work Plan Base Long-Term Monitoring at AFP 59* (HGL, 2014b) and the *Final Field Sampling Plan Addendum* (HGL, 2014a). HGL collected groundwater samples from six on-site AFP 59 monitoring wells (SW1, DW1, SW3, DW3, SW4, and SW7); five off-site monitoring wells (BM-121, URS-2D, URS-2S, URS-3D, and URS-5S); and one municipal well (JC2) in October 2013. All of the samples collected were analyzed for VOCS by USEPA Method SW8260B and 1,4-dioxane using USEPA Method SW8270C.

All the wells were sampled using the micropurge methodology, which is a low flow-rate monitoring well purging and sampling method that induces laminar (non-turbulent) flow in the immediate vicinity of the sampling pump intake, thus drawing groundwater directly from the sampled aquifer horizontally through the monitoring well screen and into the sampling device. Purging of the monitoring wells was performed to evacuate water that had been stagnant in the monitoring wells, thereby obtaining a sample that is representative of the aquifer. The temperature, pH, specific conductivity and turbidity were also measured and recorded on the monitoring well sampling forms during purging. The field forms and calibration forms are appended as Attachment 1.

2.3 ANALYTICAL RESULTS FROM THE LONG-TERM MONITORING ACTIVITIES

The following paragraphs discuss the VOCs that were detected in the groundwater samples, including those samples collected from both on-site and off-site monitoring wells. The analytical results for groundwater samples collected from monitoring wells installed in the shallow and deep zones of the aquifer are discussed below. The VOCs detected in groundwater samples are illustrated on Figure 2. The analytical results for all groundwater samples collected during the October 2013 sampling event are summarized in Table 1. The laboratory report is appended as Attachment 2.

2.3.1 Shallow Zone of the Aquifer

VOCs were detected in the groundwater samples collected from on-site monitoring wells SW3, SW4, and SW7, and off-site monitoring wells URS-2S and URS-5S (Refer to Figure 2). Chlorinated hydrocarbons were the only detected VOCs in the samples collected from the shallow zone of the aquifer in October 2013. VOCs and 1,4-dioxane were not detected in the groundwater samples collected from on-site monitoring well SW1 or off-site monitoring well BM-121.

The following maximum concentrations were detected in the groundwater samples collected from on-site monitoring well SW3 during the October 2013 event: trichloroethene (TCE) at 0.70 F micrograms per liter (µg/L) and *cis*-1,2-dichloroethene (*cis*-1,2-DCE) at 1 µg/L. The following maximum concentrations were detected in the groundwater samples collected from on-site monitoring well SW4 during the October 2013 event: 1,1,1- trichloroethane (1,1,1-TCA) at 1.8 µg/L; 1,1-dichloroethane (1,1-DCA) at 0.77 F µg/L; 1,1-dichloroethene (1,1-

DCE) at 0.26 F; *cis*-1,2-DCE at 2.6 µg/L; tetrachloroethene (PCE) at 0.39 F µg/L; and TCE at 6.6 µg/L. The following maximum concentrations were detected in the groundwater sample collected from on-site monitoring well SW7 during October 2013 event: 1,1,1-TCA at 1.2 µg/L; 1,1-DCA at 0.93 F µg/L; PCE at 0.27 F µg/L; *cis*-1,2-DCE at 7 µg/L; and TCE at 2.5 µg/L. The following maximum concentrations were detected in the groundwater sample collected from off-site monitoring well URS-2S during the October 2013 event: 1,1-DCA at 1.1 µg/L; 1,1,1-TCA at 1.6 µg/L; TCE at 2.3 µg/L; and *cis*-1,2-DCE at 1.2 µg/L. The following maximum concentrations were detected in the groundwater sample collected from off-site monitoring well URS-5S during the October 2013 event: 1,1,1-TCA at 0.50 F µg/L; and TCE at 0.63 F µg/L.

Exceedances occurred above the New York State Groundwater Quality Standard of 5 µg/L for *cis*-1,2-DCE at well SW7. An exceedance also occurred at well SW4 for TCE. These results are highlighted on Figure 2.

During the October 2013 sampling effort, 1,4-dioxane was sampled in the four on-site and two off-site shallow monitoring wells. 1,4-dioxane was detected in monitoring wells SW4, SW7, and URS-2S at concentrations of 810 F nanograms per liter (ng/L), 430 F ng/L, and 1,800 F ng/L, respectively. 1,4-dioxane was not detected in monitoring wells SW1, SW3 and BM-121.

2.3.2 Deep Zone of the Aquifer

VOCs were detected in the groundwater samples collected from on-site monitoring well DW3 and the off-site monitoring wells URS-2D and URS-3D (Refer to Figure 2). Chlorinated hydrocarbons were the only VOCs detected in the samples collected from the deep zone of the aquifer. VOCs were not detected in the groundwater samples collected from monitoring well DW1. The only VOCs detected in monitoring well DW3 were *cis*-1,2-DCE at 57 µg/L; 1,1-DCA at 0.32 F µg/L; and vinyl chloride (VC) at 0.18 F µg/L. The following maximum concentrations were detected in the groundwater sample collected from the off-site monitoring well URS-2D: 1,1-DCA at 0.21 F µg/L; *cis*-1,2-DCE at 62 µg/L; and trans-1,2-Dichloroethene at 0.17 F µg/L. Additionally, the following maximum concentrations were detected in the groundwater sample collected from the off-site monitoring well URS-3D: 1,1,1-TCA at 0.99 F µg/L; TCE at 1.7 µg/L, and *cis*-1,2-DCE at 0.90 F µg/L. *Cis*-1,2-DCE exceeded the New York State Groundwater Quality Standard of 5 µg/L in on-site well DW3 and off-site well URS-2D. Also, 1,4-dioxane was sampled in both the on-site and off-site deep monitoring wells. 1,4-dioxane was only detected in monitoring wells DW3 at 2,700 nanograms per liter (ng/L); URS-2D at 7,400 ng/L; and URS-3D at 1,800 F ng/L.

2.3.3 Municipal Well and Air Stripper

VOCs were detected in the untreated water sample collected from a sample port at municipal well JC2. Detected VOCs constituents at JC2 included 1,1,1-TCA (0.36 µg/L F); TCE (0.48 µg/L F); and *cis*-1,2-DCE (0.29 µg/L F). 1,4-dioxane was not detected in water sampled

from JC2. The treated water sample, after the air stripper, was below detection limits for 1,4-dioxane and all VOCs constituents.

2.4 TREND ANALYSIS

Table 2 presents concentrations of the most commonly detected chlorinated hydrocarbons in groundwater at AFP 59 over time. Only monitoring wells that were sampled as part of the groundwater monitoring program are included in the table.

In the groundwater samples collected from the shallow monitoring wells during the October 2013 sampling event, concentrations of the chlorinated hydrocarbons in monitoring well SW3 remained relatively constant (TCE) or increased slightly (*cis*-1,2-DCE) when compared to the previous sampling event in August 2012. The concentration of *cis*-1,2-DCE increased from the August 2012 sampling event; however, the concentration detected in October 2013 was well below the New York State Groundwater Effluent Limitations Class GA of 5 µg/L.

The concentrations of the chlorinated hydrocarbons in monitoring well SW4 remained relatively constant, with only moderate variation in TCE concentrations when compared to the August 2012 sampling event. TCE concentrations decreased from 11 µg/L in August 2012 to 6.6 µg/L in October 2013. The concentrations of 1,1-DCE (non-detect [ND] to 0.26 F µg/L); *cis*-1,2-DCE (2.3 µg/L to 2.6 µg/L); and TCA (0.66 µg/L to 1.8 µg/L) each increased during the October 2013 sampling event. The concentration of 1,1-DCA slightly decreased in the October sampling event (0.64 F to ND) as compared to the August 2012 sampling event.

Concentrations of chlorinated compounds at SW7 generally showed a decrease during the October 2013 sampling event relative to the August 2012 sampling event. The concentrations of *trans*-1,2-DCE (0.21 F µg/L to ND); *cis*-1,2-DCE (44 µg/L to 7 µg/L); TCE (9.9 µg/L to 2.5 µg/L); VC (1.2 µg/L to ND); and TCA (2.0 µg/L to ND) each decreased based on the October 2013 sampling event. Concentrations of 1,1-DCE remained relatively constant based on a comparison of the October 2013 (0.93 F µg/L) and August 2012 (0.65 µg/L) analytical data sets.

In the groundwater sample collected from deep monitoring well DW3 during the October 2013 sampling event, the concentrations of chlorinated hydrocarbons generally either remained below detection limits (TCA, TCE and *trans*-1,2-dichloroethene [*trans*-1,2-DCE]) or showed very minor increases (VC, 1,1-DCE and *cis*-1,2-DCE) or decreases (1,1-DCA). VOCs were not detected in the groundwater sample collected from deep monitoring well DW1 and shallow monitoring well SW1. These results are consistent with previous sampling events.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Although VOC concentrations in the shallow monitoring wells have generally decreased since August 2012, concentrations of *cis*-1,2-DCE continued to exceed the New York State Groundwater Quality Standard of 5 µg/L in well SW7. Additionally, the concentration of TCE exceeded the New York State Groundwater Quality Standard of 5 µg/L during the

October 2013 sampling event in monitoring well SW4. Last, groundwater concentrations detected in off-site shallow monitoring well URS-2S and URS-5S did not exceed the New York State Groundwater Quality Standard of 5 µg/L for chlorinated compounds.

In the deep monitoring wells, *cis*-1,2-DCE was the only contaminant that had concentrations exceeding the New York State Groundwater Quality Standard of 5 µg/L. Monitoring well DW3, located on the AFP 59 boundary downgradient of the suspected source, and monitoring well URS-2D, located at a downgradient, off-site location, exceeded the New York State Groundwater Quality Standard for *cis*-1,2-DCE during the October 2013 groundwater sampling event.

Water samples collected from both the municipal well JC2 and after the air stripper (Sample 59JCEFFWG1 IN Table 1) were below New York State Groundwater Quality Standards for all VOCs constituents.

Based on the results of the LTM activities, groundwater exceeding the New York State Groundwater Quality Standards is migrating off of AFP 59 property in the deep monitoring wells. Additional groundwater monitoring is recommended to monitor the migration of contaminants off site.

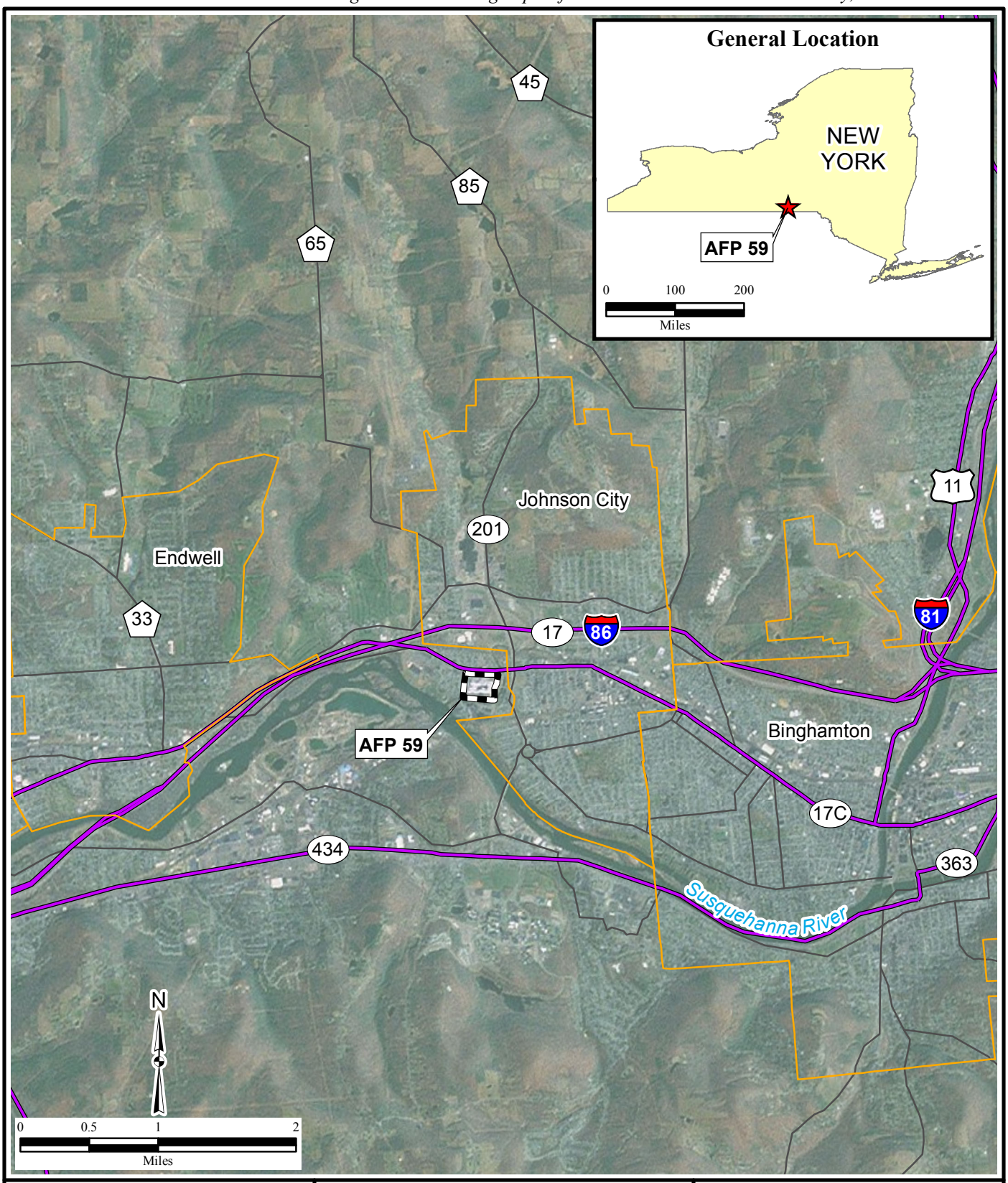
4.0 REFERENCES

Earth Tech, 1996. *Installation Restoration Program - Final Remedial Investigation Report, Air Force Plant 59*.

HydroGeoLogic, Inc. (HGL), 2014a. *Final Field Sampling Plan Addendum, Basewide Long-Term Monitoring at Air Force Plant 59, Johnson City, New York*. January.

HGL, 2014b. *Final Work Plan, Basewide Long-Term Monitoring at Air Force Plant 59, Johnson City, New York*. January.

FIGURES



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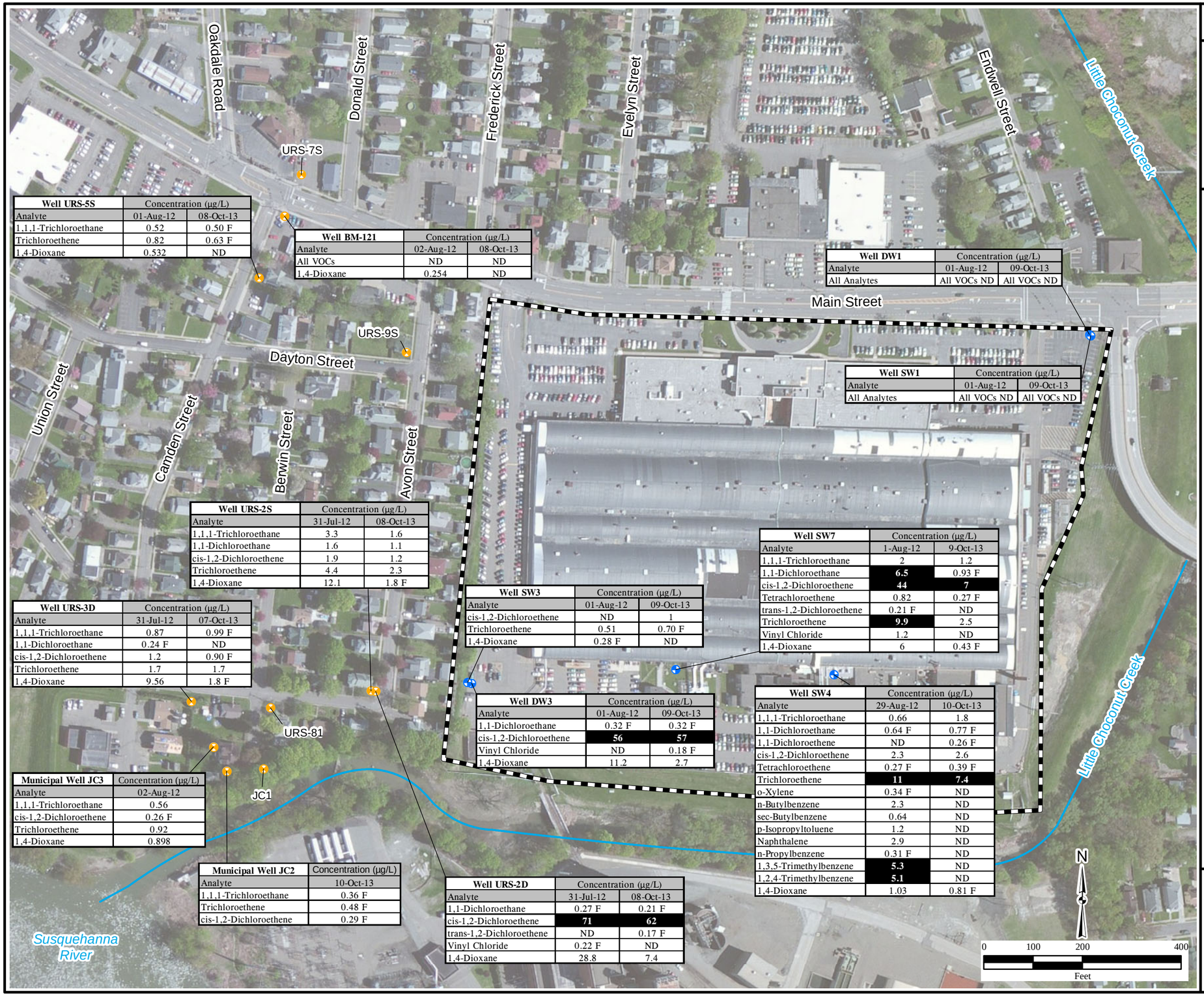
Source: HGL, ESRI, ArcGIS Online Imagery

Legend

- Major Road
- Highway
- City Limit
- Air Force Plant 59

Figure 1
Site Location
AFP 59

Figure 2
Groundwater Sampling Results
July and August 2012
On-site and Off-site Monitoring Wells



Well URS-5S	Concentration (µg/L)	
Analyte	01-Aug-12	08-Oct-13
1,1,1-Trichloroethane	0.52	0.50 F
Trichloroethene	0.82	0.63 F
1,4-Dioxane	0.532	ND

Well BM-121	Concentration (µg/L)	
Analyte	02-Aug-12	08-Oct-13
All VOCs	ND	ND
1,4-Dioxane	0.254	ND

Well DW1	Concentration (µg/L)	
Analyte	01-Aug-12	09-Oct-13
All Analytes	All VOCs ND	All VOCs ND

Well SW1	Concentration (µg/L)	
Analyte	01-Aug-12	09-Oct-13
All Analytes	All VOCs ND	All VOCs ND

Well URS-2S	Concentration (µg/L)	
Analyte	31-Jul-12	08-Oct-13
1,1,1-Trichloroethane	3.3	1.6
1,1-Dichloroethane	1.6	1.1
cis-1,2-Dichloroethene	1.9	1.2
Trichloroethene	4.4	2.3
1,4-Dioxane	12.1	1.8 F

Well SW7	Concentration (µg/L)	
Analyte	1-Aug-12	9-Oct-13
1,1,1-Trichloroethane	2	1.2
1,1-Dichloroethane	**6.5**	0.93 F
cis-1,2-Dichloroethene	**44**	**7**
Tetrachloroethene	0.82	0.27 F
trans-1,2-Dichloroethene	0.21 F	ND
Trichloroethene	**9.9**	2.5
Vinyl Chloride	1.2	ND
1,4-Dioxane	6	0.43 F

Well SW3	Concentration (µg/L)	
Analyte	01-Aug-12	09-Oct-13
cis-1,2-Dichloroethene	ND	1
Trichloroethene	0.51	0.70 F
1,4-Dioxane	0.28 F	ND

Well URS-3D	Concentration (µg/L)	
Analyte	31-Jul-12	07-Oct-13
1,1,1-Trichloroethane	0.87	0.99 F
1,1-Dichloroethane	0.24 F	ND
cis-1,2-Dichloroethene	1.2	0.90 F
Trichloroethene	1.7	1.7
1,4-Dioxane	9.56	1.8 F

Well DW3	Concentration (µg/L)	
Analyte	01-Aug-12	09-Oct-13
1,1-Dichloroethane	0.32 F	0.32 F
cis-1,2-Dichloroethene	**56**	**57**
Vinyl Chloride	ND	0.18 F
1,4-Dioxane	11.2	2.7

Well SW4	Concentration (µg/L)	
Analyte	29-Aug-12	10-Oct-13
1,1,1-Trichloroethane	0.66	1.8
1,1-Dichloroethane	0.64 F	0.77 F
1,1-Dichloroethene	ND	0.26 F
cis-1,2-Dichloroethene	2.3	2.6
Tetrachloroethene	0.27 F	0.39 F
Trichloroethene	**11**	**7.4**
o-Xylene	0.34 F	ND
n-Butylbenzene	2.3	ND
sec-Butylbenzene	0.64	ND
p-Isopropyltoluene	1.2	ND
Naphthalene	2.9	ND
n-Propylbenzene	0.31 F	ND
1,3,5-Trimethylbenzene	**5.3**	ND
1,2,4-Trimethylbenzene	**5.1**	ND
1,4-Dioxane	1.03	0.81 F

Municipal Well JC3	Concentration (µg/L)
Analyte	02-Aug-12
1,1,1-Trichloroethane	0.56
cis-1,2-Dichloroethene	0.26 F
Trichloroethene	0.92
1,4-Dioxane	0.898

Municipal Well JC2	Concentration (µg/L)
Analyte	10-Oct-13
1,1,1-Trichloroethane	0.36 F
Trichloroethene	0.48 F
cis-1,2-Dichloroethene	0.29 F

Well URS-2D	Concentration (µg/L)	
Analyte	31-Jul-12	08-Oct-13
1,1-Dichloroethane	0.27 F	0.21 F
cis-1,2-Dichloroethene	**71**	**62**
trans-1,2-Dichloroethene	ND	0.17 F
Vinyl Chloride	0.22 F	ND
1,4-Dioxane	28.8	7.4

Legend

- AFP 59 Monitoring Well
- Off-site Monitoring Well
- URS-9S — Monitoring Well Identification
- Surface Water Course
- Air Force Plant 59

Notes:

35.3 M =Shaded values indicate a New York State (NYS) groundwater effluent Class GA exceedance.

J=The analyte was posively detected but the quantitation is an estimation

F= The analyte was positively identified but the associated numerical value is below the reporting limit.

M=Matrix Effect. The analyte concentration was estimated due to matrix effect and therefore estimated.

ND=Analyte not detected above laboratory method detection limits.

NS=Monitoring well "Not Sampled" during event.

VOC=volatile organic compound

µg/L=microgram per liter

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Source: HGL, ESRI, AECOM, ArcGIS Online Imagery

HGL HydroGeoLogic, Inc

TABLES

Table 1
Summary of Detected VOCs
October 2013

Method	Analyte	NYS GW Effluent Limitations Class GA	Units	59DW1WG1 10/9/2013 280-47755-6	59DW3WG1 10/9/2013 280-47755-8	59JC2WG1 10/10/2013 280-47755-13	59JCEFFWG1 10/10/2013 280-47755-12	59SW1WG1 10/9/2013 280-47755-7	59SW3WG1 10/9/2013 280-47755-9	59BM121WG1 10/8/2013 280-47755-8	59SW7WG1 10/9/2013 280-47755-10	59URS2DWG1 10/8/2013 280-47755-3
VOLATILES by Method 8260B	Methylene chloride	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
	1,1-Dichloroethane	5	µg/L	0.16 U	**0.32** F	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	**0.93** F	**0.21** F
	Chloroform	7	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	Tetrachloroethene	5	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	**0.27** F	0.20 U
	1,1,1-Trichloroethane	5	µg/L	0.16 U	0.16 U	**0.36** F	0.16 U	0.16 U	0.16 U	0.16 U	**1.2**	0.16 U
	1,1-Dichloropropene	5	µg/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	1,1,2,2-Tetrachloroethane	5	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
	Toluene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	Vinyl chloride	2	µg/L	0.10 U	**0.18** F	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	1,1-Dichloroethene	5	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
	trans-1,2-Dichloroethene	5	µg/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	**0.17** F
	Trichloroethene	5	µg/L	0.16 U	0.16 U	**0.48** F	0.16 U	0.16 U	**0.70** F	0.16 U	**2.5**	0.16 U
	o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	cis-1,2-Dichloroethene	5	µg/L	0.15 U	**57**	**0.29** F	0.15 U	0.15 U	**1**	0.15 U	**7**	**62**
	Acetone	NS	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
	Bromochloromethane	5	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	n-Butylbenzene	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
	sec-Butylbenzene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	p-Isopropyltoluene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	Naphthalene	10	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
	n-Propylbenzene	5	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	1,3,5-Trimethylbenzene	5	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
	1,2,4-Trimethylbenzene	5	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEMI-VOLATILES by Method 8270C	1,4-Dioxane	NS	ng/l	140 U	**2,700**	140 U	140 U	140 U	140 U	140 U	**430** F	**7,400**
FIELD PARAMETERS	Temperature, Initial	NS	° Celsius	12.63	15.39	NA	NA	13.36	16.3	12.43	15.95	14.41
	Temperature, Final		° Celsius	12.65	15.37	13.83	13.26	13.32	16.56	12.6	15.26	14.26
	pH		Std units	7.1	7.12	7.58	8.06	7.09	6.99	7.98	7.08	7.18
	Specific Conductance		µS/cm	1,920	1,595	1,084	1,144	2,105	1,407	697	1,801	1,526
	ORP		mV	148.8	-38.6	200.9	203.4	83.5	91.1	-245.8	83.3	-72.1
	Dissolved Oxygen		mg/L	2.58	0.31	2.65	9.48	0.28	1.2	0.74	4.34	2.47
	Turbidity		NTU	19.9	22.4	1.5	1.87	4.75	1.7	14.9	6.7	15.9

Notes:

NA - Not Applicable

NS - No Standard

F - The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

<2.5	- Non-Detect
6.5	- NYS GW Effluent; Class GA exceedances

Bolded numbers are detections

Table 1
Summary of Detected VOCs
October 2013

Method	Analyte	NYS GW Effluent Limitations Class GA	Units	59URS2SWG1 10/8/2013 280-47755-4	59URS3DWG1 10/7/2013 280-47755-1	59URS5SWG1 10/8/2013 280-47755-5	59EB101013 10/10/2013 Equipment Blank 280-47755-16	59TB073112 10/7/2013 Trip Blank 280-47755-17	59DUP01WG1 10/10/2013 Duplicate: 59SW4WG1 280-47755-14	59AB080112 10/10/2013 Ambient Blank 280-47755-15	59SW4WG1 10/10/2013 280-47755-11
VOLATILES by Method 8260B	Methylene chloride	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
	1,1-Dichloroethane	5	µg/L	**1.1**	0.16 U	0.16 U	0.16 U	0.16 U	**0.73** F	0.16 U	**0.77** F
	Chloroform	7	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	Tetrachloroethene	5	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	**0.35** F	0.20 U	**0.39** F
	1,1,1-Trichloroethane	5	µg/L	**1.6**	**0.99** F	**0.50** F	0.16 U	0.16 U	**1.6**	0.16 U	**1.8**
	1,1-Dichloropropene	5	µg/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	1,1,2,2-Tetrachloroethane	5	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
	Toluene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	Vinyl chloride	2	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	1,1-Dichloroethene	5	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	**0.25** F	0.14 U	**0.26** F
	trans-1,2-Dichloroethene	5	µg/L	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
	Trichloroethene	5	µg/L	**2.3**	**1.7**	**0.63** F	0.16 U	0.16 U	**7.4**	0.16 U	**6.6**
	o-Xylene	5	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	cis-1,2-Dichloroethene	5	µg/L	**1.2**	**0.90** F	0.15 U	0.15 U	0.15 U	**2.6**	0.15 U	**2.6**
	Acetone	NS	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
	Bromochloromethane	5	µg/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
	n-Butylbenzene	5	µg/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
	sec-Butylbenzene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	p-Isopropyltoluene	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
	Naphthalene	10	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
	n-Propylbenzene	5	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
	1,3,5-Trimethylbenzene	5	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
	1,2,4-Trimethylbenzene	5	µg/L	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEMI-VOLATILES by Method 8270C	1,4-Dioxane	NS	ng/l	**1,800** F	**1,800** F	140 U	140 U	NA	**800** F	NA	**810** F
FIELD PARAMETERS	Temperature, Initial	NS	° Celsius	14.94	12.82	14.13	NA	NA	NA	NA	14.25
	Temperature, Final		° Celsius	14.38	12.80	13.29					14.34
	pH		Std units	6.47	7.21	7.3					7.05
	Specific Conductance		µS/cm	1,251	1,576	1,551					1,736
	ORP		mV	-17.8	50.0	46.9					172.7
	Dissolved Oxygen		mg/L	0.55	3.41	2.82					2.41
	Turbidity		NTU	19.5	583	28.7					13.6

Notes:

NA - Not Applicable

NS - No Standard

F - The analyte was positively identified but the associated numerical

<2.5	- Non-Detect
6.5	- NYS GW Effluent; Class GA exceedances

Bolded numbers are detections

Table 2
Trend Analysis of VOCs in Groundwater

Well ID	Date Sampled	Concentrations of Analyte in Groundwater µg/L						
		TCA	TCE	VC	1,1-DCE	*trans* - 1,2 DCE	1,1-DCA	*cis* - 1,2 DCE
SW1	Sep-86	–	–	–	–	–	–	–
	Jan-92	0.5	–	–	–	–	–	–
	Dec-94	–	–	–	–	–	–	–
	Nov-99	–	–	–	–	–	–	–
	May-00	–	–	–	–	–	–	–
	Nov-00	–	–	–	–	–	–	–
	May-01	–	–	–	–	–	–	–
	Nov-01	0.11 J	–	–	–	–	–	–
	May-02	–	–	–	–	–	–	–
	Nov-02	–	–	–	–	–	–	–
	May-03	–	–	–	–	–	–	–
	Nov-03	–	–	–	–	–	–	–
	Jun-04	–	–	–	–	–	–	–
	Nov-04	–	–	–	–	–	–	–
	Oct-05	–	–	–	–	–	–	–
	Jun-08	–	–	–	–	–	–	–
	Nov-08	NS	NS	NS	NS	NS	NS	NS
	Nov-09	–	–	–	–	–	–	–
	Nov-10	0.11	–	–	–	–	–	–
	CY2011	NA	NA	NA	NA	NA	NA	NA
	Aug-12	–	–	–	–	–	–	–
	Oct-13	–	–	–	–	–	–	–
DW1	Jan-92	0.6	–	–	–	–	–	–
	Dec-94	–	–	–	–	–	–	1.8
	Nov-99	–	–	–	–	–	–	–
	May-00	–	–	–	–	–	–	–
	Nov-00	–	–	–	–	–	–	–
	May-01	–	–	–	–	–	–	–
	Nov-01	–	–	–	–	–	–	–
	May-02	–	–	–	–	–	–	–
	Nov-02	–	–	–	–	–	–	–
	May-03	–	–	–	–	–	–	–
	Nov-03	–	–	–	–	–	–	–
	Jun-04	–	–	–	–	–	–	–
	Nov-04	–	–	–	–	–	–	–
	Oct-05	–	–	–	–	–	–	–
	Jun-08	–	–	–	–	–	–	–
	Nov-08	NS	NS	NS	NS	NS	NS	NS
	Nov-09	–	–	–	–	–	–	–
	Nov-10	0.18	–	–	–	–	–	–
	CY2011	NA	NA	NA	NA	NA	NA	NA
	Aug-12	–	–	–	–	–	–	–
	Oct-13	–	–	–	–	–	–	–

Table 2
Trend Analysis of VOCs in Groundwater (continued)

Well ID	Date Sampled	Concentrations of Analyte in Groundwater µg/L						
		TCA	TCE	VC	1,1-DCE	*trans* - 1,2 DCE	1,1-DCA	*cis* - 1,2 DCE
SW3	Sep-86	–	**6**	–	–	–	–	–
	Jan-92	**12**	**9**	–	–	–	**5**	–
	Dec-94	0.5	1.8	–	–	–	–	–
	Dec-95	0.86	2.8	–	–	–	–	0.44
	Jul-97	–	1	–	–	–	–	–
	Nov-98	0.22	0.81	–	–	–	–	0.1
	Apr-99	0.51	0.71	–	–	–	–	0.17
	Nov-99	0.29	0.9	–	–	–	–	0.39
	May-00	0.69	1	–	–	–	0.55	1.29
	Nov-00	0.43	0.9	–	–	–	–	0.22
	May-01	0.46	0.8	–	–	–	0.32	1.29
	Nov-01	0.32 J	0.5 J	–	–	–	–	–
	May-02	0.42 J	0.8 J	–	–	–	0.46 J	–
	May-03	0.584 J	0.893 J	–	–	–	0.302 J	1.37 J
	Nov-03	0.398 J	0.856 J	–	–	–	–	0.511 J
	Jun-04	0.9 J	0.94 J	–	–	–	0.95 J	3.7
	Nov-04	0.52 J	1	0.26 J	–	–	0.38 J	1.5
	Oct-05	0.47 J	0.86 J	–	–	–	–	0.55 J
	Jun-08	0.661 J	1.31	–	–	–	0.403 J	1.45
	Nov-08	0.345 J	0.759 J	–	–	–	–	–
	Nov-09	0.367 J	0.62 J	–	–	–	–	0.539 J
	Nov-10	0.41	0.59	–	–	–	–	0.17
	CY2011	NA	NA	NA	NA	NA	NA	NA
	Aug-12	–	0.51	–	–	–	–	0.28 F
	Oct-13	–	0.70 F	–	–	–	–	1
DW3	Jan-92	0.3	–	–	–	–	0.3	–
	Dec-94	–	–	0.28	–	–	0.26	**36**
	Dec-95	–	–	–	–	–	–	**5.2**
	Apr-97	–	–	–	–	–	–	**41**
	Jul-97	–	–	–	–	–	–	**49**
	Nov-98	–	–	–	–	–	0.34	**66**
	Apr-99	–	–	0.28	0.11	–	0.35	**67**
	Nov-99	–	–	–	–	–	–	–
	May-00	–	–	–	–	0.25	0.16	**24.98**
	Nov-00	–	–	–	–	–	–	**16.85**
	May-01	–	–	–	–	–	–	**13.29**
	Nov-01	–	–	–	–	–	–	**13.58**
	May-02	–	–	–	–	–	0.1 J	**21.08**
	May-03	–	–	–	–	–	–	–
	Nov-03	–	–	–	–	–	–	1.18 J
	Jun-04	–	–	–	–	–	–	1.3
	Nov-04	–	–	–	–	–	–	2.1
	Oct-05	–	–	–	–	–	–	3
	Jun-08	–	–	–	–	–	–	**73.1**

Table 2
Trend Analysis of VOCs in Groundwater (continued)

Well ID	Date Sampled	Concentrations of Analyte in Groundwater µg/L						
		TCA	TCE	VC	1,1-DCE	*trans* - 1,2 DCE	1,1-DCA	*cis* - 1,2 DCE
DW3 (cont.)	Nov-08	–	–	–	–	–	0.41 J	**67.3**
	Nov-09	–	–	–	–	–	0.369 J	**64.3**
	Nov-10	–	–	–	–	–	–	**8.4**
	CY2011	NA	NA	NA	NA	NA	NA	NA
	Aug-12	–	–	–	–	–	0.32 F	**56**
	Oct-13	–	–	0.18 F	0.32 F	–	–	**57**
SW4	Jan-92	2	**97**	–	0.3	–	0.6	–
	Dec-94	**20**	**370**	–	2.1		**8.5**	**19**
	Dec-95	**34**	**1200**	–	4.9	2.1	**6.9**	**34**
	Apr-97	–	–	–	–	–	**7.1**	**71**
	Jul-97	**23**	**290**	–	–	–	–	**15**
	Nov-98	**8**	**46**	0.42	0.82	–	**9**	**10**
	Apr-99	1.9	**9.53**	–	–	–	0.87	1.85
	Nov-99	2.13	**9.5**	–	0.18	–	**7.7**	**7.15**
	May-00	2.88	**8**	0.11	0.21	0.49	1.67	4.3
	Nov-00	1.14	**15.2**	1.49	0.29	–	**15.25**	**11.18**
	May-01	3.35	**34**	–	0.36	0.38	1.3	3.19
	Nov-01	0.88	**5.7**	0.43 J	0.12 J	–	**7.18**	**5.27**
	May-02	2.54	**21.63**	–	0.34 J	–	0.79 J	2.07
	May-03	3.05 J	**9.09 J**	–	–	–	1.44 J	3.36 J
	Nov-03	2.03	4.63	–	–	–	0.93	1.93
	Jun-04	2.8	**41**	–	0.57 J	0.11	1.3	3.3
	Nov-04	3.1	**56**	–	0.88 J	0.19 J	1.4	4.1
	Oct-05	2.2	**43**	–	1		1.7	**6.3**
	Jun-08	2.98	**17.8**	–	0.751 J	0.364 J	1.51	4.35
	Nov-08	0.513 J	**12.7**	–	–	–	0.825 J	3.38
	Nov-09	1.38	**11.1**	–	–	–	0.536 J	1.85
	Nov-10	1.6	**48**	–	0.64	–	1.1	3.2
	CY2011	NA	NA	NA	NA	NA	NA	NA
	Aug-12	0.66	**11**	–	–	–	0.64 F	2.3
	Oct-13	1.8	**6.6**	–	0.26 F	–	–	2.6
SW7	Dec-94	4.6	**56**	**6.2**	1	0.3	**33**	**150**
	Dec-95	2.2	**43**	**6.8**	0.8		**20**	**130**
	Jul-97	–	**17.8**	–	–	–	–	2
	Nov-98	2.5	**12.7**	**3.4**	0.65	0.28	**12**	**82**
	Apr-99	1.23	**15**	–	–	–	1.46	**5.25**
	Nov-99	1.01	**7.9**	–	0.19	–	3.38	**18.8**
	May-00	0.67	4	–	–	0.12	0.71	2.43
	Nov-00	0.91	**11**	0.52	0.15	–	3.48	**16.06**
	May-01	1.18	3.95	–	–	–	0.47	1.46
	Nov-01	0.8 J	**5.7**	0.85 J	0.19 J	0.13 J	3.02	**25.89**
	May-02	0.87 J	1.5	–	–	–	0.47 J	2.79
	May-03	1.5 J	3.8	–	–	–	0.409 J	1.43 J

Table 2
Trend Analysis of VOCs in Groundwater (continued)

Well ID	Date Sampled	Concentrations of Analyte in Groundwater µg/L						
		TCA	TCE	VC	1,1-DCE	*trans* - 1,2 DCE	1,1-DCA	*cis* - 1,2 DCE
SW7 (cont.)	Nov-03	0.674 J	1.9	–	–	–	0.509	2.76
	Jun-04	1	1	–	–	–	0.3 J	1.1
	Nov-04	1.5	2.1	0.47 J	0.25 J	–	1.5 J	**10 J**
	Oct-05	0.73 J	3.1	–	–	–	1.4	**12**
	Jun-08	2.5	2.94	–	–	–	1.59	**6.34**
	Nov-08	1.88	**8.15**	1.21 M	–	0.302 J	**5.04**	**35.3 M**
	Nov-09	1.24	2.42	–	–	–	0.905 J	5.21
	Nov-10	1	2.4	1	0.21	0.096	0.58	4.3
	CY2011	NA	NA	NA	NA	NA	NA	NA
	Aug-12	2	**9.9**	1.2	0.65	0.21 F	**6.5**	**44**
	Oct-13	–	2.5	–	0.93 F	–	–	**7**

Notes:

ND: Analyte not detected above laboratory method detection limits

NS: Monitoring well "Not Sampled" during event

NA: Analytical data "Not Available" due to extensive flood event at site and surrounding area in CY2011.

Groundwater sampling not conducted in CY2011.

J: The analyte was positively detected, but the quantitaion is an estimation

F: The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

M: Matrix Effect. The analyte concentration was estimated due to matrix effect and therefore estimated

Bolded numbers are exceedances

ATTACHMENT 1

FIELD FORMS

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59URS3DWG1 DATE: 10-7-13 TIME: 1715

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB X COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10d713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.8	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.21 Temperature 13.8 (C) Dissolved Oxygen 3.41 (mg/L) Specific Conductivity 1,576 ~~(umhos/cm)~~ m3/cm

Iron — (mg/L) Oxidation/Reduction Potential 50.0 (mv) Turbidity 583 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 60°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) _____ OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, PA / Buffalo, NY

COMMENTS:

SAMPLER: MIKE OMZKGUN OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL Hydrogeologic, Inc.

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59BM121WG1

DATE: 10/8/13 TIME: 0929

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 5.4	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.98 Temperature 12.60 (C) Dissolved Oxygen 0.74 (mg/L) Specific Conductivity 0.697 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential -245.8 (mv) Turbidity 14.9 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 50

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) X OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ TAL Pittsburgh/PA Buffalo

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL Hydrogeologic, Inc

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59URS2DWG1

DATE: 10/8/13 TIME: 1245

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB0713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 1.5	COLOR:	
2nd	ODOR:	
7.18	OTHER:	

pH 7.20 ~~7.18~~ Temperature 14.26 (C) Dissolved Oxygen 2.47 (mg/L) Specific Conductivity 4526 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential -73.3 (mv) Turbidity 15.9 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 60°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) — OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, Pa / Buffalo, NY

COMMENTS:

SAMPLER: Mike Jackson OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL Hydrogeologic, Inc.

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59URS2SGW1 DATE: 10/8/13 TIME: 1440

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB X COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10Ø713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 1.2	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 6.47 Temperature 14.38 (C) Dissolved Oxygen 0.55 (mg/L) Specific Conductivity 1.251 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential -17.8 (mv) Turbidity 19.5 (NTU)

GENERAL INFORMATION

WEATHER: (SUN/CLEAR) X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 62°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X ~~COURIER (TAL)~~ X OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ PITTSBURGH, PA / BUFFALO, NY

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc.

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59URS5SWG1 DATE: 10/8/13 TIME: 1712

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB ~~(X)~~ COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): 59URS5SWG1-MS

MATRIX SPIKE DUP (SD): 59URS5SW61-MSD

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs 8260B
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 4.1	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.30 Temperature 13.29 (C) Dissolved Oxygen 2.82 (mg/L) Specific Conductivity 1.551 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 46.9 (mv) Turbidity 287 (NTU)

GENERAL INFORMATION

WEATHER: (SUN)/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 65°F

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) ~~X~~ OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, Pa / Buffalo, NY

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc.

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59DW1WG1 DATE: 10-9-13 TIME: 0902

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): -

SAMPLE END DEPTH (FT): -

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): -

MATRIX SPIKE DUP (SD): -

FIELD DUP (FD): -

AMBIENT BLANK (AB): -

EQUIPMENT BLANK (EB): -

TRIP BLANK (TB): TB16 9-7-13

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 0.5	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.10 Temperature 12.65 (C) Dissolved Oxygen 2.58 (mg/L) Specific Conductivity 1.920 ~~(umhos/cm)~~ mS/cm

Iron - (mg/L) Oxidation/Reduction Potential 148.8 (mv) Turbidity 19.9 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION _____ AMBIENT TEMPERATURE 40°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) M OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, Pa / Buffalo, NY

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: -

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59SW1WG1

DATE: 10/9/13 TIME: 1102

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB X COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 1.3	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.09 Temperature 13.32 (C) Dissolved Oxygen 0.28 (mg/L) Specific Conductivity 2.105 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 83.5 (mv) Turbidity 4.75 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 50°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) ~~X~~ OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, PA / Buffalo, NY

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL HydroGeologic, Inc

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59DW3WG1 DATE: 10/9/13 TIME: 1417

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10 9/13

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 1.6	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.12 Temperature 15.37 (C) Dissolved Oxygen 0.31 (mg/L) Specific Conductivity 1.595 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential -38.6 (mv) Turbidity 22.4 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 60°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X ~~COURIER~~ (TAL) SV OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, Pa / Buffalo, NY

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZRDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BP=BLADDER PUMP
PP=PERISTALIC PUMP
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59SW3WG1

DATE: 10/9/13 TIME: 1600

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB X COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 2.8	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 6.99 Temperature 16.30 (C) Dissolved Oxygen 1.20 (mg/L) Specific Conductivity 1.407 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 91.1 (mv) Turbidity 1.70 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 630

SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER (TAL) X OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Pittsburgh, PA/ Buffalo, NY

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL Hydrogeologic, Inc.

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59SW7WG1

DATE: 10/9/13 TIME: 1804

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB X COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10/7/13

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 1.1	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.08 Temperature 15.26 (C) Dissolved Oxygen 4.34 (mg/L) Specific Conductivity 1.801 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 83.3 (mv) Turbidity 6.73 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 64°

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) _____ OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ / Buffalo, NY Pittsburgh, PA

COMMENTS:

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID: 59SW4WG1 DATE: 10/10/13 TIME: 1327

MATRIX TYPE: WG

SAMPLING METHOD: BP

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): 59DUP01WG1 @1313

AMBIENT BLANK (AB): ~~59ABWG08~~ 59ABWG01 @1313 (VOCs only)

EQUIPMENT BLANK (EB): ~~59EBWG08~~ 59EBWG01 @1313

TRIP BLANK (TB): TB10713 (VOCs only)

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 9.2	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.05 Temperature 14.34 (C) Dissolved Oxygen 2.41 (mg/L) Specific Conductivity 1.736 (~~umhos/cm~~) mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 172.7 (mv) Turbidity 13.6 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION _____ AMBIENT TEMPERATURE 53°F

SHIPMENT VIA: FEDEX _____ HAND DELIVER X COURIER (TAL) — OTHER _____

SHIPPED TO: Test America Laboratory Denver, CO / Buffalo, NY

COMMENTS:

SAMPLER: MIKE Jackson OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

HGL HydroGeoLogic, Inc

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID ~~59IC1WG1~~ 59JCEFFWG1 DATE: 10/10/13 TIME: 1020

MATRIX TYPE: WG

SAMPLING METHOD: G

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st —	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 7.58 Temperature 13.83 (C) Dissolved Oxygen 2.65 (mg/L) Specific Conductivity 1.084 ~~(umhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 200.9 (mv) Turbidity 1.50 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN _____ WIND DIRECTION _____ AMBIENT TEMPERATURE 53°F

SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER (TAL) _x_____ OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ Buffalo, NY Pittsburgh, PA

COMMENTS:

SAMPLER: Mike Dawson OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION:	AFP59	PROJECT NAME:	AFP59 2013 GWS
SITE:	AFP59	PROJECT NO:	AF7080

SAMPLE INFORMATION

SAMPLE ID ~~59JC1WG1~~ 59JC2WG1 DATE: 10-10-13 TIME: 1000

MATRIX TYPE: WG

SAMPLING METHOD: G

LOT CONTROL #: ___ ___ ___ ___

(Ambient Blank # - Equipment Blank # - Trip Blank # - Cooler #)

CHAIN-OF-CUSTODY #: _____

SAMPLE BEG. DEPTH (FT): —

SAMPLE END DEPTH (FT): —

GRAB (X) COMPOSITE ( )

ENTER SAMPLE NUMBERS FOR QC SAMPLES/ BLANKS ASSOCIATED WITH THIS SAMPLE:

MATRIX SPIKE (MS): —

MATRIX SPIKE DUP (SD): —

FIELD DUP (FD): —

AMBIENT BLANK (AB): —

EQUIPMENT BLANK (EB): —

TRIP BLANK (TB): TB10713

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	ANALYTICAL METHOD	ANALYSIS
40 mL VOA	3	Cool to 4C HCl ph<2	SW8260B	VOCs
1L Amber	2	Cool to 4C	8270C	1,4 Dioxane

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st —	COLOR:	
2nd	ODOR:	
	OTHER:	

pH 8.06 Temperature 1326 (C) Dissolved Oxygen 9.48 (mg/L) Specific Conductivity 1.144 ~~(mmhos/cm)~~ mS/cm

Iron — (mg/L) Oxidation/Reduction Potential 208.4 (mv) Turbidity 1.87 (NTU)

GENERAL INFORMATION

WEATHER: SUN/CLEAR _____ OVERCAST/RAIN X WIND DIRECTION _____ AMBIENT TEMPERATURE 530

SHIPMENT VIA: FEDEX _____ HAND DELIVER _____ COURIER (TAL) x OTHER _____

SHIPPED TO: Test America Laboratory ~~Denver, CO~~ / Buffalo, NY

COMMENTS: Pittsburgh, PA

SAMPLER: MIKE JACKSON OBSERVER: —

MATRIX TYPE CODES

DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZRDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER	G=GRAB
BP=BLADDER PUMP	HA=HAND AUGER
PP=PERISTALIC PUMP	H=HOLLOW STEM AUGER
CS=COMPOSITE SAMPLE	HP=HYDRO PUNCH
C=CONTINUOUS FLIGHT AUGER	SS=SPLIT SPOON
DT=DRIVEN TUBE	SP=SUBMERSIBLE PUMP

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: URS-3D	Location: AFP59
Sampler(s): MIKE Jacks	Project Name: AFP59 2013 GWS
Well Depth: 86.35	Project #: AF7080 Date: 10-7-13 Time: 1520
DTW (ft): 35.82 DTP Top (ft): 82.80	Courier: ___FedEx ___UPS X Hand ~~& TAL Pickup~~
MP Ht. Above/Below Ground Surface: 1.78	Sampling Method : BP
Condition of Bottom of Well: ~~Filled~~ SOFT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (65.33 - 95.33)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2-inch (SS)	overcast, light rain, 60°
Placement of Pump Inlet (ft): 83	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH +/-0.1	Temp. (C) +/-0.5	Cond. (umhos/cm) +/-3% mS/cm	ORP (mv) +/-10	DO (mg/L) +/-10%	Turb. (NTU)	Type, Size, and Amount of Sediment Discharged
										0.25
1542	35.82	0.25	0.5	7.30	12.82	1.575	47.9	3.78	~~E3~~ overrange	0
1547	35.82	0.25	1.75	7.25	12.81	1.574	50.9	3.86	overrange	
1552	35.82	0.25	3.00	7.23	12.82	1.572	54.2	3.95	overrange	
1557	35.82	0.25	4.25	7.22	12.83	1.574	56.8	4.01	overrange	
1602	35.82	0.25	5.50	7.21	12.83	1.576	58.2	3.99	overrange	
1607	35.82	0.25	6.75	7.21	12.83	1.577	56.7	3.96	overrange	
1612	35.82	0.25	8.00	7.21	12.84	1.576	56.5	3.93	overrange	
1617	35.82	0.25	9.25	7.21	12.85	1.577	56.0	3.87	882	
1622	35.82	0.25	10.50	7.21	12.85	1.578	53.8	4.96	882	606
1627	35.82	0.25	11.75	7.20	12.86	1.577	51.4	3.91	1000	
1632	35.82	0.25	13.00	7.20	12.87	1.577	50.0	3.82	1000	
1637	35.82	0.25	14.25	7.20	12.85	1.577	52.3	3.67	597	
1642	35.82	0.25	15.50	7.20	12.82	1.577	52.7	3.61	496	
1647	35.82	0.25	16.75	7.21	12.81	1.577	52.9	3.55	688	
1652	35.82	0.25	18.00	7.21	12.81	1.577	53.0	3.54	778	
1657	35.82	0.25	19.25	7.21	12.80	1.577	52.8	3.48	379	

Observations

Color: Clear ~~Other~~ (describe): slightly cloudy

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: #8135 Bot pump mod = 35.186

HACH 2100P TURBIDIMETER (#15613 Pine), YSI 556 (#12K101897), QED MP10 (#3095) QED well wizard compressor model 3320 (#01779 Pine), Solinst model 101 (100') (#900732)

Signed/Sampler(s): MDG. JL

HGL
HydroGeoLogic, Inc.

GROUNDWATER FIELD SAMPLING DATA SHEET

Well Name.:	URS-3D	Project Name: AFP59 GWS	LOCID:
Sampler(s):	MIKE JANKOWSKI	Project No.: AF7084	
Well Depth:	86.35	Date: 10-7-13	Time: 1520
DTW (ft TOC):	35.82	Screen Interval:	65.33 - 95.33 TOC
Well Diameter (in):	2-INCH	Placement of Pump (ft TOC):	83
Type of Pump:	Bladder		

Field Parameters

L/min

Time	Depth to Water (ft)	Flow Rate ~~(gpm)~~	Total Volume ~~(gal)~~ L	pH	Temp. (C)	Cond. (umhos/cm) mS/cm	ORP	D.O. (mg/L)	Turb. (N.T.U.)	Description
1702	35.82	0.25	20.5	7.21	12.80	1.577	51.0	3.47	326	
1707	35.82	0.25	21.75	7.21	12.80	1.577	49.5	3.41	336	
1712	35.82	0.25	23.00	7.21	12.80	1.576	50.0	3.41	583	
1715	collect	sample				~~5908~~ 3DWG	MS	15	URS 3D WG1	

Observations

Notes:	See Page 1
Signed/Sampler(s):	

FORMS-standard.ppt

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: BM-121	Location: AFP59
Sampler(s): MKG JACKSON	Project Name: AFP59 2013 GWS
Well Depth: 56.18 + 0.28 = 56.46	Project #: AF7080 Date: 10/8/13 Time: 0810
DTW (ft): 25.70 DTP Top (ft): 25.50	Courier: ____FedEx ____UPS X Hand ____TAL Pickup
MP Ht. Above/Below Ground Surface: 3.2	Sampling Method : BP
Condition of Bottom of Well: FIRM	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (- 56.04)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 6	Clear, calm, 50°
Placement of Pump Inlet (ft): 51	

Field Parameters

+/-0.1 +/-0.5 +/-3% +/-10 +/-10

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp. (C)	Cond. ~~(umhos/cm)~~ mS/cm	ORP (mv)	DO (mg/L)	Turb. (NTU)	Type, Size, and Amount of Sediment Discharged
0852	25.81	0.2	1.0	7.97	12.43	0.694	-173.4	1.11	16.8	
0857	25.81	0.2	2.0	7.97	12.46	0.695	-191.1	0.92	18.3	
0902	25.81	0.2	3.0	8.01	12.47	0.696	-232.5	0.78	21.0	
0907	25.81	0.2	4.0	8.00	12.49	0.696	-224.6	0.78	15.8	
0912	25.81	0.2	5.0	8.00	12.53	0.696	-258.7	0.73	15.6	
0917	25.81	0.2	6.0	7.99	12.55	0.696	-254.1	0.74	16.8	
0922	25.81	0.2	7.0	7.98	12.57	0.697	-249.1	0.73	16.8	
0927	25.81	0.2	8.0	7.98	12.60	0.697	-245.8	0.74	14.9	
0929	Collect		Ground	water		samples		5	BM121	WG1

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED Sample Pro 1.75" pump (Pump # 8135) Post Pump DTW = 25.58'
YSI 556 MPS (12K101897), QED MP10 controller (#3095),
Hach 2100P Turbidimeter (#15613) QED well wizard compressor 3020
~~Final~~ Final DTW = 25.77. Solonist Model 101 WLI (100') (#487-93)
Everstart Maxx 9J3 12V Battery

Signed/Sampler(s): MKG

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: URS-2D	Location: AFP59
Sampler(s): Mike Dackson	Project Name: AFP59 2013 GWS
Well Depth: 90.35 + 28 = 90.63	Project #: AF7080 Date: 10/8/13 Time: 1120
DTW (ft): 30.84 DTP Top (ft): 30.64	Courier: ___FedEx ___UPS _✓_Hand _X_TAL ~~Pickup~~ Delivery
MP Ht. Above/Below Ground Surface: -	Sampling Method : BP
Condition of Bottom of Well: SOFT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (65 - 90)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2-inch	~~over~~ Partly cloudy, slight wind, 60°
Placement of Pump Inlet (ft): 83	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH +/-0.1	Temp. (C) +/-0.5	Cond. ~~(umhos/cm)~~ mS/cm +/-3%	ORP (mv) +/-10	DO (mg/L)	Turb. (NTU) +/-10	Type, Size, and Amount of Sediment Discharged
1208	30.83	0.230	0.5	7.03	14.41	1.469	-54.1	1.99	14.9	
1213	30.83	0.230	1.650	7.10	14.35	1.513	-71.3	1.44	18.7	
1218	30.83	0.230	2.800	7.15	14.34	1.523	-80.1	2.74	20.5	
1223	30.83	0.230	3.950	7.18	14.40	1.524	-73.6	3.56	20.3	
1228	30.83	0.230	5.100	7.19	14.42	1.525	-70.2	3.47	19.8	
1233	30.83	0.230	6.250	7.20	14.30	1.527	-74.8	3.37	19.1	
1238	30.83	0.230	7.400	7.20	14.26	1.526	-73.3	2.98	19.5	
~~1240~~	~~CO~~									MDT 10/8/13
1243→ 1243	30.83	0.230	8.550	7.18	14.26	1.526	-72.1	2.47	15.9	
1245	COMPLET	GROUND	WATER	SAMPLES						590URS2DWG1

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED Sample Pro 1.75" pump (Pine # 8135), post pump DTW = 30.84 Install
YSI 556 MPS (#12K101897), HACH TURBIMETER 2100P (Pine # 15613),
QED MP10 controller (Pine # 3095), QED well wizard 2020 compressor (Pine # 01779)
Solinst model 101 (100') (#48793, Pine # 900732),
Energizer MAX 93 12V battery Final DTW = 30.83'

Signed/Sampler(s): Mike D. Jr

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: URS-2S	Location: AFP59
Sampler(s): MIKE JACKSON	Project Name: AFP59 2013 GWS
Well Depth: 58.2 + 0.28 = 58.48	Project #: AF7080 Date: 10/8/13 Time: 1335
DTW (ft): 31.04 DTP Top (ft): 30.84	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Pickup~~
MP Ht. Above/Below Ground Surface: -	Sampling Method : BP
Condition of Bottom of Well: SOFT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (35.45 - 60.45)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature): PARTLY CLOUDY, MODERATE WIND, 62°
Well Diameter (in): 2	
Placement of Pump Inlet (ft): 53.45	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH (+/-0.1)	Temp. (C) (+/-0.5)	Cond. ~~umhos/cm~~ mS/cm (+/-3%)	ORP (mv) (+/-10)	DO (mg/L)	Turb. (NTU) (+/-10)	Type, Size, and Amount of Sediment Discharged
1358	31.21	0.22Φ	Φ.5	7.55	14.94	1.298	-99.7	13.70	398	ORANGE FLOC SUSPENDED (FE)
1403	31.21	Φ.22Φ	1.6ΦΦ	7.16	14.72	1.31Φ	-102.5	3.78	154	
1408	31.21	Φ.22Φ	2.7ΦΦ	6.77	14.65	1.30Y	-52.4	2.2X	82.8	
1413	31.21	Φ.22Φ	3.8ΦΦ	6.71	14.51	1.303	-35.3	1.42	67.1	
1418	31.21	0.22Φ	4.9ΦΦ	6.62	14.57	1.303	-35.X	1.05	37.2	
1423	31.21	Φ.22Φ	6.ΦΦΦ	6.48	14.56	1.291	-34.8	Φ.85	37.4	
1428	31.21	Φ.22Φ	7.1ΦΦ	6.44	14.57	1.279	-25.7	Φ.71	27.4	
1433	31.21	Φ.22Φ	8.2ΦΦ	6.46	14.52	1.263	-18.9	0.61	21.3	
1438	31.21	Φ.22Φ	9.3ΦΦ	6.47	14.38	1.251	-17.8	0.55	19.5	
1440	COLLECT GROUNDWATER SAMPLES.							590S25W61		

Observations

Color: (Clear) Other (describe): FLOC DISSIPATED

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED PUMP 1.75" (SAMPLE PRO) (PINE #17341) POST-PUMP INSTALL DTW = 30.81
YSI 556 MPS (#K10897), HACH TURBIMETER 2100P (PINE # 15613)
QED MPID CONTROLLER (PINE #3095), QED WELL WIZARD 3020 COMPRESSOR (PINE # 61779)
SOLINST MODEL 101 WLI (100') (#48793, PINE # 900732)
EVERSTART MAXX 93 12V BATTERY FINAL DTW = 31.03

Signed/Sampler(s):

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: URS-5S	Location: AFP59
Sampler(s): MIKE JACKSON	Project Name: AFP59 2013 GWS
Well Depth: 66.15 + 0.28 = 66.43	Project #: AF7080 Date: 10/8/13 Time: 1615
DTW (ft): 22.16 DTP Top (ft): 21.96	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Direct~~
MP Ht. Above/Below Ground Surface: –	Sampling Method: BP
Condition of Bottom of Well: FIRM	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (-)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): 2	Clear, SUNNY, 65°
Placement of Pump Inlet (ft): 59'	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH (+/-0.1)	Temp. (C) (+/-3%)	Cond. ~~umhos/cm~~ mS/cm (+/-3%)	ORP (mv) (+/-10)	DO (mg/L) (+/-10)	Turb. (NTU)	Type, Size, and Amount of Sediment Discharged
1635	22.14	0.230	0.500	7.33	14.13	1.597	86.9	4.73	30.5	
1640	22.14	0.230	1.650	7.25	13.58	1.588	79.6	3.80	34.2	
1645	22.14	0.230	2.800	7.26	13.46	1.573	73.3	3.25	32.0	
1650 →	22.14	0.230	3.950	7.26	13.42	1.563	67.0	2.99	32.5	
1655	22.14	0.230	5.100	7.28	13.36	1.558	60.9	2.82	30.1	
1700	22.14	0.230	6.250	7.29	13.36	1.553	54.3	2.80	30.2	
1705	22.14	0.230	7.400	7.30	13.34	1.552	50.4	2.78	29.9	
1710	22.14	0.230	8.550	7.30	13.29	1.551	46.9	2.82	28.7	
1712	COLLECT	GROUNDWATER		SAMPLES				59 URS5SWG1		
								59 URS5SWG1-MS		
								59 URS5SWG1-MSD		

Observations MS/MSD LOCATION

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED SAMPLE PRO PUMP (1.75") (PINE # 8135) DTW POST PUMP INSTALL = 22.17
YSI 556 MPS (#K101897), HACH TURBIMETER 2100P (PINE #15613
QED MP10 CONTROLLER (PINE #3095), QED WELL WIZARD 3020 COMPRESSOR (PINE #01779)
SOLONST MODEL 101 WLI (100') (#48793, PINE #900732)
EVERSTART ~~MAXIMA~~ MAX 93 12V BATTERY FINAL DTW = 22.17

Signed/Sampler(s): Mike D. Jackson

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: DW-1	Location: AFP59
Sampler(s): MIKE Jackson	Project Name: AFP59 2013 GWS
Well Depth: 62.44+0.28 = 62.72	Project #: AF7080 Date: 10-9-13 Time: 0745
DTW (ft): 17.38 DTP Top (ft): 17.18	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Pickup~~
MP Ht. Above/Below Ground Surface: 2.63	Sampling Method: BP
Condition of Bottom of Well: ~~FILLED~~ 50 FT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (52 - 62~~64.21~~)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): ~~6~~ 4	Overcast, slight wind, 40°, some FOG
Placement of Pump Inlet (ft): 54	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH (+/-0.1)	Temp. (C) (+/-0.5)	Cond. ~~umhos/cm~~ mS/cm (+/-3%)	ORP (mv) (+/-10)	DO (mg/L)	Turb. (NTU) (+/-10)	Type, Size, and Amount of Sediment Discharged
0825	17.36	0.220	0.500	7.12	12.63	1.659	156.4	5.20	26.8	
0830	17.36	0.220	1.600	7.09	12.55	1.814	155.9	2.91	28.2	
0835	17.36	0.220	2.700	7.10	12.59	1.876	154.5	2.69	26.9	
0840	17.36	0.220	3.800	7.10	12.57	1.890	153.5	2.64	26.0	
0845	17.36	0.220	4.900	7.10	12.58	1.899	152.4	2.69	25.8	
0850	17.36	0.220	6.000	7.10	12.63	1.914	150.7	2.64	20.3	
0855	17.36	0.220	7.100	7.10	12.64	1.917	150.1	2.62	20.1	
0900	17.36	0.220	8.200	7.10	12.65	1.920	148.8	2.58	19.9	
0902	collect Groundwater samples 59DW1WG1									

Observations

Color: Clear Other (describe):

Odor: None Low Medium High Very Strong H2S Fuel-like

Notes: QED Sample Pro Pump (1.75-inch) (Pine #8135), Post Pump Install DTW = 17.37
YSI 556 MPS (12K101897), QED MP10 Controller (#3095),
Hach 2100P Turbidimeter (#15613), QED well wizard Compression 3020 (00779)
Solonst model 101 (100') (#48793) (Pine # 900732)
Eversmart Matrix Battery 92 12V. Final DTW = 17.36

Signed/Sampler(s): Mike D. Jackson

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: SW-1	Location: AFP59
Sampler(s): MIKE Jackson	Project Name: AFP59 2013 GWS
Well Depth: 28.4 + 0.28 = 28.68	Project #: AF7080 Date: 10-9-13 Time: 1010
DTW (ft): 17.35 DTP Top (ft): 17.15	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Pickup~~
MP Ht. Above/Below Ground Surface: 2.48	Sampling Method: BP
Condition of Bottom of Well: SLIGHTLY SOFT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (15.74 - 25.74~~85~~)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): ~~8~~ 2	PARTLY CLOUDY, 50°, SLIGHT WIND
Placement of Pump Inlet (ft): 23.5	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH +/-0.1	Temp. (C) +/-0.5	Cond. (~~umhos/cm~~ mS/cm) +/-3%	ORP (mv) +/-10	DO (mg/L)	Turb. (NTU) +/-10	Type, Size, and Amount of Sediment Discharged
1025	17.34	0.200	0.500	7.13	13.36	2.086	117.8	4.35	12.9	
1030	17.34	0.200	1.500	7.09	13.33	2.099	111.0	0.91	12.5	
1035	17.34	0.200	2.500	7.09	13.32	2.101	105.7	0.52	8.87	
1040	17.34	0.200	3.500	7.09	13.30	2.104	106.3	0.44	8.31	
1045	17.34	0.200	4.500	7.09	13.30	2.105	94.7	0.40	7.10	
1050	17.34	0.200	5.500	7.09	13.32	2.105	90.9	0.39	6.18	
1055	17.34	0.200	6.500	7.09	13.31	2.105	87.8	0.33	5.76	
1100	17.34	0.200	7.500	7.09	13.32	2.105	83.5	0.28	4.75	
1102	Sample	GROUND WATER					595W1WG1			

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED Sample Pro 1.75-inch (Pine # 17341), Post pump Install DTW = 17.34
YSI 556 MPS (12K101897), QED MP10 controller (#3095),
HACH 2100P TURBIMETER (#15613), QED well wizard compression 3020 (#001779)
Solonist model 101 (100') (#487-93) (Pine #900732)
EVERSTART MARINE BATTERY 12V Final DTW = 17.34

Signed/Sampler(s): M. Jackson

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: DW-3	Location: AFP59
Sampler(s): MIKE JACKSON	Project Name: AFP59 2013 GWS 10/9/13
Well Depth: 85+0.28= 85.28	Project #: AF7080 Date: ~~10/15~~ 10/9 Time: 1315
DTW (ft): 15.22 DTP Top (ft): 15.02	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Pickup~~
MP Ht. Above/Below Ground Surface: —	Sampling Method : BP
Condition of Bottom of Well: SOFT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (67.58 - 87.58~~87~~)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): ~~2~~ 4"	Clear, moderate wind, 60°
Placement of Pump Inlet (ft): 79'	

Field Parameters

+/-0.1 +/-0.5 +/-3% +/-10 +/-10

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH	Temp. (C)	Cond. ~~(umhos/cm)~~ mS/cm	ORP (mv)	DO (mg/L)	Turb. (NTU)	Type, Size, and Amount of Sediment Discharged
1340	15.23	0.210	0.5	7.66	15.39	1.532	21.2	1.49	56.5	
1345	15.23	0.210	1.550	7.44	15.47	1.566	1.5	0.75	42.7	
1350	15.23	0.210	2.600	7.29	15.41	1.595	-11.6	0.51	45.5	
1355	15.23	0.210	3.650	7.20	15.43	1.596	-22.9	0.44	39.7	
1400	15.23	0.210	4.700	7.18	15.43	1.595	-32.3	0.37	37.7	
1405	15.23	0.210	5.750	7.17	15.45	1.594	-35.1	0.35	31.8	
1410	15.23	0.210	6.800	7.14	15.42	1.595	-37.2	0.34	30.8	
1415	15.23	0.210	7.850	7.12	15.37	1.595	-38.6	0.31	22.4	
1417	COLLECT GROUNDWATER SAMPLES									59DW3WG1

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED Sample Pro 1.75-inch (Pine # 7734), Post-Pump Install DTW = 15.23
YSI 556 MPS (12K101897), QED MP10 Controller (#3095)
Hach 2100P Turbimeter (#15613), QED Well Wizard Compressor 3020 (#01779)
Solinst Model 101 (100') (#48793) (Pine #900732)
Everstart Marine Battery 12V Final DTW = 15.22

Signed/Sampler(s): Michael D. Jackson Gray mud on purge end dump DTB Cargo

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: SW-3	Location: AFP59
Sampler(s): MIKE JACKSON	Project Name: AFP59 2013 GWS
Well Depth: 29.7 +0.28 = 29.98	Project #: AF7080 Date: 10-9-13 Time: 1450
DTW (ft): 17.84 DTP Top (ft): 17.64	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Pickup~~
MP Ht. Above/Below Ground Surface: 1.17	Sampling Method : BP
Condition of Bottom of Well: SOFT	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (17.68 - 28.68295	Weather (sun/clear, overcast/rain, wind direction, ambient temperature): PARTLY cloudy, 63°, moderate wind
Well Diameter (in): ~~8~~ 2"	
Placement of Pump Inlet (ft): 24.5	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH +/-0.1	Temp. (C) +/-0.05	Cond. (umhos/cm) +/- 3%	ORP (mv) +/-10	DO (mg/L)	Turb. (NTU) +/-10	Type, Size, and Amount of Sediment Discharged
1523	17.82	0.2ϕϕ	ϕ.5	7.15	16.56	1.374	96.ϕ	1.93	5.26	
1528	17.82	ϕ.2ϕϕ	1.5ϕϕ	7.ϕ8	16.44	1.388	95.2	1.88	3.22	
1533	17.82	ϕ.2ϕϕ	2.5ϕϕ	7.ϕ4	16.38	1.4ϕϕ	93.9	1.51	2.23	
1538	17.82	ϕ.2ϕϕ	3.5ϕϕ	7.ϕ1	16.38	1.4ϕ5	92.7	1.31	1.85	
1543	17.82	ϕ.2ϕϕ	4.5ϕϕ	7.ϕ1	16.33	1.4ϕ6	92.4	1.28	2.00	
1548	17.82	ϕ.2ϕϕ	5.5ϕϕ	7.ϕϕ	16.33	1.4ϕ7	91.8	1.25	1.71	
1553	17.82	ϕ.2ϕϕ	6.5ϕϕ	6.99	16.31	1.4ϕ7	91.5	1.22	1.71	
1558	17.82	ϕ.2ϕϕ	7.5ϕϕ	6.99	16.3ϕ	1.4ϕ7	91.1	1.2ϕ	1.7ϕ	
1600	COLLECT GROUNDWATER SAMPLES.							595W3WG1		

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED SamplePro 1.75" pump (Pine # 8135) Post pump install DTW = 17.84
YSI 556 MPS (12K101897), QED MP10 controller (#3095)
HACH 2100P TURBIDIMETER (#15613), QED WELL WIZARD COMPRESSOR 3020 (#001779)
SOLINST MODEL 100 HOI (100') (#48793) (Pine # 900732)
EVERSTART MAXX 93 12V BATTERY Final DTW = 17.82

Signed/Sampler(s): Mike D. Jackson

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: SW-7	Location: AFP59
Sampler(s): MIKE DACKSON	Project Name: AFP59 2013 GWS 10-9-13
Well Depth: 28.81 +0.28 = 29.09	Project #: AF7080 Date: ~~10-9-13~~ Time: 1655
DTW (ft): 14.54 DTP Top (ft): 18.34	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL ~~Pickup~~
MP Ht. Above/Below Ground Surface: 2.65	Sampling Method : BP
Condition of Bottom of Well: Firm	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (- 28.85)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): ~~8~~ 2	PARTLY CLOUDY, 64°, CALM
Placement of Pump Inlet (ft): 24.5	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m) +/-0.1	Total Volume (L)	pH +/-0.5	Temp. (C)	Cond. (~~umhos/cm~~) mS/cm +/-3%	ORP (mv) +/-10	DO (mg/L)	Turb. (NTU) +/-10	Type, Size, and Amount of Sediment Discharged
1717	18.53	0.220	0.500	7.29	15.95	1.807	101	5.05	44.6	
1722	18.53	0.220	1.600	7.17	15.63	1.812	96.8	4.63	111	
1727	18.53	0.220	2.700	7.13	15.54	1.807	94.5	4.55	140	
1732	18.53	0.220	3.800	7.11	15.49	1.805	93.3	4.53	116	
1737	18.53	0.220	4.900	7.10	15.44	1.805	91.8	4.53	55.5	
1742	18.53	0.220	6.000	7.09	15.37	1.811	89.6	4.46	36.4	
1747	18.53	0.220	7.100	7.08	15.35	1.811	87.6	4.42	22.3	
1752	18.53	0.220	8.260	7.08	15.31	1.809	86.0	4.42	12.3	
1757	18.53	0.220	9.300	7.08	15.29	1.806	84.1	4.35	8.95	
1802	18.53	0.220	10.400	7.08	15.26	1.801	83.3	4.34	6.73	
1804	COLLECT GROUNDWATER SAMPLES							595W7WG1		

Observations

Color: (Clear) Other (describe):

Odor: (None) Low Medium High Very Strong H2S Fuel-like

Notes: QED SAMPLE PRO 1.75" PUMP (PUMP# 17341). POST PUMP INSTALL DTW = 18.54
YSI 556 MPS (12K101897). QED MP10 CONTROLLER (# 3095)
HACH 2100P TURBIDIMETER (# 15613). QED WELL WIZARD COMPRESSOR 3020 (#001779)
SOLONST MODEL 101 (100') (#48793) (PUMP #100732)
EVERSTART MAXX 93 12V BATTERY FINAL DTW = 18.53

Signed/Sampler(s): Mike D.

GROUNDWATER FIELD SAMPLING DATA SHEET

Well No.: SW-4	Location: AFP59
Sampler(s): MIKE JACKSON	Project Name: AFP59 2013 GWS
Well Depth: 27.95+0.28 = 28.23	Project #: AF7080 Date: 10/10/13 Time: 1240
DTW (ft): 13.04 DTP Top (ft): 22.91	Courier: ___FedEx ___UPS X Hand ~~X~~ TAL Pickup
MP Ht. Above/Below Ground Surface:	Sampling Method : BP
Condition of Bottom of Well: FIRM	Type of Pump: Bladder Pump
Screen Interval FTOC(ft): (- 27.52)	Weather (sun/clear, overcast/rain, wind direction, ambient temperature):
Well Diameter (in): ~~8~~ 2	OVERCAST, CALM, 53°
Placement of Pump Inlet (ft): 23.11	

Field Parameters

Time	Depth to Water (ft)	Flow Rate (L/m)	Total Volume (L)	pH (+/-0.1)	Temp. (C) (+/-0.5)	Cond. ~~(umhos/cm)~~ mS/cm (+/-3%)	ORP (mv) (+/-10)	DO (mg/L)	Turb. (NTU) (+/-10)	Type, Size, and Amount of Sediment Discharged
DTW 13.06										
1255	13.06	0.210	0.000	7.27	14.25	1.680	197.7	3.16	23.9	
1300	13.06	0.210	1.050	7.15	14.21	1.726	191.1	2.30	17.3	
1305	13.06	0.210	2.100	7.11	14.22	1.731	185.5	2.32	18.4	
1310	13.06	0.210	3.150	7.09	14.24	1.731	181.5	2.48	16.8	
1315	13.06	0.210	4.200	7.08	14.26	1.719	178.0	2.31	16.2	
1320	13.06	0.210	5.250	7.06	14.32	1.721	175.2	2.33	14.7	
1325	13.06	0.210	6.300	7.05	14.34	1.736	172.7	2.41	13.6	
1327	COLLECT GROUNDWATER SAMPLES + DUPLICATE									
									595W4WG1	
									590JP01WG1	

Observations

DUPLICATE

Color: (Clear) Other (describe):	TOC PID = 9.2 ppm
Odor: None Low Medium High Very Strong H2S (Fuel-like)	
Notes: QED Sample Pro 1.75" Pump (# 8135), Post Pump Install DTW = 13.06 YSI 556 MPS (12K101897), QED MP10 Controller (#3095) ARCH 2100P TURBIDIMETER (#15613), QED WELL WIZARD Compressor 3020 (001779) SOLINST model 688 (100') (#48793) (Pump # 900732) ELECTRAST MAXX 93 12V BATTERY Final DTW = 13.04	
Signed/Sampler(s):	

HGL
HydroGeologic, Inc

GROUNDWATER FIELD SAMPLING DATA SHEET

Well Name.: EFFLUENT (POST-SETTLING)		Project Name:	LOCID:
Sampler(s): JC+2 MIKE JACKSON		Project No.: AF7080	
Well Depth: N/A		Date: 10-10-13	Time: 0945
DTW (ft TOC): N/A		Screen Interval: N/A	
Well Diameter (in): N/A		Placement of Pump (ft TOC): N/A	
Type of Pump: N/A			

Field Parameters

Time	Depth to Water (ft)	Flow Rate (gpm)	Total Volume (gal)	pH	Temp. (C)	Cond. (~~umhos/cm~~ mS/cm)	ORP	D.O. (mg/L)	Turb. (N.T.U.)	Description
0955	purge EFFLUENT			Live	for	5 minutes.	GARDEN	HOSE	CONNECTION	
	ON well pump			poly	phosphate	tank (poly).	DISCONNECT	HOSE.		
1000	COLLECT	samples		59JCEFFWG1						
1004	Readings		5Gal+	8.06	13.26	1.144	203.4	9.48	@ 1.87	
1015	Pump JC#2			for	5 minutes.	JC#2	MAIN	WELL.		
	JC#3	pump	on/off	as	needed.	JC#3	had	issues		
	few	minutes	Back.	JC#1	off.					
1020	collect	samples		59JC2WG1						
1021	Readings			7.58	13.83	1.084	200.9	2.65	1.50	

Observations

Notes:
Signed/Sampler(s): Mike D. J.

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: URS-3D

PROJECT NAME: AFP59

DATE/TIME: 10-7-13 1757

CITY/STATE: Johnson City, NY

INSPECTED BY: MDJ

Water Level Indicator Serial No.: SOLINST 101 (# 900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 0.8 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF ~~PVC~~ SS): 86.35

WATER LEVEL DEPTH (FEET FROM TOP OF PVC): 35.86

PVC WELL STICK-UP (FEET, ABOVE GRADE): 1.78

PROTECTIVE CASING STICK-UP (FEET, AGS): 1.95

WELL DIAMETER (INCHES): 2

WELL CONSTRUCTION (PVC, (STEEL), ETC.): SS

LOCKED UPON ARRIVAL?	YES	(NO)
LOCK REPLACED?	YES	(NO)
OBSTRUCTIONS?	YES	(NO)
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO) (If YES, detail in comments below)
WELL RELABELED?	YES	(NO)
WELL PHOTOGRAPHED?	(YES)	NO

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: BM-121

PROJECT NAME: AFP59

DATE/TIME: 10/8/13 0935

CITY/STATE: Johnson City, NY

INSPECTED BY: MDS

Water Level Indicator Serial No.: Solinst model 101 (100') (#48793) (Probe # 900732

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 5.4 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF ~~PVC~~ STEEL)	56.46 (56.18 + 0.28)
WATER LEVEL DEPTH (FEET FROM TOP OF PVC)	25.76
~~PVC~~ STEEL WELL STICK-UP (FEET, ABOVE GRADE)	3.2
PROTECTIVE CASING STICK-UP (FEET, AGS)	N/A
WELL DIAMETER (INCHES)	6
WELL CONSTRUCTION (PVC, (STEEL), ETC.)	STEEL

LOCKED UPON ARRIVAL?	YES	(NO)
LOCK REPLACED?	YES	(NO)
OBSTRUCTIONS?	YES	(NO)
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO) (If YES, detail in comments below)
WELL RELABELED?	YES	(NO)
WELL PHOTOGRAPHED?	YES	(NO)

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: URS-2D

PROJECT NAME: AFP59

DATE/TIME: 10/8/13 1250

CITY/STATE: Johnson City, NY

INSPECTED BY: MDJ

Water Level Indicator Serial No.: Solinst model 101 (100') (#48793, Proj# 900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 1.5 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF ~~PVC~~ SS): 90.35 + 0.28 = 90.63

WATER LEVEL DEPTH (FEET FROM TOP OF ~~PVC~~ SS): 30.84

PVC WELL STICK-UP (FEET, ABOVE GRADE): FLUSH MOUNT

PROTECTIVE CASING STICK-UP (FEET, AGS): —

WELL DIAMETER (INCHES): 2

WELL CONSTRUCTION (PVC, STEEL, ETC.): STAINLESS STEEL

LOCKED UPON ARRIVAL?	(YES)	NO	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	(YES)	NO	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: URS-2S

PROJECT NAME: AFP59

DATE/TIME: 10/8/13 1445

CITY/STATE: Johnson City, NY

INSPECTED BY: MDJ

Water Level Indicator Serial No.: Solinst model 101 (100') (#48793, Pine # 900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 1.2 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF ~~PVC~~ SS)	58.48 (58.2 + 0.28)
WATER LEVEL DEPTH (FEET FROM TOP OF ~~PVC~~ SS)	31.04
PVC WELL STICK-UP (FEET, ABOVE GRADE)	FLUSH MOUNT
PROTECTIVE CASING STICK-UP (FEET, AGS)	—
WELL DIAMETER (INCHES)	2
WELL CONSTRUCTION (PVC, STEEL, ETC.)	Stainless Steel

LOCKED UPON ARRIVAL?	(YES)	NO
LOCK REPLACED?	YES	(NO)
OBSTRUCTIONS?	YES	(NO)
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO) (If YES, detail in comments below)
WELL RELABELED?	YES	(NO)
WELL PHOTOGRAPHED?	(YES)	NO

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: URS-5S

PROJECT NAME: AFP59

DATE/TIME: 10/8/13 1718

CITY/STATE: Johnson City, NY

INSPECTED BY: MDS

Water Level Indicator Serial No.: Solinst model 101 (#487973) (Pine # 900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 4.1 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC) SS	66.15
WATER LEVEL DEPTH (FEET FROM TOP OF PVC) SS	22.16
PVC WELL STICK-UP (FEET, ABOVE GRADE)	FLUSH MOUNT
PROTECTIVE CASING STICK-UP (FEET, AGS)	—
WELL DIAMETER (INCHES)	2
WELL CONSTRUCTION (PVC, STEEL, ETC.)	Stainless Steel

LOCKED UPON ARRIVAL?	(YES)	NO	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	YES	(NO)	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: DW-1

PROJECT NAME: AFP59

DATE/TIME: 10/9/13 0915

CITY/STATE: Johnson City, NY

INSPECTED BY: MDS

Water Level Indicator Serial No.: Solinst model 101 (100') (#48793) (Pine # 900732

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 0.5 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC)	62.72 (62.44 + 0.28)
WATER LEVEL DEPTH (FEET FROM TOP OF PVC)	17.38
PVC WELL STICK-UP (FEET, ABOVE GRADE)	2.63
PROTECTIVE CASING STICK-UP (FEET, AGS)	2.84
WELL DIAMETER (INCHES)	4
WELL CONSTRUCTION (PVC, STEEL, ETC.)	PVC

LOCKED UPON ARRIVAL?	YES	(NO)	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	(YES)	NO	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: SW-1

PROJECT NAME: AFP59

DATE/TIME: 10/9/13

CITY/STATE: Johnson City, NY

INSPECTED BY: MDT

Water Level Indicator Serial No.: Solinst model 101 (100') (#48793) (Bne #900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 1.3 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC)	28.68 (28.4 + 0.28)
WATER LEVEL DEPTH (FEET FROM TOP OF PVC)	17.35
PVC WELL STICK-UP (FEET, ABOVE GRADE)	2.48
PROTECTIVE CASING STICK-UP (FEET, AGS)	2.88
WELL DIAMETER (INCHES)	2-inch
WELL CONSTRUCTION (PVC, STEEL, ETC.)	PVC

LOCKED UPON ARRIVAL?	YES	(NO)	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	(YES)	NO	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: DW-3

PROJECT NAME: AFP59

DATE/TIME: 10/9/13 1425

CITY/STATE: Johnson City, NY

INSPECTED BY: MDJ

Water Level Indicator Serial No.: Solonst model 101 (100') (#48793) (Pine # 900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 1.6 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC) 85.28 (85 + 0.28)

WATER LEVEL DEPTH (FEET FROM TOP OF PVC) 15.22

PVC WELL STICK-UP (FEET, ABOVE GRADE) FM (FLUSH MOUNT)

PROTECTIVE CASING STICK-UP (FEET, AGS)

WELL DIAMETER (INCHES) 4

WELL CONSTRUCTION (PVC, STEEL, ETC.) PVC

LOCKED UPON ARRIVAL?	YES	(NO)	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	(YES)	NO	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: SW-3

PROJECT NAME: AFP59

DATE/TIME: 10/9/13 1615

CITY/STATE: Johnson City, NY

INSPECTED BY: MDJ

Water Level Indicator Serial No.: Solinst Model 101 (100') (#48793) (Pine # 900732)

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 2.8 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC) ~~29.2~~ 29.98 (29.7 + 0.28)

WATER LEVEL DEPTH (FEET FROM TOP OF PVC) 17.8X

PVC WELL STICK-UP (FEET, ABOVE GRADE) 1.17

PROTECTIVE CASING STICK-UP (FEET, AGS) 1.47

WELL DIAMETER (INCHES) 2"

WELL CONSTRUCTION (PVC, STEEL, ETC.) PVC

LOCKED UPON ARRIVAL?	YES	(NO)
LOCK REPLACED?	YES	(NO)
OBSTRUCTIONS?	YES	(NO)
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO) (If YES, detail in comments below)
WELL RELABELED?	YES	(NO)
WELL PHOTOGRAPHED?	(YES)	NO

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: SW-7

PROJECT NAME: AFP59

DATE/TIME: 10-9-13 1815

CITY/STATE: Johnson City, NY

INSPECTED BY: MDS

Water Level Indicator Serial No.: Solinst model 101 (100')

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 1.1 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC)	29.09 (28.81 + 0.28)
WATER LEVEL DEPTH (FEET FROM TOP OF PVC)	18.53
PVC WELL STICK-UP (FEET, ABOVE GRADE)	~~26.~~ 2.65
PROTECTIVE CASING STICK-UP (FEET, AGS)	2.95
WELL DIAMETER (INCHES)	2
WELL CONSTRUCTION (PVC/STEEL, ETC.)	PVC

LOCKED UPON ARRIVAL?	YES	(NO)	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	(YES)	NO	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

WELL INSPECTION AND GROUNDWATER LEVEL MEASUREMENT SHEET

WELL NUMBER: SW-4

PROJECT NAME: AFP59

DATE/TIME: 10/10/18 7415

CITY/STATE: Johnson City, NY

INSPECTED BY: MDS

Water Level Indicator Serial No.: 50/075T model 101 (100')
(#48793 (Proe # 90072

VENT WELL

MONITORING WELL INSTRUMENT READING (VOCs): 9.2 ppm

WELL INSPECTION/GROUNDWATER LEVEL MEASUREMENT

WELL DEPTH (FEET FROM TOP OF PVC) 28.23 (27.95 + 0.28)

WATER LEVEL DEPTH (FEET FROM TOP OF PVC) 13.04

PVC WELL STICK-UP (FEET, ABOVE GRADE) FLUSH MOUNT

PROTECTIVE CASING STICK-UP (FEET, AGS)

WELL DIAMETER (INCHES) 2

WELL CONSTRUCTION (PVC, STEEL, ETC.) PVC

LOCKED UPON ARRIVAL?	YES	(NO)	
LOCK REPLACED?	YES	(NO)	
OBSTRUCTIONS?	YES	(NO)	
DAMAGE TO WELL PAD/STICKUP/CASING, ETC?	YES	(NO)	(If YES, detail in comments below)
WELL RELABELED?	YES	(NO)	
WELL PHOTOGRAPHED?	(YES)	NO	

GENERAL CONDITION/COMMENTS/RECOMMENDATIONS:

HydroGeoLogic, Inc

STATIC GROUNDWATER ELEVATION LOG

Project Name: AFP59 2013 Groundwater Sampling Event

Project No.: AF7061

Water Level Indicator ID#: Water Level Indicator (SOLINST model 101)

PID Meter ID#: MiniRAE 2000

Well Identification	Date	Time	Static Depth to Water (from TOC)	Depth to Product (from TOC)	PID Reading	Comments
DW-1	10/7/13	1148	17.48	—	0.5	BKGND = 0.1 ppm
SW-1	10-7-13	1149	17.48	—	1.3	BKGND = 0.2 ppm
SW-4	UNDER WATER.	Drain	(floor drain)			PLUGGED
SW-7	10/7/13	1132	18.89	—	1.1	BKGND = 0.3 ppm
SW-3	10/7/13	1127	18.27		2.8	BKGND = 0.5 ppm
DW-3	10/7/13	1124	←	15.59 –	1.6	BKGND = 0.2 ppm (4-inch FM)
URS-2D	10/7/13	1043	31.04		1.5	BKGND = ~~1.5~~ 1.1 ppm (NORTH OF 25)
URS-2S	10/7/13	~~1046~~	~~31.07~~ MT	← 31.25	~~4.1~~ 1.2 MS	BKGND = 0.9 ppm
URS-3D	10/7/13	1032	35.59	—	0.8 ppm	BKGND = 0.6 ppm
URS-5S	10/7/13	~~1102~~	22.8	—	~~5.4 ppm~~ MS	~~BKGND = 0.5 ppm~~ MS BKGND = 0.7 (SOUTH EXTENSION NEAR SUMP)
BM-121	10/7/13	1111	25.89	—	5.4 ppm	BKGND = 0.5 ppm

1.5 → 2 ~~NORTH~~ N (1.1 BKgnd) (25)
1.2 → 2 ~~SOUTH~~ S (0.9 BKGND) (20?)

5 → NORTH → 2.5 (0.7 BKgnd)
↳ SOUTH 4.1 (0.7

HGL HydroGeoLogic, Inc Exceeding Expectations

AFP59 2013 LTM Event
Daily Instrument and Calibration Log

Circle One: Spring/Fall

Date:

	Standard Value	pH4	pH7	pH10	SC 1000	ORP ~~100~~ mv	100% Sat.	
	Standard Lot Number	2AK644 Aqua Phoenix 11/30/14	3AF134 6/30/15	AG213 7/31/14	2AC309 12/31/13	5100 240 10/2017		
10/7/13	Instrument Serial # 12K101897	pH4	pH7	pH10	SC ~~1000~~ 1413	ORP	D.O.	
	Pre Calibration	4.03	7.02	10.00	1.389	256	90.6%	8.52 mg/L
	Calibrated	4.00	7.00	10.00	1.413	240	99.7%	9.38 mg/L
	End of Day Drift	3.85	7.05	10.12	1.412	240	102.3%	9.17
10/8/13	Instrument Serial # 12K101897	pH4	pH7	pH10	SC 1000	ORP	D.O.	
	Pre Calibration	3.96	7.03	10.05	1.406	238.4	100.9%	9.12 mg/L
	Calibrated	4.00	7.00	10.01	1.413	240	100.7%	9.09 mg/L
	End of Day Drift	3.93	6.99	10.04	1.411	246	100.6%	9.19 mg/L
10-9-13	Instrument Serial # 12K101897	pH4	pH7	pH10	SC 1000	ORP	D.O.	
	Pre Calibration	3.99	6.98	10.08	1.412	242.8	102.9%	9.53 mg/L
	Calibrated	4.00	7.00	10.01	1.413	240.0	101.5%	9.41 mg/L
	End of Day Drift	4.02	7.03	10.03	1.411	238.7	102.0%	9.47 mg/L
10/10/13	Instrument Serial # 12K101897	pH4	pH7	pH10	SC 1000	ORP	D.O.	
	Pre Calibration	4.02	6.94	10.14	1.413	239	101.9%	101.2% 10.35%
	Calibrated	4.00	7.00	10.02	1.413	240	9.23 mg/L	9.25 mg/L 9.28 mg/L
	End of Day Drift	4.03	7.06	10.04	1.407	245		
	Instrument Serial #	pH4	pH7	pH10	SC 1000	ORP	D.O.	
	Pre Calibration							
	Calibrated							
	End of Day Drift							

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: MIKE JACKSON	Lab PM: PATRICK McENTEE	Carrier Tracking No(s):	COC No: 180-14253-3749.1
Client Contact: ~~Mr. Mike Jackson~~ MR. PETER DACTK	Phone: 518-877-0390	E-Mail: PATRICK.MCENTEE@TESTAMERICA.COM		Page: Page 1 of 2
Company: HydroGeoLogic Inc				Job #:
Address: Northway 10 Executive Park 313 Ushers Rd.	Due Date Requested:			
City: Ballston Lake	TAT Requested (days): PER CONTRACT			
State, Zip: NY, 12019	PO #:			
Phone: 518-877-0390	WO #:			
Email: mjackson@hgl.com	Project #: AF7080			
Project Name: Air Force Plant 59	SSOW#:			
Site: AFP59 JOHNSON CITY, NY				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCS 8260B	1,4-DIOXANE (8270C)	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	N		
59URS3DWG1	10-7-13	1715	G	W	N		X	X	5	
59BMW2WG1	10-8-13	0929					X	X		
59URS2DWG1		1245					X	X		
59URS2SWG1		1440					X	X		
59URS5SWG1		1712					X	X		
59URS5SWG1-MS		1712				X	X	X		
59URS5SWG1-MSD		1712				X	X	X		
59DW1WG1	10-9-13	0902					X	X		
~~59D~~ 59SW1WG1		1102					X	X		
59DW3WG1		1417					X	X		
59SW3WG1		1600					X	X		

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:	
Relinquished by: MICHAEL D. JACKSON	Date/Time: 10-11-13 1225	Company: HGL	Received by:	Date/Time: 10/11/13 1220	Company: TA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

TestAmerica Albany
25 Kraft Road
Albany, NY 12205

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: MIKE JACKSON	Lab PM: PATRICK MCENTEE	Carrier Tracking No(s):	COC No: 180-14253-3749.2
Client Contact: ~~Mr. Mike Jackson~~ MR. PETER DAUK	Phone: 518-877-0390	E-Mail: PATRICK.MCENTEE@TESTAMERICA.COM		Page: Page 2 of 2
Company: HydroGeoLogic Inc				Job #:
Address: Northway 10 Executive Park 313 Ushers Rd.	Due Date Requested:			
City: Ballston Lake	TAT Requested (days): PER CONTRACT			
State, Zip: NY, 12019				
Phone:	PO #:			
Email: mjackson@hgl.com	WO #:			
Project Name: Air Force Plant 59	Project #: AF7080			
Site: AFP 59 JOHNSON CITY, NY	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	VOCs 8260B	1,4-Dioxane (8270C)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
59SW7WG1	10/9/13	1804	G	W	N		X	X	5	
59SW4WG1	10/10/13	1327					X	X		
59JCEFPWG1		1000					X	X		
59JC2WG1		1020					X	X		
59DUP01WG1		0913					X	X		
59AB1010113		1317					X			VOCs 8260B only for AB
59EB1010113		1505					X	X		
TB000713	10/7/13	1200	G	W			X		2	
	~~10/11/13~~									

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: MICHAEL D. JACKSON HGL 10-11-13 1225	Date/Time: 10-11-13 1225	Company: HGL	Received by:	Date/Time: 10/11/13 12:20	Company: TA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

ATTACHMENT 2

LABORATORY REPORT

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR53DWG1**

Lab Sample ID: 280-47755-1
Client Matrix: Water

Date Sampled: 10/07/2013 1715
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 1131
Prep Date: 10/17/2013 1131

Analysis Batch: 280-196363
Prep Batch: N/A

Instrument ID: VMS_H
Lab File ID: H6674.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.99	~~J~~ F	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.90	~~J~~ F	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR53DWG1**

Lab Sample ID: 280-47755-1
Client Matrix: Water

Date Sampled: 10/07/2013 1715
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6674.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1131			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1131				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	1.7		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 120
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane (Surr)	95		85 - 115
Toluene-d8 (Surr)	90		85 - 120

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59BM121WG1**

Lab Sample ID: 280-47755-2
Client Matrix: Water

Date Sampled: 10/08/2013 0929
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6679.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1320			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1320				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59BM121WG1**

Lab Sample ID: 280-47755-2
Client Matrix: Water

Date Sampled: 10/08/2013 0929
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6679.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1320			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1320				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 120
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane (Surr)	92		85 - 115
Toluene-d8 (Surr)	93		85 - 120

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52DWG1**

Lab Sample ID: 280-47755-3
Client Matrix: Water

Date Sampled: 10/08/2013 1245
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6680.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1342			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1342				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.21	~~J~~ P	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	66	~~J~~ JX	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52DWG1**

Lab Sample ID: 280-47755-3
Client Matrix: Water

Date Sampled: 10/08/2013 1245
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6680.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1342			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1342				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.17	J F	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 120
4-Bromofluorobenzene (Surr)	90		75 - 120
Dibromofluoromethane (Surr)	91		85 - 115
Toluene-d8 (Surr)	85		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52DWG1**

Lab Sample ID: 280-47755-3
Client Matrix: Water

Date Sampled: 10/08/2013 1245
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6681.D
Dilution:	2.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1403	Run Type:	DL	Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1403				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.34	U	0.34	2.0
1,1,1-Trichloroethane	0.32	U	0.32	2.0
1,1,2,2-Tetrachloroethane	0.40	U	0.40	2.0
1,1,2-Trichloroethane	0.64	U	0.64	2.0
1,1-Dichloroethane	0.32	U	0.32	2.0
1,1-Dichloroethene	0.28	U	0.28	2.0
1,1-Dichloropropene	0.30	U	0.30	2.0
1,2,3-Trichlorobenzene	0.36	U	0.36	2.0
1,2,3-Trichloropropane	1.5	U	1.5	6.0
1,2,4-Trichlorobenzene	0.64	U	0.64	2.0
1,2,4-Trimethylbenzene	0.28	U	0.28	2.0
1,2-Dibromo-3-Chloropropane	1.6	U	1.6	10
1,2-Dichlorobenzene	0.26	U	0.26	2.0
1,2-Dichloroethane	0.26	U	0.26	2.0
1,2-Dichloropropane	0.26	U	0.26	2.0
1,3,5-Trimethylbenzene	0.28	U	0.28	2.0
1,3-Dichlorobenzene	0.32	U	0.32	2.0
1,3-Dichloropropane	0.30	U	0.30	2.0
1,4-Dichlorobenzene	0.32	U	0.32	2.0
1-Chlorohexane	0.34	U	0.34	2.0
2,2-Dichloropropane	0.40	U	0.40	2.0
2-Butanone (MEK)	3.7	U	3.7	12
2-Chlorotoluene	0.34	U	0.34	2.0
4-Chlorotoluene	0.34	U	0.34	2.0
4-Isopropyltoluene	0.34	U	0.34	2.0
4-Methyl-2-pentanone (MIBK)	2.1	U	2.1	10
Acetone	3.8	U	3.8	20
Benzene	0.32	U	0.32	2.0
Bromobenzene	0.34	U	0.34	2.0
Bromoform	0.38	U	0.38	2.0
Bromomethane	0.42	U	0.42	4.0
Carbon tetrachloride	0.38	U	0.38	4.0
Chlorobenzene	0.34	U	0.34	2.0
Chlorobromomethane	0.20	U	0.20	2.0
Chlorodibromomethane	0.34	U	0.34	2.0
Chloroethane	0.82	U	0.82	4.0
Chloroform	0.32	U	0.32	2.0
Chloromethane	0.60	U	0.60	4.0
cis-1,2-Dichloroethene	62		0.30	2.0
cis-1,3-Dichloropropene	0.32	U	0.32	2.0
Dibromomethane	0.34	U	0.34	2.0
Dichlorobromomethane	0.34	U	0.34	2.0
Dichlorodifluoromethane	0.62	U	0.62	4.0
Ethylbenzene	0.32	U	0.32	2.0
Ethylene Dibromide	0.36	U	0.36	2.0
Hexachlorobutadiene	0.72	U	0.72	2.0

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: 59UR52DWG1

Lab Sample ID: 280-47755-3
Client Matrix: Water

Date Sampled: 10/08/2013 1245
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6681.D
Dilution:	2.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1403	Run Type:	DL	Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1403				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.38	U	0.38	2.0
Methyl tert-butyl ether	0.50	U	0.50	10
Methylene Chloride	0.64	U	0.64	10
m-Xylene & p-Xylene	0.68	U	0.68	4.0
Naphthalene	0.44	U	0.44	2.0
n-Butylbenzene	0.64	U	0.64	2.0
N-Propylbenzene	0.32	U	0.32	2.0
o-Xylene	0.38	U	0.38	2.0
sec-Butylbenzene	0.34	U	0.34	2.0
Styrene	0.34	U	0.34	2.0
tert-Butylbenzene	0.32	U	0.32	2.0
Tetrachloroethene	0.40	U	0.40	2.0
Toluene	0.34	U	0.34	2.0
trans-1,2-Dichloroethene	0.30	U	0.30	2.0
trans-1,3-Dichloropropene	0.38	U	0.38	2.0
Trichloroethene	0.32	U	0.32	2.0
Trichlorofluoromethane	0.58	U	0.58	4.0
Vinyl chloride	0.20	U	0.20	3.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 120
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane (Surr)	92		85 - 115
Toluene-d8 (Surr)	89		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52SWG1**

Lab Sample ID: 280-47755-4
Client Matrix: Water

Date Sampled: 10/08/2013 1440
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 1425
Prep Date: 10/17/2013 1425

Analysis Batch: 280-196363
Prep Batch: N/A

Instrument ID: VMS_H
Lab File ID: H6682.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	1.6		0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	1.1		0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	1.2		0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52SWG1**

Lab Sample ID: 280-47755-4
Client Matrix: Water

Date Sampled: 10/08/2013 1440
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6682.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1425			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1425				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	2.3		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 120
4-Bromofluorobenzene (Surr)	103		75 - 120
Dibromofluoromethane (Surr)	100		85 - 115
Toluene-d8 (Surr)	92		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR55SWG1**

Lab Sample ID: 280-47755-5
Client Matrix: Water

Date Sampled: 10/08/2013 1712
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 1109
Prep Date: 10/17/2013 1109

Analysis Batch: 280-196363
Prep Batch: N/A

Instrument ID: VMS_H
Lab File ID: H6673.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.50	JF	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR55SWG1**

Lab Sample ID: 280-47755-5
Client Matrix: Water

Date Sampled: 10/08/2013 1712
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6673.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1109			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1109				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.63	J F	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 120
4-Bromofluorobenzene (Surr)	88		75 - 120
Dibromofluoromethane (Surr)	92		85 - 115
Toluene-d8 (Surr)	91		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DW1WG1**

Lab Sample ID: 280-47755-6
Client Matrix: Water

Date Sampled: 10/09/2013 0902
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 1447
Prep Date: 10/17/2013 1447

Analysis Batch: 280-196363
Prep Batch: N/A

Instrument ID: VMS_H
Lab File ID: H6683.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DW1WG1**

Lab Sample ID: 280-47755-6
Client Matrix: Water

Date Sampled: 10/09/2013 0902
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6683.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1447			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1447				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 120
4-Bromofluorobenzene (Surr)	86		75 - 120
Dibromofluoromethane (Surr)	94		85 - 115
Toluene-d8 (Surr)	92		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW1WG1**

Lab Sample ID: 280-47755-7
Client Matrix: Water

Date Sampled: 10/09/2013 1102
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6684.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1509			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1509				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW1WG1**

Lab Sample ID: 280-47755-7
Client Matrix: Water

Date Sampled: 10/09/2013 1102
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196363	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H6684.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 1509			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 1509				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 120
4-Bromofluorobenzene (Surr)	95		75 - 120
Dibromofluoromethane (Surr)	95		85 - 115
Toluene-d8 (Surr)	89		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DW3WG1**

Lab Sample ID: 280-47755-8
Client Matrix: Water

Date Sampled: 10/09/2013 1417
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2111
Prep Date: 10/17/2013 2111

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3803.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.32	U F	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	57		0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DW3WG1**

Lab Sample ID: 280-47755-8
Client Matrix: Water

Date Sampled: 10/09/2013 1417
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2111
Prep Date: 10/17/2013 2111

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3803.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.18	J F	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 120
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane (Surr)	98		85 - 115
Toluene-d8 (Surr)	91		85 - 120

gv 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW3WG1**

Lab Sample ID: 280-47755-9
Client Matrix: Water

Date Sampled: 10/09/2013 1600
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3804.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2131			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2131				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	1.0		0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

QV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW3WG1**

Lab Sample ID: 280-47755-9
Client Matrix: Water

Date Sampled: 10/09/2013 1600
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3804.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2131			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2131				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.70	J F	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 120
4-Bromofluorobenzene (Surr)	94		75 - 120
Dibromofluoromethane (Surr)	98		85 - 115
Toluene-d8 (Surr)	90		85 - 120

QV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW7WG1**

Lab Sample ID: 280-47755-10
Client Matrix: Water

Date Sampled: 10/09/2013 1804
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2151
Prep Date: 10/17/2013 2151

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3805.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	1.2		0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.93	2 F	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	7.0		0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW7WG1**

Lab Sample ID: 280-47755-10
Client Matrix: Water

Date Sampled: 10/09/2013 1804
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3805.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2151			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2151				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.27	JF	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	2.5		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		70 - 120
4-Bromofluorobenzene (Surr)	91		75 - 120
Dibromofluoromethane (Surr)	95		85 - 115
Toluene-d8 (Surr)	89		85 - 120

JV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW4WG1**

Lab Sample ID: 280-47755-11
Client Matrix: Water

Date Sampled: 10/10/2013 1327
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2211
Prep Date: 10/17/2013 2211

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3806.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	1.8		0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.77	↘ F	0.16	1.0
1,1-Dichloroethene	0.26	↘ F	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	2.6		0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW4WG1**

Lab Sample ID: 280-47755-11
Client Matrix: Water

Date Sampled: 10/10/2013 1327
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2211
Prep Date: 10/17/2013 2211

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3806.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.39	J F	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	6.6		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 120
4-Bromofluorobenzene (Surr)	94		75 - 120
Dibromofluoromethane (Surr)	97		85 - 115
Toluene-d8 (Surr)	91		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: 59JCEFFWG1

Lab Sample ID: 280-47755-12
Client Matrix: Water

Date Sampled: 10/10/2013 1000
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3807.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2231			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2231				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59JCEFFWG1**

Lab Sample ID: 280-47755-12
Client Matrix: Water

Date Sampled: 10/10/2013 1000
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3807.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2231			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2231				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		70 - 120
4-Bromofluorobenzene (Surr)	94		75 - 120
Dibromofluoromethane (Surr)	96		85 - 115
Toluene-d8 (Surr)	86		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59JC2WG1**

Lab Sample ID: 280-47755-13
Client Matrix: Water

Date Sampled: 10/10/2013 1020
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2251
Prep Date: 10/17/2013 2251

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3808.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	0.36	JF	0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.16	U	0.16	1.0
1,1-Dichloroethene	0.14	U	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	0.29	JF	0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59JC2WG1**

Lab Sample ID: 280-47755-13
Client Matrix: Water

Date Sampled: 10/10/2013 1020
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3808.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2251			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2251				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	0.48	J F	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	82		70 - 120
4-Bromofluorobenzene (Surr)	95		75 - 120
Dibromofluoromethane (Surr)	95		85 - 115
Toluene-d8 (Surr)	91		85 - 120

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Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DUP01WG1**

Lab Sample ID: 280-47755-14FD
Client Matrix: Water

Date Sampled: 10/10/2013 0913
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B/DoD
Prep Method: 5030B
Dilution: 1.0
Analysis Date: 10/17/2013 2311
Prep Date: 10/17/2013 2311

Analysis Batch: 280-196524
Prep Batch: N/A

Instrument ID: VMS_G2
Lab File ID: G2_3809.D
Initial Weight/Volume: 20 mL
Final Weight/Volume: 20 mL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,1,1,2-Tetrachloroethane	0.17	U	0.17	1.0
1,1,1-Trichloroethane	1.6		0.16	1.0
1,1,2,2-Tetrachloroethane	0.20	U	0.20	1.0
1,1,2-Trichloroethane	0.32	U	0.32	1.0
1,1-Dichloroethane	0.73	JF	0.16	1.0
1,1-Dichloroethene	0.25	JF	0.14	1.0
1,1-Dichloropropene	0.15	U	0.15	1.0
1,2,3-Trichlorobenzene	0.18	U	0.18	1.0
1,2,3-Trichloropropane	0.77	U	0.77	3.0
1,2,4-Trichlorobenzene	0.32	U	0.32	1.0
1,2,4-Trimethylbenzene	0.14	U	0.14	1.0
1,2-Dibromo-3-Chloropropane	0.81	U	0.81	5.0
1,2-Dichlorobenzene	0.13	U	0.13	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
1,2-Dichloropropane	0.13	U	0.13	1.0
1,3,5-Trimethylbenzene	0.14	U	0.14	1.0
1,3-Dichlorobenzene	0.16	U	0.16	1.0
1,3-Dichloropropane	0.15	U	0.15	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
1-Chlorohexane	0.17	U	0.17	1.0
2,2-Dichloropropane	0.20	U	0.20	1.0
2-Butanone (MEK)	1.8	U	1.8	6.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.17	U	0.17	1.0
4-Isopropyltoluene	0.17	U	0.17	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	5.0
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	2.0
Carbon tetrachloride	0.19	U	0.19	2.0
Chlorobenzene	0.17	U	0.17	1.0
Chlorobromomethane	0.10	U	0.10	1.0
Chlorodibromomethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	2.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	2.0
cis-1,2-Dichloroethene	2.6		0.15	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
Dibromomethane	0.17	U	0.17	1.0
Dichlorobromomethane	0.17	U	0.17	1.0
Dichlorodifluoromethane	0.31	U	0.31	2.0
Ethylbenzene	0.16	U	0.16	1.0
Ethylene Dibromide	0.18	U	0.18	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DUP01WG1**

Lab Sample ID: 280-47755-14FD
Client Matrix: Water

Date Sampled: 10/10/2013 0913
Date Received: 10/12/2013 0900

8260B/DoD Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B/DoD	Analysis Batch:	280-196524	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_3809.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	10/17/2013 2311			Final Weight/Volume:	20 mL
Prep Date:	10/17/2013 2311				

Analyte	Result (ug/L)	Qualifier	DL	LOQ
Isopropylbenzene	0.19	U	0.19	1.0
Methyl tert-butyl ether	0.25	U	0.25	5.0
Methylene Chloride	0.32	U	0.32	5.0
m-Xylene & p-Xylene	0.34	U	0.34	2.0
Naphthalene	0.22	U	0.22	1.0
n-Butylbenzene	0.32	U	0.32	1.0
N-Propylbenzene	0.16	U	0.16	1.0
o-Xylene	0.19	U	0.19	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
Styrene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Tetrachloroethene	0.35	↘F	0.20	1.0
Toluene	0.17	U	0.17	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
Trichloroethene	7.4		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	2.0
Vinyl chloride	0.10	U	0.10	1.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	81		70 - 120
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane (Surr)	93		85 - 115
Toluene-d8 (Surr)	89		85 - 120

QN 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR53DWG1**

Lab Sample ID: 280-47755-1
Client Matrix: Water

Date Sampled: 10/07/2013 1715
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86829	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1015020.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/15/2013 1927			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	1.8	F	0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	71		40 - 110
2-Fluorobiphenyl	66		50 - 110
Terphenyl-d14 (Surr)	77		50 - 135

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59BM121WG1**

Lab Sample ID: 280-47755-2
Client Matrix: Water

Date Sampled: 10/08/2013 0929
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86829	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1015021.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/15/2013 1954			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	69		40 - 110
2-Fluorobiphenyl	63		50 - 110
Terphenyl-d14 (Surr)	73		50 - 135

QV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52DWG1**

Lab Sample ID: 280-47755-3
Client Matrix: Water

Date Sampled: 10/08/2013 1245
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86829	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1015022.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/15/2013 2021			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	7.4		0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	67		40 - 110
2-Fluorobiphenyl	61		50 - 110
Terphenyl-d14 (Surr)	72		50 - 135

JV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR52SWG1**

Lab Sample ID: 280-47755-4
Client Matrix: Water

Date Sampled: 10/08/2013 1440
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86829	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1015023.D
Dilution:	1.0			Initial Weight/Volume:	1010 mL
Analysis Date:	10/15/2013 2049			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	1.8	J F	0.14	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	66		40 - 110
2-Fluorobiphenyl	59		50 - 110
Terphenyl-d14 (Surr)	60		50 - 135

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59UR55SWG1**

Lab Sample ID: 280-47755-5
Client Matrix: Water

Date Sampled: 10/08/2013 1712
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016003.D
Dilution:	1.0			Initial Weight/Volume:	1020 mL
Analysis Date:	10/16/2013 1417			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	61		40 - 110
2-Fluorobiphenyl	53		50 - 110
Terphenyl-d14 (Surr)	59		50 - 135

gv 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DW1WG1**

Lab Sample ID: 280-47755-6
Client Matrix: Water

Date Sampled: 10/09/2013 0902
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86829	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1015024.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/15/2013 2116			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	71		40 - 110
2-Fluorobiphenyl	65		50 - 110
Terphenyl-d14 (Surr)	79		50 - 135

QV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW1WG1**

Lab Sample ID: 280-47755-7
Client Matrix: Water

Date Sampled: 10/09/2013 1102
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86829	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1015025.D
Dilution:	1.0			Initial Weight/Volume:	1020 mL
Analysis Date:	10/15/2013 2143			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	72		40 - 110
2-Fluorobiphenyl	66		50 - 110
Terphenyl-d14 (Surr)	69		50 - 135

QV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59DW3WG1**

Lab Sample ID: 280-47755-8
Client Matrix: Water

Date Sampled: 10/09/2013 1417
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016006.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/16/2013 1539			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	2.7		0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	64		40 - 110
2-Fluorobiphenyl	58		50 - 110
Terphenyl-d14 (Surr)	79		50 - 135

1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW3WG1**

Lab Sample ID: 280-47755-9
Client Matrix: Water

Date Sampled: 10/09/2013 1600
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016007.D
Dilution:	1.0			Initial Weight/Volume:	1020 mL
Analysis Date:	10/16/2013 1606			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	61		40 - 110
2-Fluorobiphenyl	54		50 - 110
Terphenyl-d14 (Surr)	64		50 - 135

QV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW7WG1**

Lab Sample ID: 280-47755-10
Client Matrix: Water

Date Sampled: 10/09/2013 1804
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016008.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/16/2013 1634			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.43	~~J M~~ F	0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	65		40 - 110
2-Fluorobiphenyl	57		50 - 110
Terphenyl-d14 (Surr)	70		50 - 135

DV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59SW4WG1**

Lab Sample ID: 280-47755-11
Client Matrix: Water

Date Sampled: 10/10/2013 1327
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016009.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/16/2013 1701			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.81	~~J M~~ F	0.14	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	60		40 - 110
2-Fluorobiphenyl	56		50 - 110
Terphenyl-d14 (Surr)	72		50 - 135

JV 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59JCEFFWG1**

Lab Sample ID: 280-47755-12
Client Matrix: Water

Date Sampled: 10/10/2013 1000
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016010.D
Dilution:	1.0			Initial Weight/Volume:	1010 mL
Analysis Date:	10/16/2013 1728			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	66		40 - 110
2-Fluorobiphenyl	60		50 - 110
Terphenyl-d14 (Surr)	79		50 - 135

JW 1/13/14

Client: HydroGeoLogic Inc

Job Number: 280-47755-1

Client Sample ID: **59JC2WG1**

Lab Sample ID: 280-47755-13
Client Matrix: Water

Date Sampled: 10/10/2013 1020
Date Received: 10/12/2013 0900

8270C/DoD Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C/DoD	Analysis Batch:	180-86951	Instrument ID:	731
Prep Method:	3520C	Prep Batch:	180-86588	Lab File ID:	V1016011.D
Dilution:	1.0			Initial Weight/Volume:	1020 mL
Analysis Date:	10/16/2013 1756			Final Weight/Volume:	1.0 mL
Prep Date:	10/14/2013 1018			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	DL	LOQ
1,4-Dioxane	0.14	U	0.14	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	61		40 - 110
2-Fluorobiphenyl	56		50 - 110
Terphenyl-d14 (Surr)	76		50 - 135

1/13/14

ATTACHMENT 3

DATA VALIDATION REPORT

Volatile Organic Compounds
SW-846 Method 8260B
USEPA Level II Review

Site: Air Force Plant 59	SDG #: 280-47755-1
Laboratory: Alpha Analytical Laboratories	Date: 01/11/2014
HydroGeoLogic, Inc. Reviewer: Vanessa Redfield Peer Reviewer: Joseph Vilain (01/13/14)	Project: AF7061

Client Sample ID	Laboratory Sample ID	Analysis Batch	Matrix
59URS3DWG1	280-47755-1	280-196363	Groundwater
59BM121WG1	280-47755-2	280-196363	Groundwater
59URS2DWG1	280-47755-3	280-196363	Groundwater
59URS2SWG1	280-47755-4	280-196363	Groundwater
59URS5SWG1	280-47755-5	280-196363	Groundwater
59DW1WG1	280-47755-6	280-196363	Groundwater
59SW1WG1	280-47755-7	280-196363	Groundwater
59DW3WG1	280-47755-8	280-196524	Groundwater
59SW3WG1	280-47755-9	280-196524	Groundwater
59SW7WG1	280-47755-10	280-196524	Groundwater
59SW4WG1	280-47755-11	280-196524	Groundwater
59JCEFFWG1	280-47755-12	280-196524	Groundwater
59JC2WG1	280-47755-13	280-196524	Groundwater
59DUP01WG1	280-47755-14FD	280-196524	Groundwater
59AB101013	280-47755-15	280-196524	Water QC
59EB101013	280-47755-16EB	280-196524	Water QC
TB100713	280-47755-17TB	280-196524	Water QC

Narrative and Completeness Review – The case narrative and data package were checked for completeness. The four wells containing "UR" in the sample ID were misidentified and the error was carried through the lab reporting process. They have been corrected in this report.

Qualification: None required.
Sample Delivery and Condition – All samples arrived at the laboratory in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – The samples were analyzed within the 14-day holding time required by the QAPP for preserved aqueous samples

Qualification: None required.

Surrogates – The laboratory reported different control limits for all VOC surrogates than were established in the QAPP; those limits listed in the QAPP were used to evaluate the data.

All surrogate recoveries were within the control limits specified in the QAPP.

Qualification: None required.

Laboratory Control Sample – The laboratory reported different recovery and RPD limits for all target analytes than were established in the QAPP; those limits listed in the QAPP were used to evaluate the data.

One LCS/LCSD pair and one LCS were associated with the samples in this SDG. The LCS/LCSD for batch 280-196524 met the %R and RPD control limits established in the QAPP.

The LCS for batch 280-196363 also met the %R and RPD control limits established in the QAPP.

Qualification: None required.

MS/MSD – The laboratory reported different recovery and RPD limits for all target analytes than were established in the QAPP; those limits listed in the QAPP were used to evaluate the data.

Matrix spike/matrix spike duplicate analyses were performed for all target VOCs on sample 59URS5SWG1 from this SDG. The %R and RPD results were within the QAPP control limits.

Qualification: None required.

Laboratory Duplicate – Laboratory duplicate analyses were not requested or performed on a sample from this SDG.

Qualification: None required.

Method Blank – Two method blanks were associated with the samples in this SDG. The method blanks analyzed on 10/17/13, for batches 280-196363 and 180-86588, respectively, were free from contamination.

Qualification: None required.

Field Blanks – One equipment blank, identified as 59EB101013, was associated with all samples in this SDG and was free from contamination. One ambient blank, identified as 59AB101013, was associated with all samples in this SDG and was free from contamination.

Qualification: None required.

Trip Blank – One trip blank, identified as TB100713, was associated with all samples in this SDG and was free from contamination.

Qualification: None required.

Field Duplicate – Sample 59DUP01WG1 was a field duplicate of sample 59SW4WG1. All calculated RPDs were within the control limits established in the QAPP for the duplicate pair.

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "MDL U." Analyte detections below the RL were reported as J-qualified results. These J qualifiers should be changed to F qualifiers per the QAPP instructions, unless superseded by a more severe qualifier. Due to a target analyte concentration, sample 59UR52DWG1was reanalyzed at 2x dilution. The diluted results should be considered the definitive result and the non-diluted results should have an X appended to the laboratory-applied qualifier.

Qualification: All diluted results for sample 59UR52DWG1 except for cis-1,2-dichloroethene, has an X appended to it, cis-1,2-dichloroethene in original analysis has an X appended to it. The diluted results should be considered the definitive result.

Sample	Analyte	Lab Value	Lab Qualifier	Validated Value	Validated Qualifier
59URS3DWG1	1,1,1-Trichloroethane	0.99	J	0.99	F
	cis-1,2-Dichloroethene	0.90	J	0.90	F
59BM121WG1	No qualification required				
59URS2DWG1 (No Dilution)	cis-1,2-Dichloroethene	66	J	66	JX
	1,1-Dichloroethane	0.21	J	0.21	F
	trans-1,2-Dichloroethene	0.17	J	0.17	F
59URS2DWG1 (Dilution 2x)	cis-1,2-dichloroethene	62	--	Report this Value	
	All other results	Varies	U	Varies	UX
59URS2SWG1	No qualification required				
59URS5SWG1	1,1,1-Trichloroethane	0.50	J	0.50	F
	Trichloroethene	0.63	J	0.63	F
59DW1WG1	No qualification required				
59SW1WG1	No qualification required				
59DW3WG1	1,1-Dichloroethane	0.32	J	0.32	F
	Vinyl chloride	0.18	J	0.18	F
59SW3WG1	Trichloroethene	0.70	J	0.70	F
59SW7WG1	1,1-Dichloroethane	0.93	J	0.93	F
	Tetrachloroethane	0.27	J	0.27	F
59SW4WG1	1,1-Dichloroethane	0.77	J	0.77	F
	1,1-Dichloroethene	0.26	J	0.26	F
	Tetrachlorothene	0.39	J	0.39	F
59JCEFFWG1	No qualification required				
59JC2WG1	1,1,1-Trichloroethane	0.36	J	0.36	F
	cis-1,2-Dichloroethene	0.29	J	0.29	F
	Trichloroethene	0.48	J	0.48	F

59DUP01WG1	1,1-Dichloroethane	0.73	J	0.73	F
	1,1-Dichloroethene	0.25	J	0.25	F
	Tetrachloroethene	0.35	J	0.35	F

1,4-Dioxane
SW-846 Method 8270C-SIM
USEPA Level II Review

Site: Air Force Plant 59	SDG #: 280-47755-1
Laboratory: Alpha Analytical Laboratories	Date: 01/11/2014
HydroGeoLogic, Inc. Reviewer: Vanessa Redfield Peer Reviewer: Joseph Vilain (01/9/14)	Project: AF7061

Client Sample ID	Laboratory Sample ID	Analysis/Prep Batch	Matrix
59URS3DWG1	280-47755-1	180-86829/180-86588	Groundwater
59BM121WG1	280-47755-2	180-86829/180-86588	Groundwater
59URS2DWG1	280-47755-03	180-86829/180-86588	Groundwater
59URS2SWG1	280-47755-04	180-86829/180-86588	Groundwater
59URS5SWG1	280-47755-05	180-86829/180-86951	Groundwater
59DW1WG1	280-47755-06	180-86829/180-86588	Groundwater
59SW1WG1	280-47755-07	180-86829/180-86588	Groundwater
59DW3WG1	280-47755-08	180-86829/180-86951	Groundwater
59SW3WG1	280-47755-09	180-86829/180-86951	Groundwater
59SW7WG1	280-47755-10	180-86829/180-86951	Groundwater
59SW4WG1	280-47755-11	180-86829/180-86951	Groundwater
59JCEFFWG1	280-47755-12	180-86829/180-86951	Groundwater
59JC2WG1	280-47755-13	180-86829/180-86951	Groundwater
59DUP01WG1	280-47755-14FD	180-86829/180-86951	Groundwater
59EB101013	280-47755-16EB	180-86829/180-86951	Water QC

Narrative and Completeness Review – The case narrative and data package were checked for completeness. The four wells containing "UR" in the sample ID were misidentified and the error was carried through the lab reporting process. They have been corrected in this report.

Qualification: None required.

Sample Delivery and Condition – All samples arrived at the laboratory in acceptable condition and temperature and were properly preserved. Proper custody was documented.

Qualification: None required.

Holding Times – All samples were extracted within the 7-day holding time required by the QAPP and analyzed within 40 days of extraction.

Qualification: None required.

Surrogates – All surrogate recoveries were within the control limits specified by the laboratory.

Qualification: None required.

Laboratory Control Sample – The laboratory reported different recovery and RPD limits for 1,4-dioxane than were established in the QAPP; those limits listed in the QAPP were used to evaluate the data.

One LCS was associated with all samples in this SDG. The LCS for batch 180-86588 met all %R and RPD control limits established in the QAPP.

Qualification: None required.

MS/MSD – The laboratory reported different recovery and RPD limits for 1,4-dioxane than were established in the QAPP; those limits listed in the QAPP were used to evaluate the data.

Matrix spike/matrix spike duplicate analyses were performed for 1,4-dioxane on sample 59URS5SWG1 from this SDG. All %R and RPD results were within the QAPP control limits.

Qualification: None required.

Laboratory Duplicate – Laboratory duplicate analyses were not requested or performed on a sample from this SDG.

Qualification: None required.

Method Blank – One method blank was associated with all samples in this SDG. The method blank analyzed on 10/16/2013 for batch 180-86588 was free from contamination.

Qualification: None required.

Equipment Blank – One equipment blank, identified as 59EB101013, was associated with all samples in this SDG and was free from contamination.

Qualification: None required.

Field Duplicate – Sample 59DUP01WG1 was a field duplicate of sample 59SW4WG1. The calculated RPD (1.2%) was within the control limits established in the QAPP for the duplicate pair.

Qualification: None required.

Compound Quantitation – Analyte non-detections were reported as "ND"; these results should be considered the equivalent of "MDL U." Analyte detections below the RL were reported as J-qualified results. These J qualifiers should be changed to F qualifiers per the QAPP instructions, unless superseded by a more severe qualifier. The laboratory has applied M flags to results in samples 59SW7WG1 and 59SW4WG1, indicating manual integration. These M flags should be removed.

Qualification: required flags are removed from all sample results, and all laboratory applied J qualifiers for detections below the RL are changed to F qualifiers.

Qualification Summary Table (results in ng/L):

Sample	Analyte	Lab Value	Lab Qualifier	Validated Value	Validated Qualifier
59URS3DWG1	1,4-Dioxane	1.8	J	1.8	F
59BM121WG1	No Qualification Required				
59URS2DWG1	No Qualification Required				
59URS2SWG1	1,4-Dioxane	1.8	J	1.8	F
59URS5SWG1	No Qualification Required				
59DW1WG1	No Qualification Required				
59SW1WG1	No Qualification Required				
59DW3WG1	No Qualification Required				
59SW3WG1	No Qualification Required				
59SW7WG1	1,4-Dioxane	0.43	JM	0.43	F
59SW4WG1	1,4-Dioxane	0.81	JM	0.81	F
59JCEFFWG1	No Qualification Required				
59JC2WG1	No Qualification Required				
59DUP01WG1	1,4-Dioxane	0.80	J	0.80	F