TEMPORARY SOLUTION OPERATION, MAINTENANCE, AND MONITORING REPORT

JULY 2017 – DECEMBER 2017

CONDUCTORLAB SITE (RTN 2-00053)
GROTON, MASSACHUSETTS

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MAY 2018

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GLOSSARY OF ACRONYMS

Amec	Amec Environment & Infrastructure, Inc.
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
AWQC	Ambient Water Quality Criteria
CMR	Code of Massachusetts Regulations
COC	Constituents of Concern
Cr	Total Chromium
Cr^{+6}	Hexavalent Chromium
Cu	Copper
DCE	*cis*-1,2-Dichloroethene
EDTA	Ethylenediaminetetraacetic Acid
GWTS	Groundwater Treatment System
Honeywell	Honeywell International Inc.
ISCO	*In-situ* Chemical Oxidation
ISCR	*In-situ* Chemical Reduction
lbs./day	pounds per day
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
µg/L	Micrograms per Liter
O&M	Operations and Maintenance
OM&M	Operation, Maintenance, and Monitoring
RAO	Response Action Outcome
RAP	Remedial Action Plan
RGP	Remediation General Permit
RIP	Remedy Implementation Plan
RTN	Release Tracking Number
SMBS	Sodium Meta-bisulfite
TAL	Target Analyte List
TCE	Trichloroethylene
UCL	Upper Concentration Limit
USEPA	U.S. Environmental Protection Agency
VC	Vinyl Chloride
VOCs	Volatile Organic Compounds
Wood E&IS	Wood Environment & Infrastructure Solutions, Inc.

EXECUTIVE SUMMARY

On behalf of Honeywell International Inc. (Honeywell), Wood Environment & Infrastructure Solutions, Inc. (Wood E&IS), has prepared this Temporary Solution Operation, Maintenance, and Monitoring (OM&M) report for the Conductorlab property located at 430 Main Street in Groton, Massachusetts (the Site). This OM&M report was completed for the July 2017 through December 2017 period per the Code of Massachusetts Regulations (CMR) 40.0897(2) and 310 CMR 40.0892. This report summarizes ongoing groundwater monitoring results of the Site. Wood E&IS is continuing to monitor trichloroethylene (TCE) and hexavalent chromium (Cr^{+6}) following *in-situ* chemical oxidation (ISCO) and *in-situ* chemical reduction (ISCR) respectively.

Site Monitoring Activities

During the July 2017 through December 2017 monitoring period, on-property and off-property groundwater, and surface water samples were collected and analyzed for constituents of concern (COCs) comprised of volatile organic compounds (VOCs), total Cr (Cr), and Cr^{+6}.

On-Property: Groundwater. The average concentrations of TCE, Cr, and Cr^{+6} from on-property groundwater sample locations are below GW-3 standards with fluctuations (within the range of historical concentrations) at locations: CIW-1B, CLW-5, CLW-5B, CLW-8 and PP-2.

Off-Property: Groundwater. Groundwater data from off-property monitoring wells indicates that average concentrations of TCE, Cr, and Cr^{+6} are below GW-3 standards with slight increases in TCE concentrations at locations: PP-3, PP-4A, and PP-4B. This average represents the cumulative concentrations observed over the last several years.

Off-Property: Surface Water. Four out of five surface water samples (collected from the Unnamed Brook) continue to exhibit Cr^{+6} concentrations above the Ambient Water Quality Criteria (AWQC). This condition remains a focus at the Conductorlab Site with an additional Cr^{+6} source investigation scheduled for April/May 2018.

Groundwater Treatment System (GWTS)

The GWTS was shut down in March 2012 and the building was demolished in November 2017. Groundwater sampling results following the ISCO and ISCR programs demonstrated that the *in-situ* remediation was effective at treating groundwater so that the average TCE and Cr^{+6} concentrations remain below their respective Upper Concentration Limits (UCLs), and meet site-specific risk-based closure goals under a Method 3 Risk Characterization.

ISCO/ ISCR Treatments

The last ISCO treatments were applied in January 2013. Approximately 190 gallons of sodium persulfate and ferric sodium ethylenediaminetetraacetic Acid (EDTA) were applied to nineteen bedrock wells across the impacted zone.

The last ISCR remediation, consisting of calcium polysulfide (CAPS) solution was completed in January 2016 to address elevated Cr^{+6} concentrations at monitoring well locations CLW-8 and PP-3.

Honeywell and Wood E&IS conducted Cr and Cr^{+6} source area investigation in September 2017. An additional focused Cr^{+6} source soil investigation surrounding CLW-8 is scheduled for April/May 2018. Based on the results, if residual sources of Cr^{+6} are present, then necessary steps will be taken to remediate the potential source areas that may be impacting the surface waters.

Bedrock Groundwater

Four quarterly bedrock groundwater sampling events were completed in October 2013, December 2013, April 2014, and June 2014 as part of demonstrating the effectiveness of the implemented in-situ remedial actions on TCE. Bedrock groundwater results demonstrate that average concentrations of Site related contaminants (VOCs, Cr, and Cr^{+6}) were below their respective UCL during the four quarterly rounds of sampling. The goals of the Phase IV Remedial Implementation Plan (Phase IV RIP) were met.

Additional Monitoring

As described above, the quarterly rounds of bedrock groundwater monitoring demonstrated that the remediation is sustainable and the results remain below their applicable UCL goals; however, Site groundwater and surface water, on and off-property, continue to be monitored until a Permanent Solution is achieved. Surface water results and select monitoring wells continue to be evaluated with focus on areas where Cr^{+6} concentrations exceed AWQC and GW-3 standards.

1.0 INTRODUCTION

The Conductorlab property is located at 430 Main Street in Groton, Massachusetts, on the east side of Route 111/119, approximately 0.75 miles north of the center of Groton. A Site locus is provided as **Figure 1**; a Site map including off-property monitoring locations is provided as **Figure 2**; an on-property Site map, including prominent on-property features and monitoring well locations, is provided as **Figure 3**.

1.1 REPORT ORGANIZATION

This report is organized as follows:

- Section 1 – Introduction
- Section 2 – Site Monitoring Activities
- Section 3 – Supplemental Activities
- Section 4 – Future Activities
- Section 5 – Summary of Findings
- Section 6 – References

1.2 REGULATORY BACKGROUND

On February 2, 1996, a temporary Class C RAO was filed for the Site. Operations and maintenance (O&M) activities have been conducted at the Site in accordance with the OM&M Plan (Earth Tech, 1995), which was submitted to the MassDEP and has been updated every six months. The selected remedy (groundwater capture and treatment) operated at the Site for more than 15 years. During this time the GWTS provided hydraulic control and removed subsurface contaminants.

While the groundwater treatment system was in place, Honeywell actively pursued alternate technologies that could more effectively advance the Site to closure. On June 18, 2009, Mactec Engineering and Consulting, Inc. (now Wood Environment & Infrastructure Solutions, Inc.), on behalf of Honeywell, submitted a Phase III Remedial Action Plan (RAP), which described the information, reasoning, and results used to identify, evaluate, and select an alternative remedial action. The outcome of the Phase III RAP resulted in the Phase IV RIP under which ISCO was selected to treat TCE in the bedrock while ISCR was selected to treat Cr^{+6}. The objective for both treatments was to achieve levels below the MassDEP UCL to address risk-based Site closure requirements. The Phase IV RIP documented the design, construction, and implementation requirements for the ISCO remedy.

As stated previously, ISCO treatments for TCE had the potential to convert Cr^{+3} to Cr^{+6}. This occurred in certain areas of the Site including near monitoring well locations CLW-8 and PP-3 and surface water locations CSW-3, CSW-3A, and CSW-4. Based on groundwater and surface water results from 2015, it was determined that additional ISCR treatment was necessary to treat groundwater discharging to the surface water thereby improving the water quality in the Unnamed Brook. Wood E&IS submitted a Phase IV RIP Amendment to the MassDEP dated November 2015 and ISCR remediation was completed in January 2016. Section 2.3 summarizes post-ISCR groundwater and surface water results.

1.3 GROUNDWATER TREATMENT SYSTEM

The GWTS has not operated since March 2012. Since then, Wood E&IS has applied several rounds of *in-situ* ISCO and ISCR treatments. Groundwater analytical data collected since the treatments have demonstrated that remediation has been effective in the reduction of TCE, and Cr^{+6} to meet site-specific risk-based closure goals for groundwater under a Method 3 Risk Characterization. The GWTS building was removed in November 2017.

1.4 MONITORING SUMMARY

On-property and off-property monitoring wells are sampled semi-annually in March and September. Surface water is sampled quarterly in March, June, September, and December. Four quarterly bedrock groundwater sampling events were completed by June 2014. The sampling and analytical schedule for all field events during the July 2017 through December 2017 monitoring period are presented in **Table 1**.

2.0 SITE MONITORING ACTIVITIES

2.1 GROUNDWATER ELEVATION MEASUREMENTS

Groundwater elevation measurements were collected on September 11, 2017; a summary of this data is provided in **Table 2**. Groundwater contours for the overburden and bedrock aquifers are presented in **Figure 4A** and **Figure 4B,** respectively. As shown on the figures, groundwater flow direction, in both the overburden and bedrock aquifers, is generally inferred to the west.

2.2 GROUNDWATER AND SURFACE WATER SAMPLING

As indicated on **Table 1**, groundwater samples from monitoring wells and/or surface water were collected in September 2017 and December 2017. Groundwater and surface water samples were analyzed for VOCs by Method 8260C, total Cr (Cr) by Method 6010C, Cr^{+6} by Method 7196A, and select dissolved metals by Method 6010C. Sampling locations are presented by type in Sections 2.2.1 through 2.2.5 below. A summary of Site-wide analytical results is presented in Section 2.3.

2.2.1 On-Property Groundwater Monitoring Wells

In September 2017, Wood E&IS collected groundwater samples from eight overburden monitoring wells and seven bedrock monitoring wells. The monitoring wells were sampled using low flow methods (refer to **Appendix A**) and samples were submitted for laboratory analyses including VOCs, Cr, and Cr^{+6}. The groundwater sampling records are provided in **Appendix B**. Monitoring wells are identified in the following tables and can be located on **Figure 3**. Groundwater sampling results are summarized in **Table 3A**.

On-Property Monitoring Wells Sampled in September 2017	
Overburden Monitoring Wells	***Bedrock Monitoring Wells***
CLW-5A	CIW-1B
CLW-8	CLW-5B
DMW-A	CLW-16B
OSW-1A	DMW-B
OSW-3A	OSW-1B
OSW-4I	OSW-2B
OSW-7	OSW-3B
PP-2	

2.2.2 On-Property Bedrock Monitoring Wells

Wood E&IS conducted post-ISCO sampling to assess remediation progress for four consecutive quarters. Groundwater was collected from 15 bedrock monitoring wells (**Figure 3**) in October 2013, December 2013, April 2014 and June 2014. The samples were collected using low flow methods and sampling procedures as described in **Appendix A**. The groundwater samples were collected and submitted to Test America Laboratory for VOCs, Cr, and Cr^{+6} analyses. Groundwater sampling results are summarized in **Table 3B**.

Bedrock Monitoring Wells Sampled Post-ISCO Treatment October 2013, December 2013, April 2014, and June 2014	
Bedrock Monitoring Wells	***Bedrock Monitoring Wells***
BIW-1	BIW-16
BIW-2	BIW-24
BIW-4	BIW-31
BIW-5	BIW-32
BIW-6	BIW-33
BIW-7	BMW-5
BIW-14	OSW-1B
BIW-15	

2.2.3 Off-Property Groundwater Monitoring Wells

In September 2017, Wood E&IS collected groundwater samples from 11 off-property monitoring wells (six overburden and five bedrock) to monitor off-property impacts. Monitoring wells can be located on **Figure 2**. The off-property wells were sampled in the same manner as on-property wells and submitted to Test America Laboratory for VOCs, Cr, and Cr^{+6} analyses. Groundwater sampling records are provided in **Appendix B**. Groundwater sampling results are summarized in **Table 3C**.

Off-Property Monitoring Wells Sampled in September 2017	
Overburden Monitoring Wells	***Bedrock Monitoring Wells***
CLW-17	CLW-17B
CLW-19	CLW-19B
CLW-20	CLW-20B
CLW-22	CLW-22B
PP-3	PP-4B
PP-4A	

2.2.4 Surface Water Sampling

Four surface water samples were collected during the September 2017 sampling event from locations: CSW-2, CSW-3, CSW-3A, and CSW-5. Sample location CSW-2 was dry. Five

surface water samples were collected during the December 2017 sampling event from locations: CSW-2, CSW-3, CSW-3A, CSW-4, and CSW-5. All samples were analyzed for the following: VOCs, Cr^{+6}, and filtered (dissolved) metals Target Analyte List (TAL). Surface water sampling locations can be found on **Figure 2**. Surface water sampling records are provided in **Appendix B**. Surface water sampling results are summarized in **Table 3D**.

2.3 SUMMARY OF ANALYTICAL RESULTS

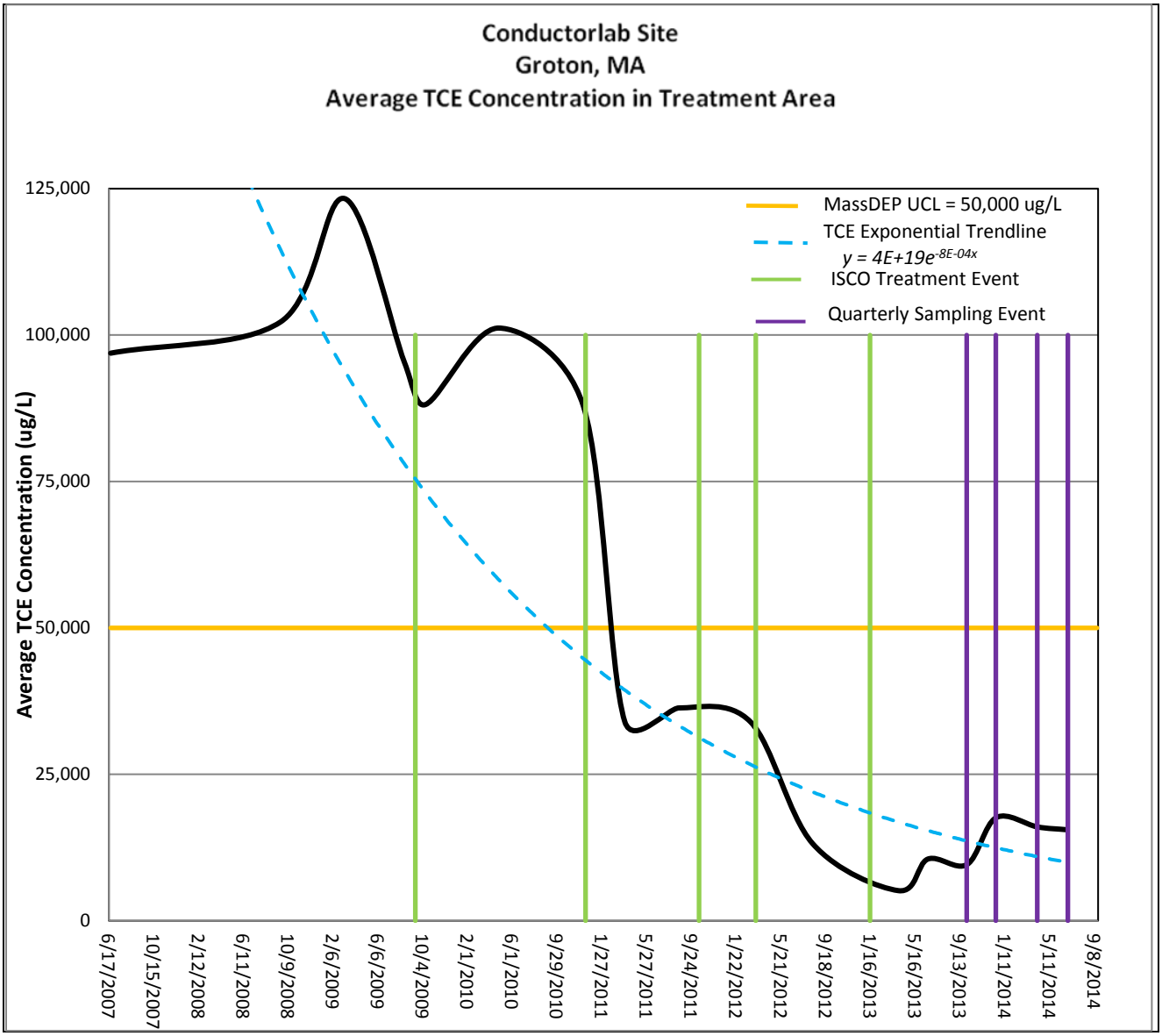
Groundwater and surface water analytical results are provided in **Appendix C** and summarized in **Tables 3A, 3B, 3C, and 3D**. The tables also present results from prior sampling events conducted from 2016 through 2017 for comparison.

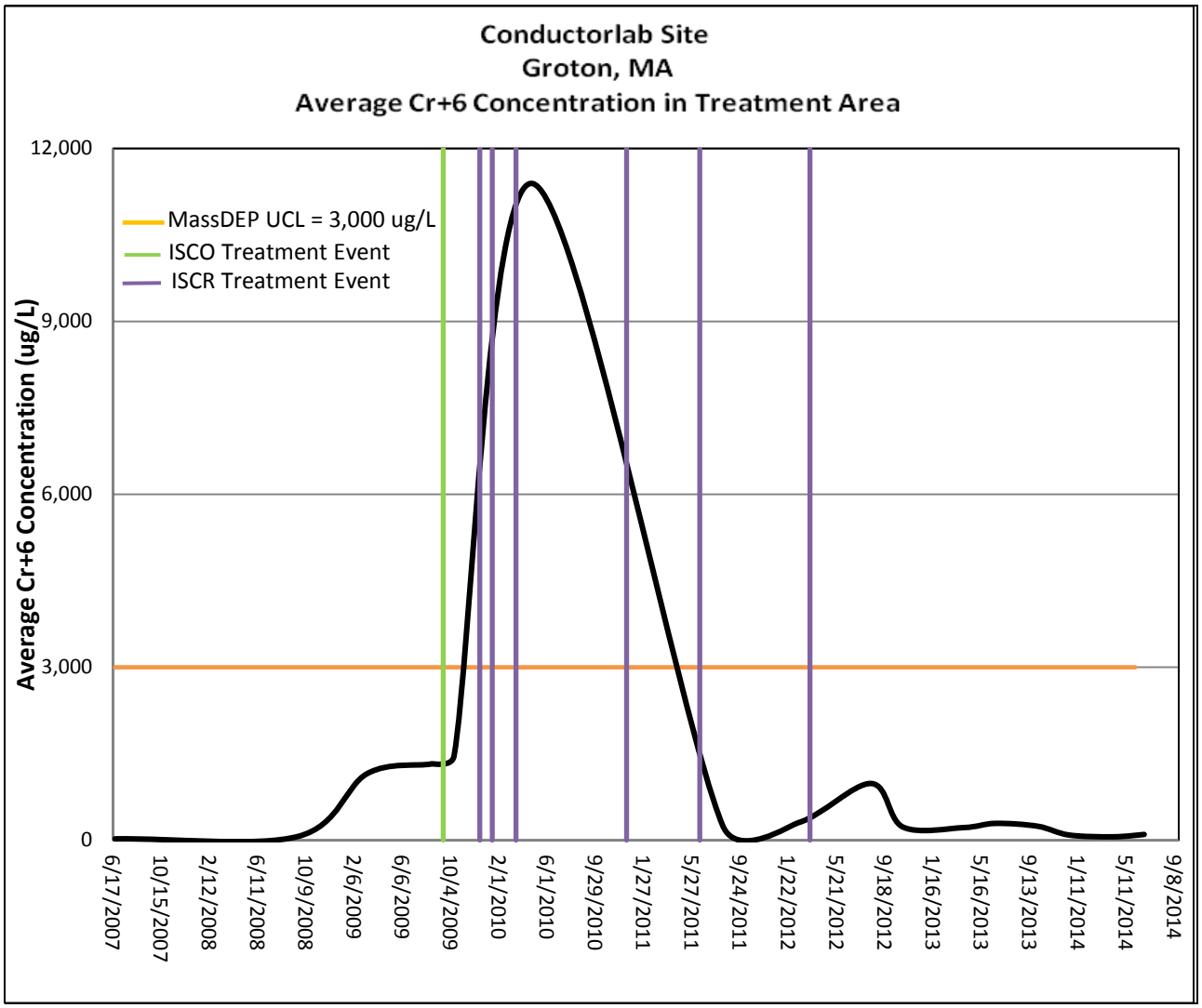
2.3.1 Site Contaminant History

TCE and Cr^{+6} have historically been identified as the two contaminants of concern (COC) at the Site. The 2016 through 2017 analysis for TCE and degradation products *cis*-1,2-dichloroethene (DCE), and vinyl chloride (VC) concentrations are summarized on **Figures 5A and 5B**. Cr and Cr^{+6} results are summarized on **Figures 6A and 6B** for on-property monitoring wells and off-property monitoring wells (including surface water), respectively.

To further assist in analyzing the groundwater and surface water data, TCE and Cr^{+6} trend graphs are provided for each location displaying data since the initiation of the monitoring program. These data graphs for TCE and Cr^{+6} concentrations are summarized in **Appendix D**.

The following two trend graphs represent average TCE and Cr^{+6} concentrations during and after the ISCO and ISCR remediation events from fifteen bedrock monitoring wells. The results are based on the ISCO treatment initiated in September 2009 and continued through June 2014. Overall, results show a significant reduction, below the UCL, in the average TCE concentrations following treatment. The Cr^{+6} concentrations underwent an increase following the initial treatment for TCE, but following a series of ISCR treatments, the Cr^{+6} concentrations decreased to levels below GW-3 standards. The ISCO and ISCR treatment events are summarized on the following Figures.


Conductorlab Site
Groton, MA
Average TCE Concentration in Treatment Area
Average TCE Concentration (ug/L)
125,000
100,000
75,000
50,000
25,000
0
MassDEP UCL = 50,000 ug/L
TCE Exponential Trendline
y = 4E+19e-8E-04x
ISCO Treatment Event
Quarterly Sampling Event
6/17/2007
10/15/2007
2/12/2008
6/11/2008
10/9/2008
2/6/2009
6/6/2009
10/4/2009
2/1/2010
6/1/2010
9/29/2010
1/27/2011
5/27/2011
9/24/2011
1/22/2012
5/21/2012
9/18/2012
1/16/2013
5/16/2013
9/13/2013
1/11/2014
5/11/2014
9/8/2014


Conductorlab Site
Groton, MA
Average Cr+6 Concentration in Treatment Area
Average Cr+6 Concentration (ug/L)
12,000
9,000
6,000
3,000
0
MassDEP UCL = 3,000 ug/L
ISCO Treatment Event
ISCR Treatment Event
6/17/2007
10/15/2007
2/12/2008
6/11/2008
10/9/2008
2/6/2009
6/6/2009
10/4/2009
2/1/2010
6/1/2010
9/29/2010
1/27/2011
5/27/2011
9/24/2011
1/22/2012
5/21/2012
9/18/2012
1/16/2013
5/16/2013
9/13/2013
1/11/2014
5/11/2014
9/8/2014

2.3.2 On-Property Monitoring Wells

As displayed on **Figure 5A** and summarized in **Table 3A**, average TCE, DCE, and VC concentrations detected in groundwater are below GW-3 standards. **Table 3B** shows average TCE, DCE, and VC concentrations in bedrock groundwater after the ISCO treatments, which are below the MassDEP UCL standards.

As shown on **Figure 6A**, average Cr and Cr^{+6} concentrations in groundwater are generally similar to historic results and remain below their respective UCLs and GW-3 standards. As noted in this report, and portrayed on the Cr^{+6} graphs in **Appendix D**, the application of sodium meta-bisulfite (SMBS) has reduced Cr^{+6} concentrations at several locations. The variability of Cr^{+6} in two monitoring wells (CLW-8 and PP-3) as well as results from surface water samples initiated a focused ISCR treatment using a new compound calcium polysulfide (CAPS). The CAPS formula has been used successfully at other sites in the northeast; however, it provided little positive impact at Conductorlab.

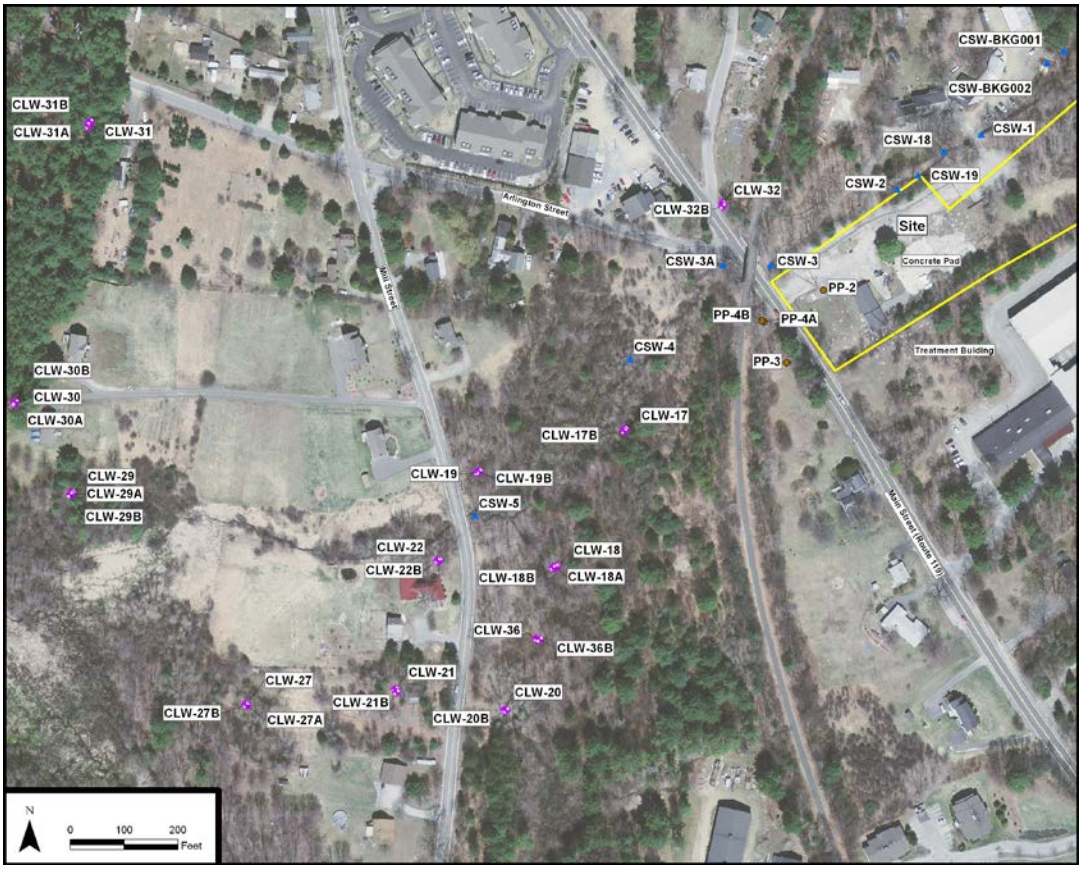
A review of the trend graphs presented in **Appendix D** for on-property wells indicates that concentrations of TCE and Cr^{+6} are within the range of historical concentrations; with fluctuations at locations: CIW-1B, CLW-5, CLW-5B, CLW-8, and PP-2. All monitoring wells are below the applicable GW-3 standards for VOCs with the exception of CLW-16B; and below the GW-3 standard for Cr and/or Cr^{+6} with the exception of: CIW-1B, CLW-8, OSW-2B, and OSW-7A.

2.3.3 Off-Property Monitoring Wells

Off-property VOC, Cr, and Cr^{+6} concentrations in groundwater are shown on **Figures 5B and 6B**. Average concentrations of TCE, DCE, and VC in groundwater are below GW-3 standards and are consistent with historic results (see **Table 3C**). .

A review of the trend graphs presented in **Appendix D** for off-property wells indicates increasing fluctuations of TCE and/or Cr^{+6} concentrations at locations: PP-3, PP-4A, and PP-4B. However, these concentrations remain below applicable GW-3 standards, with the exception of PP-3.

Off-Property Monitoring Wells and Surface Water Locations



Note: Monitoring Wells CLW-27, CLW-27A, CLW-27B, CLW-21, and CLW-21B have been decommissioned. Monitoring wells CLW-31, CLW-31A, and CLW-31B have been closed.

2.3.4 Surface Water

Surface water samples are collected at locations identified as CSW on the above Figure. Samples are collected and submitted on a quarterly basis for VOCs and several metals including: Cr, Cr^{+6}, and Cu. VOCs, Cr, Cr^{+6}, and Cu concentrations in surface water are summarized on **Figures 5B and 6B**. As summarized in **Table 3D**, DCE and VC concentrations are not detected in surface water. TCE continues to be detected in surface water at concentrations similar to previous sampling events. As shown on **Figure 6B**, Cr and Cr^{+6} concentrations are detected in surface water above the AWQC at five locations. A review of contaminant trend graphs presented in **Appendix D** for surface water indicates that detections of TCE and Cr^{+6} concentrations at locations CSW-2, CSW-4, and CSW-5 are within the historical range of concentrations; however, locations CSW-3 and CSW-3A have increased.

3.0 SUPPLEMENTAL ACTIVITIES

Additional activities were performed at the Conductorlab Site during July 2017 through December 2017. These activities are presented below.

3.1 GWTS BUILDING DEMOLITION

Wood E&IS monitored the demolition of the GWTS building by Renaissance Builders from October through November 2017. The building, concrete slab, and equipment pads were removed and disposed at Waste Management in Rochester, New Hampshire. Soils were collected and sampled from beneath the former building slab for VOCs, Cr, and Cr^{+6}. There were no reportable concentrations detected in the soil samples. The former building foundation area was backfilled and seeded.

3.2 ABANDONED MONITORING WELLS

Monitoring wells located at 23 Gratuity Road appear to have been destroyed. These wells identified as: CLW-31, CLW-31A, and CLW-31B were not integral to the monitoring program as historical results were non-detect.

3.3 GROUNDWATER AND SURFACE WATER MONITORING

Wood E&IS continues to monitor groundwater and surface water until a Permanent Solution is achieved. Additional sampling events are planned for March and June 2018.

3.4 SOURCE AREA INVESTIGATION

Honeywell and Wood E&IS conducted a Cr and Cr^{+6} source area assessment in September 2017. After review of the data, it was determined that an additional focused Cr^{+6} source area investigation proximate to CLW-8 and the Unnamed Brook should be conducted and has been scheduled for April/May of 2018. Based on the results of this investigation, if a residual source of Cr^{+6} is present this area will be excavated and removed from the Site under a Release Abatement Measure (RAM) Plan.

4.0 FUTURE ACTIVITIES

The goal of the ISCO and ISCR treatments applied to the Site was to reduce average concentrations of VOCs and Cr^{+6} to below their respective UCLs, and thereby achieve a Permanent Solution. The remediation via *in-situ* technologies was conducted in accordance with the Phase IV RIP and amended Phase IV RIP, submitted to the MassDEP in September 2009 and November 2015, respectively.

Activities planned for the Site for 2018 include: Review of groundwater and surface water results supporting the forthcoming Permanent Solution; Completing an additional focused Cr and Cr^{+6} source investigation; Potential implementation of a RAM Plan contingent on the results of the additional focused investigation; Review of data for a Stage II Ecological Risk Assessment; Review of data for a Site-specific risk-based closure under a Method 3 Risk Characterization; and, Submission of a Permanent Solution.

5.0 SUMMARY OF FINDINGS

This report presents the OM&M findings for the Conductorlab Site in Groton, Massachusetts (Release Tracking Number [RTN] 2-00053), for the period of July 2017 through December 2017. This report has been prepared by Wood E&IS on behalf of Honeywell pursuant to 310 CMR 40.0897(2) and in accordance with 310 CMR 40.0892. The following are the findings of the report:

- As displayed on **Figures 5A and 6A**, results from on-property groundwater sampled during this monitoring period indicate average VOC, Cr, and Cr^{+6} concentrations are below GW-3 standards.
- As shown on **Figures 5B and 6B**, results from off-property groundwater indicate average VOC, Cr, and Cr^{+6} concentrations are below GW-3 standards.
- Surface water samples collected during July 2017 through December 2017 display VOC concentrations similar to historical results and Cr^{+6} concentrations above their applicable AWQC. Honeywell and Wood E&IS are conducting an additional Cr and Cr^{+6} source area investigation to identify impacts to the surface water.
- Groundwater contour figures developed from the September 11, 2017 groundwater elevation survey infer general (shallow and deep) groundwater flow direction to the west.
- Based on bedrock groundwater results, comprised of four quarterly rounds of groundwater sampling following treatment, the data have confirmed that ISCO treatments have achieved and maintained average TCE concentrations below the UCL. The four quarterly sampling rounds are summarized in **Table 3B**.
- The Site groundwater and surface water will continue to be monitored and reviewed until a Site-specific risk-based closure under a Method 3 Risk Characterization and Permanent Solution is submitted.

6.0 REFERENCES

Amec Environment & Infrastructure, Inc. (Amec), June, 2009. Phase III Remedial Action Plan Amendment, Conductorlab Site (RTN 2-00053), Groton, Massachusetts.

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Amec Foster Wheeler, November, 2015. Phase IV Remedial Implementation Plan Amendment, Conductorlab Site (RTN 2-00053), Groton, Massachusetts

Earth Tech, February, 1995. Phase IV Remedy Implementation Plan, Appendix E, Operation, Maintenance, and Monitoring Plan (Volume I - IV).

Massachusetts Department of Environmental Protection (MassDEP), December 14, 2007. 310 CMR 40.0000, Massachusetts Contingency Plan (MCP). Bureau of Waste Site Cleanup. Boston, Massachusetts.

Shaw Engineering, Inc. (Shaw), April, 2006. Pilot Study Work Plan, Conductorlab Site, Groton, Massachusetts.

TABLES

Table 1
Sampling and Analysis Schedule (July 2017 – December 2017)
Conductorlab Site
Groton, Massachusetts

Sample Location	On-Property Monitoring Well	Off-Property Monitoring Well	Off-Property Surface Water	Semi-Annual September 2017	SW September 2017	SW December 2017	VOCs (SW-846 8260C)	Hexavalent Chromium (SW-846 7196A)	Select Metals (SW-846 6000/7000 Series)	Other	Temp, pH, Sp. Conductivity, DO, ORP, and Turbidity
OSW-1B	X			X			X	X	Total Cr		X
CIW-1B	X			X			X	X	Total Cr		X
CLW-16B	X			X			X	X	Total Cr		X
CLW-5A	X			X			X	X	Total Cr		X
CLW-5B	X			X			X	X	Total Cr		X
CLW-8	X			X			X	X	Total Cr		X
DMW-A	X			X			X	X	Total Cr		X
DMW-B	X			X			X	X	Total Cr		X
OSW-1A	X			X			X	X	Total Cr		X
OSW-2B	X			X			X	X	Total Cr		X
OSW-3A	X			X			X	X	Total Cr		X
OSW-3B	X			X			X	X	Total Cr		X
OSW-4I	X			X			X	X	Total Cr		X
OSW-7A	X			X [1]			X	X	Total Cr		X
PP-2	X			X			X	X	Total Cr		X
PP-3		X		X			X	X	Total Cr		X
PP-4A		X		X			X	X	Total Cr		X
PP-4B		X		X			X	X	Total Cr		X
CLW-17		X		X			X	X	Total Cr		X
CLW-17B		X		X			X	X	Total Cr		X
CLW-19		X		X			X	X	Total Cr		X
CLW-19B		X		X			X	X	Total Cr		X
CLW-20		X		X			X	X	Total Cr		X
CLW-20B		X		X			X	X	Total Cr		X
CLW-22		X		X			X	X	Total Cr		X
CLW-22B		X		X			X	X	Total Cr		X
CSW-2			X		X [2]	X [2]	X	X	Dissolved TAL Metals	Dissolved Cr	X
CSW-3			X		X [2]	X [2]	X	X	Dissolved TAL Metals	Dissolved Cr	X
CSW-3A			X		X [2]	X [2]	X	X	Dissolved TAL Metals	Dissolved Cr	X
CSW-4			X			X [2]	X	X	Dissolved TAL Metals	Dissolved Cr	X
CSW-5			X		X [2]	X [2]	X	X	Dissolved TAL Metals	Dissolved Cr	X

Notes:
[1] Duplicate sample collected.
[2] Samples for September and December were sampled for Dissolved Chromium.

Prepared by / Date: HTS 02/08/2018
Checked by / Date: CTM 02/08/2018

Table 2
Groundwater Elevation Measurements
September 11, 2017
Conductorlab Site
Groton, Massachusetts

		Location					Measured Point Used				
Well ID	Type of Well[1]	On-Property	Off-Property	Ground Surface Elevation[2] (ft. msl)	Top of Protective Steel Casing Elevation[2] (ft. msl)	Top of Well Pipe Elevation[2] (ft. msl)	Top of Protective Steel Casing	Top of Well Pipe	Measured Depth to Groundwater	Groundwater Elevation (ft. msl)	Comments
CIW-1B	B	X		278.72	278.76	278.53		X	5.24	273.29	
CLW-1	S/O	X		287.38	288.97	288.56		X	9.10	279.46	
CLW-1B	B	X		287.57	288.94	288.66		X	9.28	279.38	
CLW-3B	B	X		299.25	299.32	298.99		X	15.88	283.11	
CLW-5A	S/O	X		274.84	275.28	274.92		X	3.03	271.89	
CLW-5B	B	X		274.81	275.22	274.34		X	3.00	271.34	
CLW-6	S/O	X		271.71	271.89	271.46		X	3.54	267.92	
CLW-7	S/O	X		267.15	267.13	266.81		X	2.45	264.36	
CLW-7B	B	X		267.37	267.35	267.11		X	3.51	263.60	
CLW-8	S/O	X		268.75	270.31	270.25		X	7.50	262.75	
CLW-9	S/O	X		267.92	267.95	267.21		X	4.09	263.12	
CLW-9B	B	X		267.99	268.01	267.53		X	NA	--	Destroyed
CLW-11	S/O	X		273.44	273.47	273.16		X	4.34	268.82	
CLW-11B	B	X		273.75	273.77	273.42		X	3.11	270.31	
CLW-16	S/O	X		278.82	280.80	280.77		X	8.53	272.24	
CLW-16AR	S/O	X		278.59	279.11	278.11	X		6.99	272.12	
CLW-16B	B	X		278.47	281.50	281.27		X	10.43	270.84	
CLW-16C	S/O	X		278.92	281.72	281.34		X	9.16	272.18	
CLW-16D	S/O	X		278.73	282.23	281.20		X	9.04	272.16	
CLW-16E	S/O	X		278.68	281.56	281.27		X	8.14	273.13	
CPZ-1	S/O	X		280.18	280.80	280.66		X	3.69	276.97	
CPZ-1B	B	X		280.30	280.37	279.38	X		3.83	276.54	
CPZ-1C	S/O	X		280.02	280.53	278.96	X		3.99	276.54	
CPZ-2C	S/O	X		267.88	267.95	267.46		X	6.00	261.46	
DMW-A	S/O	X		267.23	267.22	266.84		X	3.70	263.14	
DMW-B	B	X		266.80	266.87	266.66		X	4.19	262.47	
DN-2	B	X		278.83	281.52	281.31		X	6.89	274.42	
DN-3	B	X		278.87	281.79	281.55		X	8.86	272.69	
GZA-1	S/O	X		275.62	275.62	275.40		X	6.41	268.99	
GZA-3	S/O	X		276.73	276.78	276.59		X	NA	--	NM, No cover cap
GZA-6	S/O	X		274.49	----	274.35		X	4.69	269.66	
LF-1	S/O	X		284.71	287.13	287.04		X	8.57	278.47	
LF-2	S/O	X		287.64	290.37	290.23		X	10.47	279.76	
LF-3	S/O	X		292.75	295.25	293.64	X		13.73	281.52	
MW-2	S/O	X		280.59	281.00	280.90		X	2.05	278.85	
OSW-1A	S/O	X		278.16	278.87	278.10		X	3.73	274.37	
OSW-1B	B	X		278.14	278.70	277.61		X	4.27	273.34	
OSW-2	S/O	X		279.29	282.36	281.48		X	6.83	274.65	
OSW-2B	B	X		279.38	281.97	280.61		X	6.66	273.95	
OSW-2C	S/O	X		278.53	278.69	278.19		X	5.54	272.65	
OSW-3A	S/O	X		278.21	278.94	278.03	X		7.86	271.08	
OSW-3B	B	X		278.00	279.35	279.12		X	8.24	270.88	
OSW-4	S/O	X		273.65	273.76	272.90		X	3.66	269.24	
OSW-4B	B	X		273.77	273.87	273.09		X	4.01	269.08	
OSW-4I	I	X		273.67	273.81	273.17		X	3.97	269.20	
OSW-5	S/O	X		273.98	274.07	273.40		X	6.60	266.80	
OSW-5B	B	X		273.82	273.92	273.49		X	7.23	266.26	
OSW-5I	S/O	X		273.93	274.02	273.38		X	7.14	266.24	
OSW-5C	S/O	X		274.05	274.08	273.19		X	6.17	267.02	
OSW-5D	I	X		274.10	274.22	273.38		X	6.60	266.78	
OSW-5E	S/O	X		274.05	274.11	273.11	X		7.20	266.91	

Table 2
Groundwater Elevation Measurements
September 11, 2017
Conductorlab Site
Groton, Massachusetts

		Location					Measured Point Used				
Well ID	Type of Well[1]	On-Property	Off-Property	Ground Surface Elevation[2] (ft. msl)	Top of Protective Steel Casing Elevation[2] (ft. msl)	Top of Well Pipe Elevation[2] (ft. msl)	Top of Protective Steel Casing	Top of Well Pipe	Measured Depth to Groundwater	Groundwater Elevation (ft. msl)	Comments
OSW-6	S/O	X		279.48	282.05	281.91		X	6.75	275.16	
OSW-6B	B	X		279.31	281.99	281.80		X	5.95	275.85	
OSW-7A	S/O	X		275.51	275.80	275.41		X	6.27	269.14	
OSW-7B	B	X		275.42	275.75	275.38		X	6.96	268.42	
OSW-8A	S/O	X		278.49	278.51	277.90		X	6.14	271.76	
OSW-8B	B	X		278.40	278.65	278.47		X	5.55	272.92	
OSW-8D	S/O	X		278.49	278.54	278.21		X	4.61	273.60	
OSW-8E	S/O	X		278.73	278.72	278.05		X	3.89	274.16	
PTA-IW-1	S/O	X		275.82	NS	275.25		X	4.33	270.92	
PTA-IW-2	S/O	X		275.86	NS	275.45		X	4.53	270.92	
PTA-MW-1D	S/O	X		273.01	NS	272.63		X	3.58	269.05	
PTA-MW-1S	S/O	X		273.28	NS	272.82		X	3.23	269.59	
PTA-MW-2	S/O	X		270.36	NS	270.11		X	4.33	265.78	
PTA-MW-3	S/O	X		271.70	NS	271.15		X	4.82	266.33	
PTA-MW-4	S/O	X		271.30	NS	271.06		X	NA	--	Damaged
PTA-MW-5	S/O	X		266.19	266.18	265.40		X	1.87	263.53	
PTA-MW-5BR	B	X		266.03	266.01	265.35		X	1.71	263.64	
PTB-IW-1	S/O	X		274.84	NS	274.51		X	3.50	271.01	
PTB-IW-2	S/O	X		274.93	NS	274.64		X	3.76	270.88	
PTB-MW-1BR	B	X		274.51	274.50	274.02		X	5.14	268.88	
PTB-MW-1D	S/O	X		274.65	NS	274.17		X	4.42	269.75	
PTB-MW-1S	S/O	X		274.55	NS	274.03		X	4.72	269.31	
PTB-MW-2S	S/O	X		274.95	NS	274.66		X	4.81	269.85	
PTB-MW-2D	S/O	X		274.90	NS	274.42		X	4.80	269.62	
PTB-MW-3	S/O	X		274.54	NS	274.34		X	6.58	267.76	
PTB-MW-4	S/O	X		275.42	NS	274.91		X	6.55	268.36	
PTB-MW-5	S/O	X		273.83	NS	273.34		X	7.14	266.20	
PTC-IW-1	B	X		278.90	NS	278.37		X	1.80	276.57	
PTC-IW-2	B	X		278.78	NS	278.47		X	1.57	276.90	
PTC-MW-1	B	X		278.88	NS	278.31		X	4.34	273.97	
PTC-MW-2R	B	X		NS	278.10	277.83		X	3.75	274.08	
PTC-MW-3	B	X		277.70	NS	277.08		X	6.39	270.69	
PTC-MW-4	B	X		278.27	NS	277.95		X	5.83	272.12	
PTC-MW-5	B	X		276.85	NS	276.19		X	6.50	269.69	
PTC-MW-6	B	X		276.78	NS	276.05		X	4.15	271.90	
PTC-MW-7	B	X		NS	278.17	277.78		X	6.30	271.48	
PP-1	S/O	X		271.86	274.62	274.08		X	8.29	265.79	
PP-2	S/O	X		272.37	275.15	274.96		X	6.52	268.44	
PP-3	S/O		X	279.01	281.22	281.04		X	17.17	263.87	
PP-4	S/O		X	269.36	272.05	271.85		X	12.14	259.71	
PP-4B	B		X	269.04	271.50	271.35		X	11.93	259.42	
CLW-17	S/O		X	245.41	249.74	249.52		X	7.21	242.31	
CLW-17B	B		X	245.58	248.34	248.19		X	6.14	242.05	
CLW-18	S/O		X	240.27	243.22	243.02		X	3.51	239.51	
CLW-18A	S/O		X	239.99	242.92	242.69		X	2.33	240.36	
CLW-18B	B		X	240.10	242.78	242.39		X	1.96	240.43	
CLW-19	S/O		X	240.50	244.51	244.35		X	4.49	239.86	
CLW-19B	B		X	240.86	244.43	243.96		X	3.36	240.60	
CLW-20	S/O		X	239.94	242.91	242.37		X	4.85	237.52	
CLW-20B	B		X	239.54	242.67	242.47		X	4.97	237.50	
CLW-21	S/O		X	243.80	247.13	245.81	X		NA	--	Closed

Table 2
Groundwater Elevation Measurements
September 11, 2017
Conductorlab Site
Groton, Massachusetts

		Location					Measured Point Used				
Well ID	Type of Well[1]	On-Property	Off-Property	Ground Surface Elevation[2] (ft. msl)	Top of Protective Steel Casing Elevation[2] (ft. msl)	Top of Well Pipe Elevation[2] (ft. msl)	Top of Protective Steel Casing	Top of Well Pipe	Measured Depth to Groundwater	Groundwater Elevation (ft. msl)	Comments
CLW-21B	B		X	244.21	247.13	246.92		X	NA	--	Closed
CLW-22	S/O		X	243.70	243.91	243.67		X	7.83	235.84	
CLW-22B	B		X	243.76	243.90	243.70		X	8.14	235.56	
CLW-27	S/O		X	223.97	227.04	226.99		X	NA	--	Closed
CLW-27A	S/O		X	224.09	226.76	225.67	X		NA	--	Closed
CLW-27B	B		X	223.97	226.62	226.51		X	NA	--	Closed
CLW-29	S/O		X	217.76	218.02	217.86		X	4.01	213.85	
CLW-29A	S/O		X	217.65	218.02	217.92		X	3.93	213.99	
CLW-29B	B		X	217.53	217.99	217.81		X	3.05	214.76	
CLW-30	S/O		X	217.31	217.74	217.56		X	4.63	212.93	
CLW-30A	S/O		X	217.26	217.70	217.45		X	4.89	212.56	
CLW-30B	B		X	217.26	217.73	217.43		X	4.99	212.44	
CLW-31	S/O		X	216.60	218.97	218.84		X	NA	--	Destroyed
CLW-31A	S/O		X	216.67	219.70	219.19		X	NA	--	Destroyed
CLW-31B	B		X	216.91	219.56	219.03		X	NA	--	Destroyed
CLW-32	S/O		X	261.76	263.81	263.48		X	NA	--	Dry
CLW-32B	B		X	261.91	263.80	263.68		X	11.25	252.43	
CLW-36	S/O		X	240.68	243.49	243.16		X	4.05	239.11	
CLW-36B	B		X	240.56	243.57	243.29		X	3.94	239.35	

Prepared by: HTS 02/08/18
Checked by: CTM 02/08/18

Notes:

1) S/O = Shallow/Overburden well; B = Bedrock Well; I = Intermediate Well
2) Ground surface, top of protective steel casing and well pipe elevations based on the elevation survey conducted by Cabco Consulting Services of Clinton, MA in 2004
The vertical datum elevation was based on MA Geodetic Survey Station 81G, which is based on the National Geodetic Vertical Datum of 1929 (NGVD29)

Table 3A
Summary of Compounds Detected in Groundwater
On-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]																		
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	CIW-1B Apr-16	CIW-1B Oct-16	CIW-1B Apr-17	CIW-1B Sep-17	CLW-5A Apr-16	CLW-5A Apr-17	CLW-5A Sep-17	CLW-5B Apr-16	CLW-5B Oct-16	CLW-5B Apr-17	CLW-5B Sep-17	CLW-8A Apr-16	CLW-8A DUP Apr-16	CLW-8 Oct-16	CLW-8 Apr-17	CLW-8 Sep-17	CLW-16B Apr-16
Chlorinated Ethenes (ug/L)																			
Tetrachloroethene	30,000	100,000	10 U	10 U	18	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.63 J	1.0 U	1.0 U	100 U
Trichloroethene (TCE)	5,000	50,000	400	370	1,600	410	1.0 U	0.75 J	1,300	2.5	51	100	140	23	22	40	16	32	**7,900**
cis-1,2-Dichloroethene	50,000	100,000	140	140	240	140	1.0 U	1.0 U	550	1.1	36	85	110	7.0	7.0	9.3	4.3	5.6	1,300
trans-1,2-Dichloroethene	50,000	100,000	14	16	18	18 J	1.0 U	1.0 U	3.7	1.0 U	1.5	4.5	7.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
1,1-Dichloroethene	30,000	100,000	10 U	10 U	3.3 J	20 U	1.0 U	1.0 U	4.9	1.0 U	1.0 U	1.1	1.9 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Vinyl chloride	50,000	100,000	61	78	110	80	1.0 U	1.0 U	130	1.0 U	2.4	8.5	28	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	540
Chlorinated Ethanes (ug/L)																			
Chloroethane	NL	NL	4.9 J	20 U	4.0 J	40 U	2.0 U	2.0 U	1.4 J	2.0 U	0.36 J	4.5	6.9	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	200 U
1,1,2,2-Tetrachloroethane	50,000	100,000	5.0 U	5.0 U	5.0 U	10 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	50 U
1,1,1-Trichloroethane	20,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
1,1,2-Trichloroethane	50,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
1,1-Dichloroethane	20,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
1,2-Dichloroethane	20,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Other VOCs (ug/L)																			
Benzene	10,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Carbon disulfide	NL	NL	100 U	100 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	10 U	10 U	10 U	10 U	1000 U
Chlorobenzene	1,000	10,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Chloroform	20,000	10,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Chloromethane	NL	NL	20 U	20 U	20 U	40 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	200 U
Ethylbenzene	5,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Methylene chloride	50,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.53 J	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Toluene	40,000	100,000	10 U	10 U	10 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U
Xylenes (Total)	5,000	100,000	30 U	30 U	30 U	60 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	300 U
Total Metals (ug/L)																			
Chromium (Cr)	300	3,000	**510**	**750**	230	**470**	100	110	82	75	69	9.0	7.0	**610**	**640**	**1,400**	**630**	**1,100**	130
Chromium (Hexavalent)	300	3,000	5 U	**680**	5 U	10 U	94	110	53	55	64	5.2 J	14	**550**	**560**	**1,400**	**480**	**970**	5 U

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Table 3A
Summary of Compounds Detected in Groundwater
On-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]																		
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	CLW-16B Oct-16	CLW-16B Apr-17	CLW-16B Sep-17	DMW-A Apr-16	DMW-A Oct-16	DMW-A Apr-17	DMW-A Sep-17	DMW-B Apr-16	DMW-B Oct-16	DMW-B Apr-17	DMW-B Sep-17	OSW-1A Apr-16	OSW-1A Oct-16	OSW-1A Apr-17	OSW-1A Sep-17	OSW-1B Apr-16	OSW-1B Oct-16
Chlorinated Ethenes (ug/L)																			
Tetrachloroethene	30,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Trichloroethene (TCE)	5,000	50,000	**5,600**	5,000	**12,000**	22	4.7	18	20	51	14	93	4.6	1.9	4.1	3.5	6.3	4,000	2,300
cis-1,2-Dichloroethene	50,000	100,000	1,300	1,200	3,000	42	36	41	62	110	69	150	30	1.0 U	1.0 U	1.0 U	1.0 U	250	280
trans-1,2-Dichloroethene	50,000	100,000	100 U	93 J	350	1.0 U	1.0 U	1.0 U	1.0 U	32	9.8	51	4.5	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
1,1-Dichloroethene	30,000	100,000	100 U	100 U	100 U	0.87 J	0.53 J	0.90 J	1.1	0.58 J	2.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Vinyl chloride	50,000	100,000	250	360	1,200	2.6	1.1	2.3	2.7	13	5.6	19	0.93 J	1.0 U	1.0 U	1.0 U	1.0 U	48	100 U
Chlorinated Ethanes (ug/L)																			
Chloroethane	NL	NL	200 U	200 U	200 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	200 U
1,1,2,2-Tetrachloroethane	50,000	100,000	50 U	50 U	50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	50 U
1,1,1-Trichloroethane	20,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
1,1,2-Trichloroethane	50,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
1,1-Dichloroethane	20,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
1,2-Dichloroethane	20,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Other VOCs (ug/L)																			
Benzene	10,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Carbon disulfide	NL	NL	1,000 U	1,000 U	1,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	0.21 J	10 U	10 U	10 U	10 U	100 U	1,000 U
Chlorobenzene	1,000	10,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Chloroform	20,000	10,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Chloromethane	NL	NL	200 U	200 U	200 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	200 U
Ethylbenzene	5,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Methylene chloride	50,000	100,000	100 U	53 J	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Toluene	40,000	100,000	100 U	100 U	100 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	100 U
Xylenes (Total)	5,000	100,000	300 U	300 U	300 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	6.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	30 U	300 U
Total Metals (ug/L)																			
Chromium (Cr)	300	3,000	200	49	40	5.0 U	5.0 U	1.1 J	1.9 J	5.0 U	5.0 U	1.2 J	8.6	170	**320**	160	220	1.0 J	1.7 J
Chromium (Hexavalent)	300	3,000	5 U	5 U	6.8 J	5 UJ	5 UJ	5 U	10 U	5 U	5 U	5 U	10 U	150	5 UJ	150	190	5 U	5 U

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; R = value is rejected

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Table 3A
Summary of Compounds Detected in Groundwater
On-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]																		
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	OSW-1B Apr-17	OSW-1B Sep-17	OSW-2B Apr-16	OSW-2B Oct-16	OSW-2B Apr-17	OSW-2B Sep-17	OSW-3A Apr-16	OSW-3A Apr-17	OSW-3A Sep-17	OSW-3B Apr-16	OSW-3B Oct-16	OSW-3B Apr-17	OSW-3B Sep-17	OSW-4I Apr-16	OSW-4I Oct-16	OSW-4I Apr-17	OSW-4I DUP Apr-17
Chlorinated Ethenes (ug/L)																			
Tetrachloroethene	30,000	100,000	0.39 J	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Trichloroethene (TCE)	5,000	50,000	3,400	3,300	2,300	**10,000**	1,800	1,200	89	24	29	180	200	590	270	520	320	490	550
cis-1,2-Dichloroethene	50,000	100,000	260	490	160	680	81	100	5.8	1.2	1.8	100	110	200	130	150	120	170	190
trans-1,2-Dichloroethene	50,000	100,000	7.5	50 U	83	740	40 U	280	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.3	10 U	8.0 U	8.0 U	8.0 U	1.3
1,1-Dichloroethene	30,000	100,000	1.3	50 U	0.32 J	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.5	10 U	2.7 J	8.0 U	4.2 J	3.3
Vinyl chloride	50,000	100,000	34	47 J	47	150	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	14	12	7.2 J	8.0 U	12	13
Chlorinated Ethanes (ug/L)																			
Chloroethane	NL	NL	0.61 J	100 U	2.0 U	100 U	80 U	80 U	2.0 U	2.0 U	2.0 U	8.0 U	8.0 U	1.3 J	20 U	16 U	16 U	16 U	2.0 U
1,1,2,2-Tetrachloroethane	50,000	100,000	0.50 U	25 U	0.50 U	25 U	20 U	20 U	0.50 U	0.50 U	0.50 U	2.0 U	2.0 U	0.50 U	5.0 U	4.0 U	4.0 U	4.0 U	0.50 U
1,1,1-Trichloroethane	20,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
1,1,2-Trichloroethane	50,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
1,1-Dichloroethane	20,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
1,2-Dichloroethane	20,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Other VOCs (ug/L)																			
Benzene	10,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Carbon disulfide	NL	NL	10 U	500 U	10 U	500 U	400 U	400 U	10 U	10 U	10 U	40 U	40 U	10 U	100 U	80 U	80 U	80 U	10 U
Chlorobenzene	1,000	10,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Chloroform	20,000	10,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Chloromethane	NL	NL	2.0 U	100 U	2.0 U	100 U	80 U	80 U	2.0 U	2.0 U	2.0 U	8.0 U	8.0 U	2.0 U	20 U	16 U	16 U	16 U	2.0 U
Ethylbenzene	5,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Methylene chloride	50,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	4.0 J	3.7 J	8.0 U	1.0 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	1.0 U	50 U	1.0 U	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Toluene	40,000	100,000	1.1	50 U	3.1	50 U	40 U	40 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	10 U	8.0 U	8.0 U	8.0 U	1.0 U
Xylenes (Total)	5,000	100,000	3.0 U	150 U	3.0 U	150 U	120 U	120 U	3.0 U	3.0 U	3.0 U	12.0 U	12.0 U	3.0 U	30 U	24.0 U	24.0 U	24 U	3.0 U
Total Metals (ug/L)																			
Chromium (Cr)	300	3,000	**2.6 J**	**1.1 J**	**890**	**640**	**1,200**	**1,600**	7.9	1.1 J	3.5 J	2.7 J	6.9	5.0 U	3.5 J	**350**	130	150	150
Chromium (Hexavalent)	300	3,000	5 U	10 U	37 J	5.3 J	150	**2,400**	5 U	5 U	10 U	5 U	5 U	25 U	10 U	200	120	130	140

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; R = value is rejected

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Table 3A
Summary of Compounds Detected in Groundwater
On-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]												
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	OSW-4I Sep-17	OSW-7 Apr-16	OSW-7 DUP Apr-16	OSW-7 Oct-16	OSW-7A Apr-17	OSW-7A Sep-17	OSW-7A DUP Sep-17	PP-2 Apr-16	PP-2 Oct-16	PP-2 Apr-17	PP-2 Sep-17
Chlorinated Ethenes (ug/L)										`			
Tetrachloroethene	30,000	100,000	8.0 U	1.0 U	1.0 U	0.40 J	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Trichloroethene (TCE)	5,000	50,000	390	9.8	9.6	19	16	240 J	230 J	150	220	270	360
cis-1,2-Dichloroethene	50,000	100,000	130	2.4	2.2	1.4	1.7	34	33	79	170	110	210
trans-1,2-Dichloroethene	50,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
1,1-Dichloroethene	30,000	100,000	5.2 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	2.1 J	3.3 J	3.8 J	8.8 J
Vinyl chloride	50,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 UJ	10 UJ	19	29	19	31
Chlorinated Ethanes (ug/L)													
Chloroethane	NL	NL	16 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	20 U	10 U	10 U	20 U	20 U
1,1,2,2-Tetrachloroethane	50,000	100,000	4.0 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	2.5 U	2.5 U	5.0 U	5.0 U
1,1,1-Trichloroethane	20,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
1,1,2-Trichloroethane	50,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
1,1-Dichloroethane	20,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
1,2-Dichloroethane	20,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Other VOCs (ug/L)													
Benzene	10,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Carbon disulfide	NL	NL	80 U	10 U	10 U	10 U	10 U	100 U	100 U	50 U	50 U	100 U	100 U
Chlorobenzene	1,000	10,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Chloroform	20,000	10,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Chloromethane	NL	NL	16 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	20 U	10 U	10 U	20 U	20 U
Ethylbenzene	5,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Methylene chloride	50,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	2.7 J	5.0 U	10 U	10 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Toluene	40,000	100,000	8.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	5.0 U	5.0 U	10 U	10 U
Xylenes (Total)	5,000	100,000	24 U	3.0 U	3.0 U	3.0 U	3.0 U	30 U	30 U	15.0 U	15.0 U	30 U	30 U
Total Metals (ug/L)													
Chromium (Cr)	300	3,000	140	270	280	**410**	270	**560**	**570**	65	30	58	11
Chromium (Hexavalent)	300	3,000	140	260	260	**440**	260	**660**	**600**	5 U	150	12	10 U

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; R = value is rejected

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Prepared by / Date: HTS 02/08/18
Checked by / Date: CTM 02/08/18

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-1	BIW-2	BIW-2	BIW-2	BIW-2	BIW-2
	GW-3 MCP	UCL GW MCP																
	(ug/L)	(ug/L)	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Aug-11	Jan-12	Feb-12	Feb-12	Aug-12
Chlorinated Ethenes (ug/L)																		
Tetrachloroethene	30,000	100,000	20 U	20 U	10 U	3.1 J	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene (TCE)	5,000	50,000	**8,400**	**7,400**	4,600	4,400	4,600	1,100	1,200	3,300	**8,400**	3,200	2,600	90	24	18	21	23
cis-1,2-Dichloroethene	50,000	100,000	3,600	3,600	1,900	1,700	1,900	560	640	1,500	3,900	1,500	1,100	22	9.7	7.4	7.1	4.8 J
trans-1,2-Dichloroethene	50,000	100,000	22	41	14	14	25	20 U	24	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	30,000	100,000	5.9 J	5.0 J	3.8 J	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	50,000	100,000	510	580	540	630	630	77	76	610	1800	490	390	1.9 J	2.5 U	2.5 U	2.5 U	2.5 U
Chlorinated Ethanes (ug/L)																		
Chloroethane	NL	NL	40 U	40 U	20 U	20 U	40 U	40 U	40 U	40 U	80 U	100 U	100 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	50,000	100,000	10 U	10 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	20 U	25 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	20,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	50,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	20,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	20,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Other VOCs (ug/L)																		
2-Butanone	50,000	100,000	200 U	200 U	100 U	100 U	200 U	200 U	200 U	200 U	400 U	500 U	500 U	50 U	50 U	50 U	50 U	50 U
2-Chlorotoluene	NL	NL	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	NL	NL	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50,000	100,000	1,000 U*	1,000 U	500 U	500 U	1000 U	1000 UJ	1000 U	1000 U	2000 U	2500 U	2,500 U	250 U	250 U	250 U	250 U	250 U
Benzene	10,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	50,000	100,000	10 U	10 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U	20 U	25.0 U	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Butylbenzene	NL	NL	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	NL	NL	200 U*	200 U	5.5 J	7.5 J	200 U	6.5 J	200 U	200 U	400 U	500 U	500 U	50 U	50 U	11 J	7.2 J	50 U
Carbon tetrachloride	5,000	50,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	1,000	10,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	20,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	4.5 J	1.6 J	1.3 J	5.0 U	5.0 U
Chloromethane	NL	NL	40 U	40 U	20 U	20 U	40 U	40 U	40 U	40 U	80 U	100 U	100 U	10 U	320	10 U	10 U	10 U
Ethylbenzene	5,000	100,000	20 U	20 U	2.0 J	2.1 J	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	50,000	100,000	40 U	40 U	20 U	20 U	42 U	20 U	10 J	20 U	40 U	50 U	44 J	10 U	10 U	10 U	10 U	10 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	20 U	20 U	10 U	10 U	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	40,000	100,000	32	20 U	23	24	21	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes, m,p-	5,000	100,000	40 U	40 U	20 U	20 U	40 U	40 U	40 U	40 U	80 U	100 U	100 U	10 U	10 U	10 U	10 U	10 U
Xylene, o-	5,000	100,000	20 U	20 U	2.1 J	2.5 J	20 U	20 U	20 U	20 U	40 U	50 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Metals, Total (ug/L)																		
Chromium	300	3,000	240	---	53	60	33	31	86	28	26	11	23	**1,300**	---	**530**	**340**	150
Hexavalent Chromium	300	3,000	5.0 U	---	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	11	5.0 U	5.0 U	5.0 U	50 U	---	5.0 U	1,000 U	5.0 U
Iron	NL	NL	---	13,000	---	6,800	---	---	---	---	---	---	---	140,000 B	31,000	---	6,200	---
Metals, Dissolved (ug/L)												---						
Chromium	300	3,000	240	---	---	---	---	---	---	---	---	---	---	**1,300**	---	---	---	---
Iron	NL	NL	---	4,200	---	5,300	---	---	---	---	---	---	---	75,000	25,000	---	6,300	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]																			
	GW-3 MCP	UCL GW MCP	BIW-2	BIW-2	BIW-2	BIW-2	BIW-2	BIW-2	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-4	BIW-5
	(ug/L)	(ug/L)	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Aug-11
Chlorinated Ethenes (ug/L)																				
Tetrachloroethene	30,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.5	2.4	3.0	1.0	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Trichloroethene (TCE)	5,000	50,000	180	370	350	760	1,200	1,200	770	200	870	1,100	200	**8,600**	**6,100**	**5,800**	**21,000**	**17,000**	**17,000**	**35,000**
cis-1,2-Dichloroethene	50,000	100,000	27	38	28	120	190	160	47	54	100	130	41	580	420	490	1300	1000	1,100	2,100
trans-1,2-Dichloroethene	50,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	3.6	2.0	1.7 J	2.2	200 U	100 U	100 U	100 U	400 U	400 U	29 J
1,1-Dichloroethene	30,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Vinyl chloride	50,000	100,000	2.0 U	8.0 U	8.0 U	23	7.7 J	20 U	5.0 U	0.50 U	0.50 U	1.0 U	0.50 U	200 U	100 U	100 U	140	400 U	400 U	400
Chlorinated Ethanes (ug/L)																				
Chloroethane	NL	NL	4 UJ	16 U	16 U	16 U	16 U	40 U	20 U	2.0 U	2.0 U	4.0 U	2 U	400 U	200 U	200 U	200 U	800 U	800 U	200 U
1,1,2,2-Tetrachloroethane	50,000	100,000	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	10 U	5.0 U	4.7	1.1	1.0 U	3.3	100 U	50 U	50 U	50 U	200 U	200 U	50 U
1,1,1-Trichloroethane	20,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
1,1,2-Trichloroethane	50,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	0.93 J	1.0 U	2.0 U	0.79 J	200 U	100 U	100 U	100 U	400 U	400 U	100 U
1,1-Dichloroethane	20,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
1,2-Dichloroethane	20,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	0.31 J	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Other VOCs (ug/L)																				
2-Butanone	50,000	100,000	20 U	80 U	80 U	80 U	80 U	200 U	100 U	1.7 J	10 U	20 U	1.6 J	2000 U	1000 U	1000 U	1000 U	4,000 U	4,000 U	1,000 U
2-Chlorotoluene	NL	NL	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
4-Chlorotoluene	NL	NL	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Acetone	50,000	100,000	100 UJ	400 U	400 U	400 U	400 U	1,000 U	500 U*	50 U	50 U	100 U	33 J	10,000 U	5,000 U	5,000 U	5,000 U	20,000 U	20,000 U	5,000 U*
Benzene	10,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Bromodichloromethane	50,000	100,000	1.0 U	4.0 U	4.0 U	4.0 U	4.0 U	10 U	5.0 U	0.50 U	0.50 U	1.0 U	0.30 J	100 U	50 U	50 U	50 U	200 U	200 U	50 U
Butylbenzene	NL	NL	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	2.7 JB	0.94 J	1.0 U	2.0 U	0.27 J	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Carbon disulfide	NL	NL	20 U	80 U	80 U	80 U	80 U	200 U	100 U*	3.5 J	3.4 J	1.7 J	10 J	2000 U	62 J	1000 U	1000 U	4,000 U	4,000 U	1,000 U*
Carbon tetrachloride	5,000	50,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Chlorobenzene	1,000	10,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Chloroform	20,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	2.5 J	1.6	0.97 J	0.60 J	1.3	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Chloromethane	NL	NL	4.0 U	16 U	16 U	16 U	16 U	40 U	20 U	4.9	2.0 U	4.0 U	8.1	400 U	200 U	200 U	200 U	800 U	800 U	200 U
Ethylbenzene	5,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	0.46 J	1.3	1.3 J	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Methylene chloride	50,000	100,000	2.0 U	4.1 J	8.0 U	8.0 U	8.0 U	16 J	20 U	1.7 J	1.7 J	4.0 U	20 U	130 J	100 U	100 U	100 U	400 U	340 J	200 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	1.0 U	1.0 U	2.0 U	1.0 U	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Toluene	40,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	3.1 J	2.5	7.4	8.1	1.8	200 U	100 U	100 U	100 U	400 U	400 U	33 J
Xylenes, m,p-	5,000	100,000	4.0 U	16 U	16 U	16 U	16 U	40 U	20 U	0.94 J	4.5	4.8	0.67 J	400 U	200 U	200 U	200 U	800 U	800 U	200 U
Xylene, o-	5,000	100,000	2.0 U	8.0 U	8.0 U	8.0 U	8.0 U	20 U	10 U	0.42 J	1.9	2.1	0.25 J	200 U	100 U	100 U	100 U	400 U	400 U	100 U
Metals, Total (ug/L)																				
Chromium	300	3,000	80	110	71	65	25	52	**13,000**	---	**2,300**	**1,500**	**4,300**	290	280	**320**	170	86	120	75
Hexavalent Chromium	300	3,000	5.0 U	5.0 U	6.7	5.0 U	5.0 U	5.0 U	50 U	---	5.0 U	5.0 U	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iron	NL	NL	---	---	---	---	---	---	---	33,000	---	5,900	---	---	---	---	---	---	---	---
Metals, Dissolved (ug/L)							---											---		
Chromium	300	3,000	---	---	---	---	---	---	**14,000**	---	---	---	---	---	---	---	---	---	---	54
Iron	NL	NL	---	---	---	---	---	---	---	27,000	---	6,000	---	---	---	---	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-5	BIW-5	BIW-5	BIW-5	BIW-5	BIW-5	BIW-5	BIW-5	BIW-5	BIW-5	BIW-6	BIW-6	BIW-6	BIW-6	BIW-6	BIW-6	BIW-6
	GW-3 MCP	UCL GW MCP																	
	(ug/L)	(ug/L)	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Dec-10	Feb-11	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12
Chlorinated Ethenes (ug/L)																			
Tetrachloroethene	30,000	100,000	5.7	5.8 J	8.7 J	100 U	20 U	10 U	10 U	10 U	100 U	200 U	27 J	4.0 U	250 U	50 U	16 J	21 J	11 J
Trichloroethene (TCE)	5,000	50,000	1,100	1,600 J	**5,500**	**18,000**	1,200	680	670	**5,100**	**12,000**	**17,000**	**72,000**	2.3 J	**130,000**	**12,000**	**41,000**	**51,000**	**14,000**
cis-1,2-Dichloroethene	50,000	100,000	180	170 J	510	1,900	98	50	58	360	1,100	1,400	1,700	4.0 U	1,500	270	980	1,300	560
trans-1,2-Dichloroethene	50,000	100,000	25	26 J	47	100 U	20 U	10 U	10 U	37	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	56
1,1-Dichloroethene	30,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U*	250 U	50 U	50 U	50 U	50 U
Vinyl chloride	50,000	100,000	4.3	4.9 J	10 U	420	20 U	10 U	10 U	68	250	320	99	2.0 U	180	27	120	190	25 U
Chlorinated Ethanes (ug/L)																			
Chloroethane	NL	NL	4.6 J	5.6 J	40 U	200 U	40 U	7.6 J	20 U	20 U	200 U	400 U	200 U	8.0 U	500 U	100 U	100 U	100 U	100 U
1,1,2,2-Tetrachloroethane	50,000	100,000	140	130 J	78	50 U	33	60	45	58	50 U	100 U	50 U	16	130 U	85	27	24 J	290
1,1,1-Trichloroethane	20,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
1,1,2-Trichloroethane	50,000	100,000	30	21 J	6.8 J	100 U	32	14	7.5 J	7.3 J	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
1,1-Dichloroethane	20,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
1,2-Dichloroethane	20,000	100,000	14	14 J	20 U	100 U	64	29	15	12	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Other VOCs (ug/L)																			
2-Butanone	50,000	100,000	50 U	50 UJ	200 U	1,000 U	200 U	100 U	100 U	100 U	1000 U	2,000 U	1,000 U	33 J*	2500 U	500 U	500 U	500 U	500 U
2-Chlorotoluene	NL	NL	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
4-Chlorotoluene	NL	NL	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Acetone	50,000	100,000	250 U	250 UJ	1,000 U	5,000 U	60 J	54 J	500 U	500 U	5,000 U	10,000 U	5,000 U	210 *	13,000 U*	2,500 U	2,500 U	2,500 U	2,500 U
Benzene	10,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Bromodichloromethane	50,000	100,000	2.5 U	2.5 UJ	10 U	50 U	10 U	5.0 U	5.0 U	5.0 U	50 U	100 U	100 U	2.0 U	130 U	25 U	25 U	25 U	25 U
Butylbenzene	NL	NL	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Carbon disulfide	NL	NL	70	63 J	31 J	1,000 U	39 J	33 J	26 J	29 J	27 J	2,000 U	1,000 U	1.8 J*	2,500 U*	35 J	110 J	64 J	130 J
Carbon tetrachloride	5,000	50,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Chlorobenzene	1,000	10,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Chloroform	20,000	100,000	28	19 J	20 U	100 U	42	27	14	11	100 U	200 U	100 U	10	250 U	50 U	50 U	50 U	50 U
Chloromethane	NL	NL	150	49 J	15 J	200 U	1000	730	380	330	84 J	92 J	200 U	59	500 U	140	100 U	47 J	40 J
Ethylbenzene	5,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Methylene chloride	50,000	100,000	210	90 J	24 J	200 U	390	230	130	100	100 U	160 J	200 U	18	500 U	100 U	100 U	100 U	100 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Toluene	40,000	100,000	5.0 U	5.0 UJ	20 U	31 J	20 U	10 U	10 U	10 U	100 U	200 U	55 J	4.0 U	1400	50 U	140	160	50 U
Xylenes, m,p-	5,000	100,000	10 U	4.0 UJ	40 U	200 U	40 U	20 U	20 U	20 U	200 U	400 U	200 U	8.0 U	500 U	100 U	100 U	100 U	100 U
Xylene, o-	5,000	100,000	5.0 U	5.0 UJ	20 U	100 U	20 U	10 U	10 U	10 U	100 U	200 U	100 U	4.0 U	250 U	50 U	50 U	50 U	50 U
Metals, Total (ug/L)																			
Chromium	300	3,000	---	20	**430**	**1,200**	**3,100**	**2,600**	**1,600**	**480**	**470**	**440**	---	---	6.9 J	---	200	200	24 J
Hexavalent Chromium	300	3,000	---	500 U	5.0 U	**630**	250 U	500 U	250 U	**510**	240	210	---	---	5.0 U	---	30	5.0 U	250 U
Iron	NL	NL	460,000	---	12,000	---	---	---	---	---	---	---	---	---	61,000 B	2,200,000	---	430,000	---
Metals, Dissolved (ug/L)											---								
Chromium	300	3,000	---	---	---	---	**2900**	---	---	---	---	---	---	---	5.3 J	---	---	---	---
Iron	NL	NL	380,000	---	1,900	---	---	---	---	---	---	---	---	---	55000	2000000	---	430000	---

Notes:

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10 - Indicates value exceeds current GW-3 Standard.

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Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-6	BIW-6	BIW-6	BIW-6	BIW-6	BIW-6	BIW-7	BIW-7	BIW-7	BIW-7	BIW-7	BIW-7	BIW-7	BIW-7	BIW-7	BIW-7
	GW-3 MCP	UCL GW MCP																
	(ug/L)	(ug/L)	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Dec-10	Feb-11	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13
Chlorinated Ethenes (ug/L)																		
Tetrachloroethene	30,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	12 J	100 U	20 U	20 U	200 U
Trichloroethene (TCE)	5,000	50,000	**5,600**	**43,000**	**58,000**	**80,000**	**53,000**	**53,000**	**57,000**	140	**41,000**	4,400	**46,000**	**51,000**	**30,000**	1,100	**12,000**	**20,000**
cis-1,2-Dichloroethene	50,000	100,000	270	2,300	2,300	2,900	2,600	2,400	2,100	2.8 J	1,200	150	1,700	2,100	1,100	48	400	750
trans-1,2-Dichloroethene	50,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	35	200 U
1,1-Dichloroethene	30,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U*	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Vinyl chloride	50,000	100,000	80 U	440	800 U	800 U	800 U	800 U	210	5.0 U	87	14	200	240	99	20 U	29	200 U
Chlorinated Ethanes (ug/L)																		
Chloroethane	NL	NL	160 U	160 U	1,600 U	1,600 U	1,600 U	1,600 U	200 U	4.6 J	200 U	40 U	200 U	100 U	200 U	40 U	40 U	400 U
1,1,2,2-Tetrachloroethane	50,000	100,000	82	40 U	400 U	400 U	400 U	400 U	50 U	56	50 U	190	30 J	13 J	29 J	130	150	180
1,1,1-Trichloroethane	20,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
1,1,2-Trichloroethane	50,000	100,000	34 J	80 U	800 U	800 U	800 U	800 U	100 U	7.0 J	100 U	14 J	100 U	50 U	100 U	30	20	200 U
1,1-Dichloroethane	20,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	10 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
1,2-Dichloroethane	20,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	17	100 U	8.8 J	100 U	50 U	100 U	19 J	15 J	200 U
Other VOCs (ug/L)																		
2-Butanone	50,000	100,000	800 U	800 U	8,000 U	8,000 U	8000 U	8,000 U	1,000 U	40 U*	1,000 U	200 U	1,000 U	5,00 U	1,000 U	200 U	200 U	2000 U
2-Chlorotoluene	NL	NL	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
4-Chlorotoluene	NL	NL	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Acetone	50,000	100,000	4000 UJ	4000 U	40,000 U	40,000 U	40,000 U	40,000 U	5,000 U	500 U*	5,000 U	1,000 U	5,000 U	2,500 U	5,000 U	1,000 UJ	1,000 U	10,000 U
Benzene	10,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Bromodichloromethane	50,000	100,000	40 U	40 U	400 U	400 U	400 U	400 U	100 U	5.0 U	50 U	10 U	50 U	25 U	50 U	10 U	10 U	100 U
Butylbenzene	NL	NL	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Carbon disulfide	NL	NL	61 J	37 J	8,000 U	8,000 U	8,000 U	8,000 U	1,000 U	29 J*	35 J*	32 J	25 J	19 J	58 J	25 J	63 J	2,000 U
Carbon tetrachloride	5,000	50,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Chlorobenzene	1,000	10,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Chloroform	20,000	100,000	45 J	80 U	800 U	800 U	800 U	800 U	100 U	49	100 U	40	100 U	50 U	100 U	140	87	73 J
Chloromethane	NL	NL	510	47 J	1,600 U	1,600 U	1600 U	1,600 U	200 U	410	200 U	500	78 J	28 J	63 J	670	420	370 J
Ethylbenzene	5,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Methylene chloride	50,000	100,000	340	98	800 U	800 U	800 U	750 J	200 U	270	200 U	150	200 U	100 U	200 U	570	390	280
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Toluene	40,000	100,000	80 U	78 J	800 U	800 U	800 U	800 U	130	4.0 U	67 J	6.3 J	48 J	62	44 J	20 U	20 U	200 U
Xylenes, m,p-	5,000	100,000	160 U	160 U	1,600 U	1,600 U	1,600 U	1,600 U	200 U	8.0 U	200 U	40 U	200 U	100 U	200 U	40 U	40 U	400 U
Xylene, o-	5,000	100,000	80 U	80 U	800 U	800 U	800 U	800 U	100 U	4.0 U	100 U	20 U	100 U	50 U	100 U	20 U	20 U	200 U
Metals, Total (ug/L)																		
Chromium	300	3,000	240	64	34	15	9.4	9.6	---	---	0.86 J	---	76 B	56	0.95 J	160	94	71
Hexavalent Chromium	300	3,000	250 U	250 U	**430**	5.0 U	5.0 U	5.0 U	---	---	5.0 U	---	2,500 U	5.0 U	5.0 U	250 U	250 U	500 U
Iron	NL	NL	---	---	---	---	---	---	---	---	1100	2100000	---	100000	---	---	---	---
Metals, Dissolved (ug/L)							---											
Chromium	300	3,000	---	---	---	---	---	---	---	---	10 U	---	---	---	---	140	---	---
Iron	NL	NL	---	---	---	---	---	---	---	---	350	2,000,000	---	95,000	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10

10

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-7	BIW-7	BIW-7	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-14	BIW-15	BIW-15
	GW-3 MCP	UCL GW MCP																		
	(ug/L)	(ug/L)	Dec-13	Apr-14	Jun-14	Dec-10	Feb-11	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Dec-10	Feb-11
Chlorinated Ethenes (ug/L)																				
Tetrachloroethene	30,000	100,000	200 U	400 U	400 U	20 J	4.0 U	33 J	12 J	50 U	12 J	10 J	40 U	80 U	80 U	200 U	200 U	200 U	44 J	4.0 U
Trichloroethene (TCE)	5,000	50,000	**24,000**	**20,000**	**25,000**	**42,000**	5.9 J	**49,000**	**17,000**	**16,000**	**21,000**	**14,000**	4,800	**7,300**	**22,000**	**15,000 J**	**10,000**	**11,000**	**92,000**	5.4
cis-1,2-Dichloroethene	50,000	100,000	930	1,000	1,100	980	4.0 U	1,500	1,100	650	650	760	120	350	530	360	310	320	1400	4.0 U
trans-1,2-Dichloroethene	50,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
1,1-Dichloroethene	30,000	100,000	200 U	400 U	400 U	50 U	4.0 U*	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U*
Vinyl chloride	50,000	100,000	200 U	400 U	400 U	25 U	5.0 U	230	300	75	25 U	61	40 U	80 U	80 U	200 U	200 U	200 U	42 J	5.0 U
Chlorinated Ethanes (ug/L)																				
Chloroethane	NL	NL	400 U	800 U	800 U	100 U	8.0 U	200 U	100 U	100 U	100 U	100 U	80 U	160 U	160 U	400 U	400 U	400 U	200 U	8.0 U
1,1,2,2-Tetrachloroethane	50,000	100,000	100 U	200 U	110 J	25 U	5.0 U	50 U	20 J	25 U	25 U	33	24	75	19 J	100 U	100 U	100 U	50 U	5.0 U
1,1,1-Trichloroethane	20,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
1,1,2-Trichloroethane	50,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
1,1-Dichloroethane	20,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
1,2-Dichloroethane	20,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	16 J	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Other VOCs (ug/L)																				
2-Butanone	50,000	100,000	2000 U	4,000 U	4,000 U	500 U	40 U*	1,000 U	500 U	500 U	500 U	500 U	400 U	800 U	800 U	2,000 U	2,000 U	2,000 U	1,000 U	40 U*
2-Chlorotoluene	NL	NL	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
4-Chlorotoluene	NL	NL	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Acetone	50,000	100,000	10,000 U	20,000 U	20,000 U	2,500 U	380 J*	5,000 U	2,500 U	2,500 U	2,500 U	2,500 U	2000 UJ	4,000 U	4,000 U	10,000 U	10,000 U	10,000 U	5,000 U	370 J*
Benzene	10,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Bromodichloromethane	50,000	100,000	100 U	200 U	200 U	50 U	5.0 U	50 U	25 U	25 U	25 U	25 U	20 U	40 U	40 U	100 U	100 U	100 U	100 U	5.0 U
Butylbenzene	NL	NL	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Carbon disulfide	NL	NL	2,000 U	4,000 U	4,000 U	500 U	40 U*	1,000 U	38 J	26 J	18 J	44 J	16 J	75 J	800 U	20,00 UJ	2,000 U	2,000 U	1,000 U	40 U*
Carbon tetrachloride	5,000	50,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Chlorobenzene	1,000	10,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Chloroform	20,000	100,000	200 U	400 U	400 U	50 U	15	100 U	25 J	50 U	50 U	24 J	40 U	36 J	80 U	200 U	200 U	200 U	100 U	6.6 J
Chloromethane	NL	NL	400 U	800 U	800 U	100 U	67	200 U	1,000	210	47 J	200	350	320	60 J	400 U	400 U	400 U	200 U	41
Ethylbenzene	5,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Methylene chloride	50,000	100,000	200 U	400 U	360 J	100 U	15 J	200 U	460	92 J	100 U	89 J	220	200	48 J	200 U	200 U	150 J	200 U	19 J
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Toluene	40,000	100,000	200 U	400 U	400 U	40 J	4.0 U	450	80	50 U	15 J	50 U	40 U	80 U	80 U	200 U	200 U	200 U	810	4.0 U
Xylenes, m,p-	5,000	100,000	400 U	800 U	800 U	100 U	8.0 U	200 U	100 U	100 U	100 U	100 U	80 U	160 U	160 U	400 U	400 U	400 U	200 U	8.0 U
Xylene, o-	5,000	100,000	200 U	400 U	400 U	50 U	4.0 U	100 U	50 U	50 U	50 U	50 U	40 U	80 U	80 U	200 U	200 U	200 U	100 U	4.0 U
Metals, Total (ug/L)																				
Chromium	300	3,000	7	2.7 J	26	---	---	180	---	**1,300**	270	**1,400**	**620**	**820**	69	12	14	6.1	---	---
Hexavalent Chromium	300	3,000	5.0 U	5.0 U	5.0 U	---	---	190	---	250 U	5.0 U	2.5 U	250 U	500 U	5.0 U	5.0 U	5.0 U	5.0 U	---	---
Iron	NL	NL	---	---	---	---	---	---	2,300,000	---	37,000	---	---	---	---	---	---	---	---	---
Metals, Dissolved (ug/L)				---													---			
Chromium	300	3,000	---	---	---	---	---	220	---	---	---	---	**530**	---	---	---	---	---	---	---
Iron	NL	NL	---	---	---	---	---	---	2,300,000	---	34,000	---	---	---	---	---	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-15	BIW-16	BIW-16	BIW-16	BIW-16	BIW-16	BIW-16
	GW-3 MCP	UCL GW MCP																	
	(ug/L)	(ug/L)	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Dec-10	Feb-11	Aug-11	Jan-12	Feb-12	Mar-12
Chlorinated Ethenes (ug/L)																			
Tetrachloroethene	30,000	100,000	200 U	27 J	36 J	35 J	43 J	200 U	42 J	20 U	26	250 U	250 U	100 U	4.0 J	100 U	250 U	200 U	200 U
Trichloroethene (TCE)	5,000	50,000	**74,000**	**45,000**	**71,000**	**79,000**	**69,000**	**7,800**	**5,700**	680	**27,000**	**14,000**	**21,000**	**56,000**	4,700	**37,000**	**64,000**	**74,000**	**91,000**
cis-1,2-Dichloroethene	50,000	100,000	590	650	960	980	480	260	86 J	17 J	420	200 J	420	77 J	10 U	100 U	84 J	46 J	77 J
trans-1,2-Dichloroethene	50,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	25	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
1,1-Dichloroethene	30,000	100,000	100 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U*	100 U	250 U	200 U	200 U
Vinyl chloride	50,000	100,000	100 U	28 J	45 J	46 J	50 U	200 U	100 U	20 U	20 U	250 U	250 U	50 U	5.0 U	50 U	130 U	100 U	100 U
Chlorinated Ethanes (ug/L)																			
Chloroethane	NL	NL	400 U	200 U	200 U	200 U	200 U	400 U	200 U	40 U	40 U	500 U	500 U	200 U	20 U	200 U	500 U	400 U	400 U
1,1,2,2-Tetrachloroethane	50,000	100,000	100 U	86	46 J	35 J	130	1500	1200	1100	500	860	68 J	50 U	270	50 U	130 U	100 U	100 U
1,1,1-Trichloroethane	20,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
1,1,2-Trichloroethane	50,000	100,000	200 U	21 J	100 U	100 U	100 U	310.0	110.0	72	34	250 U	250 U	100 U	4.5 J	100 U	250 U	200 U	200 U
1,1-Dichloroethane	20,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
1,2-Dichloroethane	20,000	100,000	200 U	100 U	100 U	100 U	100 U	120 J	100 U	26	13 J	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Other VOCs (ug/L)																			
2-Butanone	50,000	100,000	2,000 U	1,000 U	1,000 U	1,000 U	1,000 UJ	2000 U	1000 U	200 U	200 U	2500 U	2,500 U	1,000 U	100 U*	1,000 U	2,500 U	2,000 U	2,000 U
2-Chlorotoluene	NL	NL	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
4-Chlorotoluene	NL	NL	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Acetone	50,000	100,000	10,000 U	5,000 U	5,000 U	5,000 U	5,000 U	10,000 UJ	5,000 UJ	77 J	1,000 U	13,000 U	13,000 U	5,000 UJ	500 U*	5,000 U	13,000 U	10,000 U	10,000 U
Benzene	10,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Bromodichloromethane	50,000	100,000	100 U	50 U	50 U	50 U	50 U	100 U	50 U	10 U	10 U	130 U	130 U	100 U	5.0 U	50 U	130 U	100 U	100 U
Butylbenzene	NL	NL	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Carbon disulfide	NL	NL	54 J	1,000 U	72 J	82 J	200 J	2000 U	140 J	60 J	50 J	84 J	2,500 U	1,000 U	86 J*	1,000 U*	2,500 U	2,000 U	2,000 U
Carbon tetrachloride	5,000	50,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U*	10 U	100 U	250 U	200 U	200 U
Chlorobenzene	1,000	10,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Chloroform	20,000	100,000	200 U	76 J	37 J	25 J	81 J	2200	710	470	190	250	250 U	100 U	54	100 U	250 U	200 U	200 U
Chloromethane	NL	NL	400 U	720	240	180 J	170 J	2800	830	470	200	180 J	500 U	200 U	230	200 U	71 J	400 U	400 U
Ethylbenzene	5,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Methylene chloride	50,000	100,000	400 U	440	200	140 J	510	4800	1300	1100	460	500	240 J	200 U	140	200 U	500 U	400 U	400 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Toluene	40,000	100,000	1,600	1,300	1,800	1,900	66 J	200 U	100 U	20 U	44	250 U	250 U	300	10 U	260	250 U	200 U	200 U
Xylenes, m,p-	5,000	100,000	400 U	200 U	200 U	200 U	200 U	400 U	200 U	40 U	40 U	500 U	500 U	200 U	20 U	200 U	500 U	400 U	400 U
Xylene, o-	5,000	100,000	200 U	100 U	100 U	100 U	100 U	200 U	100 U	20 U	20 U	250 U	250 U	100 U	10 U	100 U	250 U	200 U	200 U
Metals, Total (ug/L)																			
Chromium	300	3,000	140	---	**330 B**	240	**430**	**590**	**440**	**320**	130	180	11	---	---	**480**	---	43	50
Hexavalent Chromium	300	3,000	68	---	500 U	250 U	5,000 U	250 U	250 U	**840**	50 U	130 U	5.0 U	---	---	**600**	---	5.0 U	5.0 U
Iron	NL	NL	---	2,200,000	---	520,000	---	---	---	---	---	---	---	---	---	---	28000	---	3,700
Metals, Dissolved (ug/L)												---							
Chromium	300	3,000	130	---	---	---	---	**560**	---	---	---	---	---	---	---	**610**	---	---	---
Iron	NL	NL	---	2,000,000	---	550,000	---	---	---	---	---	---	---	---	---	---	26000	---	3,100

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-16	BIW-16	BIW-16	BIW-16	BIW-16	BIW-16	BIW-16	BIW-24	BIW-24	BIW-24	BIW-24	BIW-24	BIW-24	BIW-24	BIW-24
	GW-3 MCP	UCL GW MCP															
	(ug/L)	(ug/L)	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13
Chlorinated Ethenes (ug/L)																	
Tetrachloroethene	30,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	2.4 J	2.0 J	3.1 J	6.1 J	5.0 U	2.0 U	1.0 U
Trichloroethene (TCE)	5,000	50,000	**9,300**	**34,000 J**	**51,000**	**9,700**	**22,000**	**36,000**	**20,000**	1,800	2,000	2,400	1,200	**6,100**	8	22	40
cis-1,2-Dichloroethene	50,000	100,000	6.3 J	400 U	400 U	130 U	130 U	400 U	400 U	310	550	530	510	900	5.0 U	2.9	5.3
trans-1,2-Dichloroethene	50,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	4.1 J	6	4.8 J	6.1 J	10 J	5.0 U	2.0 U	1.0 U
1,1-Dichloroethene	30,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Vinyl chloride	50,000	100,000	13 U	400 U	400 U	130 U	130 U	400 U	400 U	5.0 U	2.5 U	2.5 U	5.0 U	240	5.0 U	2.0 U	1.0 U
Chlorinated Ethanes (ug/L)																	
Chloroethane	NL	NL	50 U	800 U	800 U	250 U	250 U	800 U	800 U	20 U	10 U	10 U	20 U	40 U	10 UJ	4.0 U	1.0 J
1,1,2,2-Tetrachloroethane	50,000	100,000	13 U	200 U	200 U	63 U	63 U	200 U	200 U	5.0 U	1.7 J	1.7 J	5.0 U	10 U	7	3.1	0.50 U
1,1,1-Trichloroethane	20,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
1,1,2-Trichloroethane	50,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	4.8 J	1.6 J	0.91 J
1,1-Dichloroethane	20,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
1,2-Dichloroethane	20,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	4.8 J	2.9	1.7
Other VOCs (ug/L)																	
2-Butanone	50,000	100,000	250 U	4000 U	4000 U	1300 U	1300 U	4,000 U	4,000 U	100 U	50 U	50 U	100 U	200 U	50 U	20 U	10 U
2-Chlorotoluene	NL	NL	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
4-Chlorotoluene	NL	NL	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Acetone	50,000	100,000	1,300 U	20,000 UJ	20,000 U	6,300 U	6,300 U	20,000 U	20,000 U	500 U*	250 U	250 U	500 U	1,000 U	37 J	18 J	19 J
Benzene	10,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Bromodichloromethane	50,000	100,000	13 U	200 U	200 U	63 U	63 U	200 U	200 U	5.0 U	2.5 U	2.5 U	5.0 U	10 U	2.5 U	1.0 U	0.50 U
Butylbenzene	NL	NL	25 UJ	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Carbon disulfide	NL	NL	7.6 J	4,000 U	4,000 U	1,300 U	1,300 U	4,000 U	4,000 U	5.5 J*	5.6 J	8.1 J	10 J	9.4 J	3.2 J	9.1 J	9.3 J
Carbon tetrachloride	5,000	50,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Chlorobenzene	1,000	10,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Chloroform	20,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	2.0 J	5.0 U	5.0 U	10 U	20 U	9.5	5.8	8.9
Chloromethane	NL	NL	50 U	800 U	800 U	250 U	250 U	800 U	800 U	20 U	10 U	10 U	20 U	40 U	68	53	46
Ethylbenzene	5,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Methylene chloride	50,000	100,000	61 U	260 J	270 J	130 U	130 U	400 U	360 J	20 U	10 U	10 U	20 U	40 U	24	9.9	8.3
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Toluene	40,000	100,000	28	400 U	400 U	130 U	130 U	400 U	400 U	5.8 J	6	6.9	5.1 J	5.6 J	5.0 U	2.0 U	1.0 U
Xylenes, m,p-	5,000	100,000	50 U	800 U	800 U	250 U	250 U	800 U	800 U	20 U	10 U	10 U	20 U	40 U	10 U	4.0 U	2.0 U
Xylene, o-	5,000	100,000	25 U	400 U	400 U	130 U	130 U	400 U	400 U	10 U	5.0 U	5.0 U	10 U	20 U	5.0 U	2.0 U	1.0 U
Metals, Total (ug/L)																	
Chromium	300	3,000	**520**	40	160	**450**	**570**	250	180	**5100**	---	**330**	200	180	**8,300**	**1,600**	**1,500**
Hexavalent Chromium	300	3,000	**590**	24	5.0 U	5,000 U	**320**	160	190	50 U	---	5.0 U	5.0 U	5.0 U	250 U	500 U	1000 U
Iron	NL	NL	---	---	---	---	---	---	---	---	75000	---	46000	---	---	---	---
Metals, Dissolved (ug/L)								---									
Chromium	300	3,000	---	---	---	---	---	---	---	**4800**	---	---	---	---	---	---	---
Iron	NL	NL	---	---	---	---	---	---	---	---	85000	---	43000	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10

10

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-24	BIW-24	BIW-24	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-31	BIW-32	BIW-32
	GW-3 MCP	UCL GW MCP	Dec-13	Apr-14	Jun-14	Dec-10	Feb-11	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Dec-10	Jan-11
	(ug/L)	(ug/L)																		
Chlorinated Ethenes (ug/L)																				
Tetrachloroethene	30,000	100,000	3.7	6.1	100 U	190 J	52	100 U	6.0 J	100 U	55 J	10 U	10 U	10 U	10 U	27	400 U	400 U	100 U	10 U
Trichloroethene (TCE)	5,000	50,000	**5,300**	**11,000**	**6,700**	**330,000**	920	**36,000**	1,200	**110,000**	**130,000**	3.9 J	11	66	330	**25,000**	**36,000**	**28,000**	**92,000**	2,000
cis-1,2-Dichloroethene	50,000	100,000	470	1000	630	1700	10 U	72 J	20 U	1300	1100	10 U	10 U	10 U	10 U	210	420	400 U	28 J	10 U
trans-1,2-Dichloroethene	50,000	100,000	3.6	4.4	100 U	250 U	10 U	100 U	20 U	32 J	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
1,1-Dichloroethene	30,000	100,000	1.0 U	0.88 J	100 U	250 U	10 U*	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U*
Vinyl chloride	50,000	100,000	140	220	150	120 U	50 U	50 U	10 U	50 U	100 U	5.0 U	10 U	10 U	10 U	10 U	400 U	400 U	50 U	50 U
Chlorinated Ethanes (ug/L)																				
Chloroethane	NL	NL	2.0 U	2.0 U	200 U	500 U	9.0 J	200 U	20 J	200 U	400 U	20 U	20 UJ	20 U	20 U	20 U	800 U	800 U	200 U	20 U
1,1,2,2-Tetrachloroethane	50,000	100,000	3	2	50 U	120 U	4,300	3,600	4,200	1,500	1,700	290	370	320	650	1,600	1,800	1,800	50 U	59
1,1,1-Trichloroethane	20,000	100,000	1.0 U	1.0 U	100 U	250 U	10 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
1,1,2-Trichloroethane	50,000	100,000	0.29 J	0.30 J	100 U	250 U	300	150	830	200	200	17	32	12	18	57	400 U	400 U	100 U	10 U
1,1-Dichloroethane	20,000	100,000	1.0 U	1.0 U	100 U	250 U	100 U	100 U	15 J	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
1,2-Dichloroethane	20,000	100,000	1.0 U	1.0 U	100 U	250 U	91	63 J	220	53 J	200 U	3.8 J	6.5 J	10 U	10 U	15	400 U	400 U	100 U	10 U
Other VOCs (ug/L)																				
2-Butanone	50,000	100,000	10 U	10 U	1,000 U	2,500 U	1,000 U *	1,000 U	200 U	1,000 U	2,000 U	100 U	100 U	100 U	100 U	100 U	4,000 U	4,000 U	1,000 U	1,000 U *
2-Chlorotoluene	NL	NL	1.0 U	1.0 U	100 U	250 U	100 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	100 U
4-Chlorotoluene	NL	NL	1.0 U	1.0 U	100 U	250 U	100 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	100 U
Acetone	50,000	100,000	50 U	50 U	5,000 U	12,000 UJ	5,000 U*	5,000 U	1,000 U	5,000 U	10,000 U	500 U	130 J	120 J	74 J	500 U	20,000 U	20,000 U	5,000 UJ	5,000 U*
Benzene	10,000	100,000	1.0 U	1.0 U	100 U	250 U	3.6 J	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
Bromodichloromethane	50,000	100,000	0.50 U	0.50 U	50 U	250 U	50 U	50 U	10 U	50 U	100 U	5.0 U	5.0 U	4.7 J	5.0 U	5.0 U	200 U	200 U	100 U	50 U
Butylbenzene	NL	NL	1.0 U	1.0 U	100 U	250 U	100 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	100 U
Carbon disulfide	NL	NL	2.8 J	3.2 J	82 J	2,500 U	76 J*	78 J	50 J	120 J	180 J	11 J	10 J	8.6 J	21 J	51 J	4,000 U	4,000 U	1,000 U	24 J*
Carbon tetrachloride	5,000	50,000	1.0 U	1.0 U	100 U	250 U*	100 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U*	100 U
Chlorobenzene	1,000	10,000	1.0 U	1.0 U	100 U	250 U	10 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
Chloroform	20,000	100,000	0.70 J	0.83 J	100 U	250 U	2,500	1,200	4,500	1,300	1,300	230	390	480	550	500	370 J	650	100 U	24 J
Chloromethane	NL	NL	2.0 U	2.0 U	200 U	500 U	1,900	660	4,900	950	1,100	190	270	120	170	500	260 J	440 J	200 U	200 U
Ethylbenzene	5,000	100,000	1.0 U	1.0 U	100 U	250 U	10 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
Methylene chloride	50,000	100,000	1.0 U	1.0 U	170	500 U	4,800	1,800	8,900	2,000	2,100	320	530	250	340	810	610	960	200 U	30
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	1.0 U	1.0 U	100 U	250 U	10 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
Toluene	40,000	100,000	1.1	1.7	100 U	13000	10 U	23 J	20 U	2500	160 J	10 U	10 U	10 U	10 U	9.0 J	550	400 U	480	10 U
Xylenes, m,p-	5,000	100,000	2.0 U	0.95 J	200 U	500 U	20 U	200 U	40 U	200 U	400 U	20 U	20 U	20 U	20 U	20 U	800 U	800 U	200 U	20 U
Xylene, o-	5,000	100,000	1.0 U	1.0 U	100 U	250 U	10 U	100 U	20 U	100 U	200 U	10 U	10 U	10 U	10 U	10 U	400 U	400 U	100 U	10 U
Metals, Total (ug/L)																				
Chromium	300	3,000	58	21	42	---	---	**1100**	---	140 B	250	**410**	**410**	**490**	**500**	**360**	180	290	---	---
Hexavalent Chromium	300	3,000	5.0 U	5.0 U	5.0 U	---	---	2,500 U	---	250 U	250 U	5,000 U	250 U	250 U	250 U	250 U	130 U	500 U	---	---
Iron	NL	NL	---	---	---	---	---	1,500,000	1,200,000	---	290,000	---	---	---	---	---	---	---	---	---
Metals, Dissolved (ug/L)				---													---			
Chromium	300	3,000	---	---	---	---	---	**1200**	---	---	---	---	---	---	---	---	---	---	---	---
Iron	NL	NL	---	---	---	---	---	1,600,000	980,000	---	160,000	---	---	---	---	---	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-32	BIW-33	BIW-33	BIW-33	BIW-33	BIW-33	BIW-33
	GW-3 MCP	UCL GW MCP																	
	(ug/L)	(ug/L)	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Dec-10	Jan-11	Aug-11	Jan-12	Feb-12	Mar-12
Chlorinated Ethenes (ug/L)																			
Tetrachloroethene	30,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Trichloroethene (TCE)	5,000	50,000	**77,000**	610	4,700	4,000	**8,300**	640	30	44	29	320	120	**45,000**	33 J	**14,000**	390	**6,400**	**21,000**
cis-1,2-Dichloroethene	50,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	1.6 J	3.9 J	50 U
trans-1,2-Dichloroethene	50,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
1,1-Dichloroethene	30,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Vinyl chloride	50,000	100,000	100 U	1.0 U	10 U	5.0 U	10 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	25 U	25 U	25 U	2.5 U	2.5 U	25 U
Chlorinated Ethanes (ug/L)																			
Chloroethane	NL	NL	400 U	4.0 U	40 U	20 U	40 U	20 UJ	4.0 U	8.0 U	8.0 U	8.0 U	8.0 U	100 U	9.7	100 U	12	4.1 J	100 U
1,1,2,2-Tetrachloroethane	50,000	100,000	50 U	2.2	10 U	2.3 J	26	5.5	4.5	17	12	2.0 U	16	25 U	43	13.J	36	51	42
1,1,1-Trichloroethane	20,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
1,1,2-Trichloroethane	50,000	100,000	200 U	0.86 J	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	27	50 U	31	6	50 U
1,1-Dichloroethane	20,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	3.2 J	5.0 U	50 U
1,2-Dichloroethane	20,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	1.5 J	1.2 J	4.0 U	4.0 U	4.0 U	50 U	53	50 U	68	16	50 U
Other VOCs (ug/L)																			
2-Butanone	50,000	100,000	2,000 U	20 U	200 U	100 U	200 U	100 U	20 U	40 U	40 U	40 U	40 U	500 U	500 U	500 U	50 U	50 U	500 U
2-Chlorotoluene	NL	NL	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
4-Chlorotoluene	NL	NL	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Acetone	50,000	100,000	10,000 U	100 U	1,000 U	500 U	1,000 U	37 J	100 U	54 J	200 U	200 U	35 J	2,500 UJ	1,600 J	2,500 U	110 J	250 U	2500 U
Benzene	10,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Bromodichloromethane	50,000	100,000	50 U	1.0 U	10 U	5.0 U	10 U	5.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	50 U	25 U	25 U	2.5 U	2.5 U	25 U
Butylbenzene	NL	NL	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Carbon disulfide	NL	NL	2,000 U*	0.99 J	200 U	6.4 J	52 J	11 J	1.5 J	2.4 J	11 J	2.9 J	3.6 J	500 U	500 U*	26 J	11 J	16 J	25 J
Carbon tetrachloride	5,000	50,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U*	50 U	50 U	5.0 U	4.5 J	16 J
Chlorobenzene	1,000	10,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Chloroform	20,000	100,000	200 U	2.1	20 U	2.1 J	4.0 J	8.3 J	11	12	9.7	4.0 U	10	50 U	70	11 J	54	18	11 J
Chloromethane	NL	NL	400 U	94	6.8 J	75	53	130	130	170	86	8.1	80	100 U	1,300	290	2,800	760	430
Ethylbenzene	5,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Methylene chloride	50,000	100,000	400 U	30	40 U	30	52 U	55	60	50	30	4.0 U	28	100 U	880	100 U	1,400	320	170
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Toluene	40,000	100,000	960	1.8 J	10 J	8.6 J	99	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	18 J	5.0 U	3.4 J	50 U
Xylenes, m,p-	5,000	100,000	400 U	4.0 U	40 U	20 U	40 U	20 U	4.0 U	8.0 U	8.0 U	8.0 U	8.0 U	100 U	8.0 U	100 U	10 U	10 U	100 U
Xylene, o-	5,000	100,000	200 U	2.0 U	20 U	10 U	20 U	10 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	50 U	50 U	50 U	5.0 U	5.0 U	50 U
Metals, Total (ug/L)																			
Chromium	300	3,000	62	---	39 B	48	31	**540**	**520**	**490**	**450**	43	170	---	---	23	---	**340**	140
Hexavalent Chromium	300	3,000	79	---	5.0 U	5.0 U	13 U	250 U	1,300 U	5.0 U	130 U	52	500 U	---	---	25	---	250 U	130 U
Iron	NL	NL	---	95,000	---	42000	---	---	---	---	---	---	---	---	---	3,400 B	1,900,000	---	44,000
Metals, Dissolved (ug/L)												---							
Chromium	300	3,000	63	---	---	---	---	---	---	---	---	---	---	---	---	47	---	---	---
Iron	NL	NL	---	65,000	---	52000	---	---	---	---	---	---	---	---	---	3,100	1,800,000	---	53,000

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		BIW-33	BIW-33	BIW-33	BIW-33	BIW-33	BIW-33	BIW-33	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5	BMW-5
	GW-3 MCP	UCL GW MCP																		
	(ug/L)	(ug/L)	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Apr-13	Jun-13	Oct-13	Dec-13	Apr-14	Jun-14
Chlorinated Ethenes (ug/L)																				
Tetrachloroethene	30,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.1	100 U	100 U	28 J	37 J	50	32 J	29 J	80 U	67	400 U	400 U	80 U	200 U
Trichloroethene (TCE)	5,000	50,000	2,000	1.0 U	2	22	**6,400**	**5,400**	**9,800**	**25,000**	**26,000**	**28,000**	**25,000**	**15,000**	**5,800**	**23,000**	**17,000**	**20,000**	**16,000**	**14,000**
cis-1,2-Dichloroethene	50,000	100,000	2.9 J	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	2000	2200	1900	2000	1400	520	1500	1500	1900	1500	1,300
trans-1,2-Dichloroethene	50,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	20 J	15 J	22 J	80 U	25	400 U	400 U	80 U	200 U
1,1-Dichloroethene	30,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	15 J	15 J	50 U	80 U	13 J	400 U	400 U	80 U	200 U
Vinyl chloride	50,000	100,000	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	470	410	330	300	320	81	320	400 U	400 U	220	200 U
Chlorinated Ethanes (ug/L)																				
Chloroethane	NL	NL	20 U	2.0 U	2.0 U	2.0 U	2.0 U	200 U	200 U	200 U	200 U	100 U	100 U	100 U	160 U	40 U	800 U	800 U	160 U	400 U
1,1,2,2-Tetrachloroethane	50,000	100,000	62	8.8	2.8	9.5	14	50 U	50 U	50 U	50 U	25 U	25 U	25 U	40 U	10 U	200 U	200 U	40 U	100 U
1,1,1-Trichloroethane	20,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
1,1,2-Trichloroethane	50,000	100,000	10 U	1.0 U	1.0 U	0.40 J	0.29 J	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
1,1-Dichloroethane	20,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
1,2-Dichloroethane	20,000	100,000	2.3 J	0.91 J	1.0 U	0.85 J	0.55 J	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Other VOCs (ug/L)																				
2-Butanone	50,000	100,000	100 U	10 U	10 U	10 U	2.0 J	1000 U	1,000 U	1,000 U	1,000 U	500 U	500 U	500 U	800 U	200 U	4,000 U	4,000 U	800 U	2,000 U
2-Chlorotoluene	NL	NL	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
4-Chlorotoluene	NL	NL	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Acetone	50,000	100,000	500 U	50 U	14 J	40 J	50 U	5,000 U	5,000 U	5,000 U	5,000 U	2,500 U	2,500 U	2500 U	4000 UJ	1000 U	20,000 U	20,000 U	4,000 U	10,000 U
Benzene	10,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Bromodichloromethane	50,000	100,000	5.0 U	0.5 U	0.5 U	0.50 U	0.50 U	50 U	50 U	50 U	50 U	25 U	25 U	25 U	40 U	10 U	200 U	200 U	40 U	100 U
Butylbenzene	NL	NL	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Carbon disulfide	NL	NL	7.5 J	10 U	0.76 J	1.4 J	4.4 J	1,000 U	1,000 U	43 J*	47 J	36 J	17 J	30 J	36 J	59 J	4,000 U	4,000 U	800 U	2,000 U
Carbon tetrachloride	5,000	50,000	10 U	2.8	4.8	5.4	6.6	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Chlorobenzene	1,000	10,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Chloroform	20,000	100,000	7.4 J	5.3	2.5	6.3	5.1	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Chloromethane	NL	NL	190	49	13	49	23	200 U	200 U	200 U	200 U	100 U	100 U	100 U	160 U	40 U	290 J	800 U	160 U	400 U
Ethylbenzene	5,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Methylene chloride	50,000	100,000	65	24	6	23	12	100 U	88 J	200 U	200 U	100 U	100 U	120 U	80 U	13 J	400 U	400 U	80 U	160 J
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	20 U	400 U	400 U	80 U	200 U
Toluene	40,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	38 J	40 J	44 J	20 J	19 J	80 U	36	400 U	400 U	80 U	200 U
Xylenes, m,p-	5,000	100,000	20 U	2.0 U	2.0 U	2.0 U	2.0 U	200 U	200 U	200 U	200 U	30 J	100 U	100 U	160 U	57	800 U	800 U	160 U	400 U
Xylene, o-	5,000	100,000	10 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	100 U	100 U	100 U	50 U	50 U	50 U	80 U	18 J	400 U	400 U	80 U	200 U
Metals, Total (ug/L)																				
Chromium	300	3,000	**420**	140	280	160	22	61	16	95	---	**840**	15	120	36	98	36	16	15	4.3 J
Hexavalent Chromium	300	3,000	500 U	250 U	500 U	250 U	50 U	130 U	5.0 U	130	---	6.6	5.0 U	130	250 U	56	36	5.0 U	5.0 U	5.0 U
Iron	NL	NL	---	---	---	---	---	---	---	---	1,700	---	2,600	---	---	---	---	---	---	---
Metals, Dissolved (ug/L)								---											---	
Chromium	300	3,000	---	---	---	---	---	---	---	100	---	---	---		---	---	---	---	---	---
Iron	NL	NL	---	---	---	---	---	---	---	---	760	---	1,400		---	---	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Table 3B
Summary of Compounds Detected in Bedrock Groundwater
On-Property Wells (Pre-ISCO December 2010 through Post-ISCO June 2014)
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]		OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B	OSW-1B
	GW-3 MCP	UCL GW MCP														
	(ug/L)	(ug/L)	Dec-10	Feb-11	Mar-11	Aug-11	Jan-12	Feb-12	Mar-12	Aug-12	Mar-13	Jun-13	Sep-13	Dec-13	Apr-14	Jun-14
Chlorinated Ethenes (ug/L)																
Tetrachloroethene	30,000	100,000	10 U	4.0 U	7.7 J	50 U	100 U	50 U	25 U	20 U	1.4 J	1.7	100 U	100 U	100 U	100 U
Trichloroethene (TCE)	5,000	50,000	**5,100**	230	**34,000**	16,000 E	**20,000**	**18,000**	**24,000**	**7,400**	**6,300**	**7,600**	**6,300**	4,200	**5,300**	**6,900**
cis-1,2-Dichloroethene	50,000	100,000	690	5.8	480	320	390	350	410	230	160	230	210	160	240	280
trans-1,2-Dichloroethene	50,000	100,000	4.2 J	0.87 J	9.5 J	50 U	100 U	50 U	25 U	9.6 J	11 J	9.8	100 U	100 U	100 U	100 U
1,1-Dichloroethene	30,000	100,000	4.2 J	4.0 U*	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	0.73 J	100 U	100 U	100 U	100 U
Vinyl chloride	50,000	100,000	250	2.0 U	50	45	60	50	53	24	1.5 J	36	100 U	100 U	100 U	100 U
Chlorinated Ethanes (ug/L)													---	---		
Chloroethane	NL	NL	20 U	8.0 U	50 U	8.0 U	200 U	100 U	50 U	40 U	0.99 J	2.0 U	200 U	200 U	200 U	200 U
1,1,2,2-Tetrachloroethane	50,000	100,000	5.0 U	22	37	25 U	50 U	25 U	13 U	7.1 J	2.9 J	17	50 U	50 U	50 U	50 U
1,1,1-Trichloroethane	20,000	100,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
1,1,2-Trichloroethane	50,000	100,000	10 U	6.7	25 U	50 U	100 U	50 U	25 U	20 U	0.74 J	0.4 J	100 U	100 U	100 U	100 U
1,1-Dichloroethane	20,000	100,000	10 U	1.3 J	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
1,2-Dichloroethane	20,000	100,000	10 U	15	25 U	50 U	100 U	50 U	25 U	20 U	5.9 J	2.8	100 U	100 U	100 U	100 U
Other VOCs (ug/L)													---	---		
2-Butanone	50,000	100,000	100 U	40 U*	45 J	500 U	1000 U	500 U	250 U	200 U	10 UJ	10 U	1000 U	1000 U	1,000 U	1,000 U
2-Chlorotoluene	NL	NL	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
4-Chlorotoluene	NL	NL	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Acetone	50,000	100,000	500 U	200 U*	1200 U	2,500 U	5,000 U	2,500 U	1,300 U	1000 U	50 U	50 U	5,000 U	5,000 U	5,000 U	5,000 U
Benzene	10,000	100,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Bromodichloromethane	50,000	100,000	10 U	2.0 U	12 U	25 U	50 U	25 U	13 U	10 U	0.5 UJ	0.5 U	50 U	50 U	50 U	50 U
Butylbenzene	NL	NL	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Carbon disulfide	NL	NL	100 U	35 J*	210 J	39 J*	51 J	24 J	72 J	18 J	37 J	35	1000 U	1000 U	1,000 U	1,000 U
Carbon tetrachloride	5,000	50,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Chlorobenzene	1,000	10,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Chloroform	20,000	100,000	10 U	45	10 J	50 U	100 U	50 U	10 J	20 U	3.5 J	1.6	100 U	100 U	100 U	100 U
Chloromethane	NL	NL	20 U	400	130	100 U	60 J	100	50 U	40 U	160	92	36 J	200 U	200 U	200 U
Ethylbenzene	5,000	100,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Methylene chloride	50,000	100,000	20 U	260	40 J	100 U	200 U	100 U	29 J	42 U	70 J	34	100 U	100 U	100 U	67 J
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Toluene	40,000	100,000	18	4.0 U	31	50 U	100 U	50 U	25 U	20 U	1.0 UJ	0.81 J	100 U	100 U	100 U	100 U
Xylenes, m,p-	5,000	100,000	20 U	8.0 U	50 U	100 U	200 U	100 U	50 U	40 U	2.0 UJ	2.0 U	200 U	200 U	200 U	200 U
Xylene, o-	5,000	100,000	10 U	4.0 U	25 U	50 U	100 U	50 U	25 U	20 U	1.0 UJ	1.0 U	100 U	100 U	100 U	100 U
Metals, Total (ug/L)													---	---		
Chromium	300	3,000	---	---	21 J	4.2 J	---	47	34	5.0 U	63	17	25	3.6 J	2.9 J	3.1 J
Hexavalent Chromium	300	3,000	---	---	50 R	5.0 U	---	250 U	5.0 U	5.0 U	500 U	5.0 U	50 U	5.0 U	5.0 UJ	50 U
Iron	NL	NL	---	---	---	---	430,000	---	94,000	---	---	---	---	---	---	---
Metals, Dissolved (ug/L)													---	---		
Chromium	300	3,000	---	---	---	25 U	---	---	---	---	17	---	8.4	---	---	---
Iron	NL	NL	---	---	---	---	370,000	---	99,000	---	---	---	---	---	---	---

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

--- denotes not analyzed for; NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated; B = analyte detected in associated blank; E = exceeds calibration range

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Metals concentrations are reported as total except for hexavalent chromium, which is dissolved.

Prepared by / Date: HTS 07/30/14
Checked by / Date: CTM 07/31/14

Table 3C
Summary of Compounds Detected in Groundwater
Off-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]																				
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	CLW-17 Apr-16	CLW-17 Oct-16	CLW-17 Apr-17	CLW-17 Sep-17	CLW-17B Apr-16	CLW-17B Oct-16	CLW-17B Apr-17	CLW-17B Sep-17	CLW-19 Apr-16	CLW-19 Oct-16	CLW-19 Apr-17	CLW-19 Sep-17	CLW-19B Apr-16	CLW-19B Oct-16	CLW-19B Apr-17	CLW-19B Sep-17	CLW-20 Apr-16	CLW-20 Oct-16	CLW-20 Apr-17
Chlorinated Ethenes (ug/L)																					
Tetrachloroethene	30,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	5,000	50,000	7.3	14	12	11	110	110	130	100	0.64 J	4.0	0.72 J	2.5	1.5	3.8	1.2	1.8	1.9	0.58 J	1.1
cis-1,2-Dichloroethene	50,000	100,000	1.4	3.0	3.4	2.7	23	26	31	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	50,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	6.5	6.7	8.2	5.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	30,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	50,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorinated Ethanes (ug/L)																					
1,1,2,2-Tetrachloroethane	50,000	100,000	0,.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	20,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Other VOCs (ug/L)																					
Benzene	10,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	NL	NL	10 U	10 U	10 U	10 U	10 U	20 U	20 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	20,000	10,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	NL	NL			2.0 U	2.0 U			4.0 U	4.0 U			2.0 U	2.0 U			2.0 U	2.0 U			2.0 U
Ethylbenzene	5,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Metals (ug/L)																					
Chromium (Total)	300	3,000	48	62	46	56	5.7	5.0 U	8.2	9.1	19	31	17	24	14	25	12	20	2.0 J	5.0 U	2.3 J
Chromium (Hexavalent)	300	3,000	52	65	45	72	5 U	10 U	5.8 J	13	19	42	21	30	10	33	12	16	5 U	5 UJ	5 U

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Table 3C
Summary of Compounds Detected in Groundwater
Off-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]														
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	CLW-20 Sep-17	CLW-20B Apr-16	CLW-20B Oct-16	CLW-20B Apr-17	CLW-20B Sep-17	CLW-22 Apr-16	CLW-22 Oct-16	CLW-22 Apr-17	CLW-22 Sep-17	CLW-22B Apr-16	CLW-22B Oct-16	CLW-22B Apr-17	CLW-22B Sep-17
Chlorinated Ethenes (ug/L)															
Tetrachloroethene	30,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	5,000	50,000	0.89 J	1.0 U	1.0 U	1.0 U	1.0 U	6.6	15	5.4	16	5.3	15	4.7	17
cis-1,2-Dichloroethene	50,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U	1.0 U	1.8	1.0 U	2.6
trans-1,2-Dichloroethene	50,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	30,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	50,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorinated Ethanes (ug/L)															
1,1,2,2-Tetrachloroethane	50,000	100,000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	20,000	100,000	1.0 U	0.53 J	1.0 U	0.82 J	0.42 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Other VOCs (ug/L)															
Benzene	10,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	NL	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	20,000	10,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	NL	NL	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U
Ethylbenzene	5,000	100,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Metals (ug/L)															
Chromium (Total)	300	3,000	5.0 U	5.0 U	5.0 U	2.8 J	5.0 U	16	20	12	14	15	24	15	15
Chromium (Hexavalent)	300	3,000	10 U	5 U	5.7 J	5 U	10 U	12	22	18	26	6.1 J	31	14	31

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Table 3C
Summary of Compounds Detected in Groundwater
Off-Property Wells
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	MCP Method 1 GW Standards [1]															
	GW-3 MCP (ug/L)	UCL GW MCP (ug/L)	PP-3 Apr-16	PP-3 DUP Apr-16	PP-3 Oct-16	PP-3 Apr-17	PP-3 Sep-17	PP-4A Apr-16	PP-4A Oct-16	PP-4A DUP Oct-16	PP-4A Apr-17	PP-4A Sep-17	PP-4B Apr-16	PP-4B Oct-16	PP-4B Apr-17	PP-4B Sep-17
Chlorinated Ethenes (ug/L)																
Tetrachloroethene	30,000	100,000	0.83 J	5.0 U	4.9 J	10 U	5.5 J	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	2.1	1.8 J	10 U	20 U
Trichloroethene (TCE)	5,000	50,000	400 J	560 J	**8,300**	380	**5,500**	190	130 J	130 J	240	130	590	530	1,200	740
cis-1,2-Dichloroethene	50,000	100,000	91	110	1,400	49	920	15	13	14	22	14	400	370	720	500
trans-1,2-Dichloroethene	50,000	100,000	1.0 U	5.0 U	10 U	10 U	10 U	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	13	14	31	24
1,1-Dichloroethene	30,000	100,000	1.0 U	5.0 U	10 U	10 U	3.9 J	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	0.85 J	0.76 J	10 U	20 U
Vinyl chloride	50,000	100,000	18	19	440	10 U	230	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	8.8	3.0	20	20 U
Chlorinated Ethanes (ug/L)																
1,1,2,2-Tetrachloroethane	50,000	100,000	0.50 U	2.5 U	5.0 U	5.0 U	5.0 U	0.50 U	1.0 U	1.0 U	2.0 U	2.0 U	0.50 U	1.0 U	5.0 U	10 U
1,1-Dichloroethane	20,000	100,000	1.0 U	5.0 U	10 U	10 U	10 U	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	1.0 U	2.0 U	10 U	20 U
Other VOCs (ug/L)																
Benzene	10,000	100,000	1.0 U	5.0 U	10 U	10 U	10 U	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	1.0 U	2.0 U	10 U	20 U
Carbon disulfide	NL	NL	10 U	50 U	100 U	100 U	100 U	10 U	20 U	20 U	40 U	40 U	0.48 J	1.6 J	100 U	200 U
Chloroform	20,000	10,000	0.36 J	5.0 U	10 U	10 U	10 U	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	1.0 U	2.0 U	10 U	20 U
Chloromethane	NL	NL				20 U	20 U				8.0 U	8.0 U			20 U	40 U
Ethylbenzene	5,000	100,000	1.0 U	5.0 U	10 U	10 U	10 U	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	1.0 U	2.0 U	10 U	20 U
Methyl-tert-butyl-ether (MTBE)	50,000	100,000	1.0 U	5.0 U	10 U	10 U	10 U	1.0 U	2.0 U	2.0 U	4.0 U	4.0 U	1.0 U	2.0 U	10 U	20 U
Total Metals (ug/L)																
Chromium (Total)	300	3,000	**1,700**	**1,700**	**1,000**	**730**	**800**	27	8.9	7.8	48	5.2	140	130	43	57
Chromium (Hexavalent)	300	3,000	**1,600**	**1,700**	**970**	**660**	**1,500**	26	5 U	10 U	41	10 U	110	98	5 U	10 U

Notes:

(1) Compounds detected in groundwater after February 2008 have been compared with the applicable groundwater standards listed in 310 CMR 40.0974(2) Table 1.

NL = indicates standard not listed in 310 CMR 40.0000

U = analyte was analyzed for but not detected above the indicated detection limit; J = value was estimated

10 - Indicates value exceeds current GW-3 Standard.

10 - Indicates value exceeds current UCL.

Prepared by / Date: HTS 02/08/18
Checked by / Date: CTM 02/08/18

Table 3D
Summary of Compounds Detected in Surface Water
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	AWQC Acute (ug/L)	AWQC Chronic (ug/L)	CSW-2 Apr-16	CSW-2 Dec-16	CSW-2 Apr-17	CSW-2 Jun-17	CSW-2 Sep-17	CSW-2 Dec-17	CSW-3 Apr-16	CSW-3 DUP Apr-16	CSW-3 Jun-16	CSW-3 Dec-16	CSW-3 DUP Dec-16	CSW-3 Apr-17	CSW-3 DUP Apr-17	CSW-3 Jun-17	CSW-3 Sep-17	CSW-3 Dec-17
Chlorinated Ethenes (ug/L)																		
Tetrachloroethene			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.61 J	0.57 J	6.8	2.3	2.3	1.2	1.4	1.8	10	2.8
cis-1,2-Dichloroethene			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.87 J	1.0 U
Metals, Total (ug/L)																		
Calcium (Ca)			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexavalent Chromium	16	11	5 U	5 U	5 U	6.7 J	10 U	10 U	9.5 J	**15**	**170**	**50**	**47**	**24**	**24**	**62**	**330**	**38**
Magnesium (Mg)			2,000	2,800	---	---	---	---	2,200	2,600	2,300	2,800	2,800	---	---	---	---	---
Potassium (K)			3,200	4,300	---	---	---	---	3,400	3,700	3,800	4,200	4,200	---	---	---	---	---
Sodium (Na)			32,000	31,000	---	---	---	---	35,000 J	67,000 J	34,000	30,000	30,000	---	---	---	---	---
Metals, Dissolved (ug/L)																		
Aluminum (Al)	750	87	200 U	200 U	---	---	---	---	200 U	200 U	200 U	200 U	200 U	---	---	---	---	---
Antimony (Sb)			6.0 U	6.0 U	---	---	---	---	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	---	---	---	---	---
Arsenic (As)	340	150	10 U	10 U	---	---	---	---	10 U	10 U	10 U	10 U	10 U	---	---	---	---	---
Barium (Ba)			20	24	---	---	---	---	21	24	24	24	24	---	---	---	---	---
Calcium (Ca)			24,000	33,000	28,000	31,000	25,000	31,000	26,000	29,000	28,000	33,000	33,000	28,000	29,000	29,000	27,000	31,000
Chromium (Cr)	570	74	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	12 J	31 J	**190**	46	46	23	28	47	**320**	47
Cobalt (Co)			4.0 U	4.0 U	---	---	---	---	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	---	---	---	---	---
Copper (Cu)	13	9	1.7 J	10 U	10 U	10 U	10 U	2.4 J	3.3 J	7.0 J	**12**	3.3 J	3.5 J	2.8 J	3.2 J	5.2 J	**13**	6.3 J
Iron (Fe)		1,000	40 J	50 U	---	---	---	---	47 J	35 J	50 U	50 U	50 U	---	---	---	---	---
Lead (Pb)	65	2.5	5.0 U	5.0 U	---	---	---	---	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	---	---	---	---	---
Magnesium (Mg)			2,000	2,800	2,300	2,500	1,800	2,600	2,200	2,600	2,300	2,800	2,800	2,400	2,400	2,400	2,100	2,500
Manganese (Mn)			3.2	3.5	---	---	---	---	2.7 J	5.8	34	4.3	5.5	---	---	---	---	---
Nickel (Ni)	470	52	10 U	10 U	---	---	---	---	10 U	10 U	2.3 J	10 U	10 U	---	---	---	---	---
Potassium (K)			3,200	4,300	3,700	3,200	3,300	3,500	3,400	3,700	3,800	4,200	4,200	3,700	3,800	3,300	4,000	3,500
Sodium (Na)			32,000	31,000	38,000	31,000	27,000	28,000	35,000 J	67,000 J	34,000	30,000	30,000	41,000	47,000	30,000	26,000	27,000
Zinc (Zn)	120	120	3.8 J	50 U	---	---	---	---	1.8 J	3.8 J	3.0 J	50 U	50 U	---	---	---	---	---
Inorganics (mg/L)																		
Chloride			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sulfate			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

AWQC - Ambient Water Quality Criteria

* Value for Trivalent Chromium used as a surrogate for Chromium

--- denotes not analyzed for; U = not detected above the indicated detection limit;

B = compound was detected in the blank; J = value was estimated

10 - Indicates value exceeds current AWQC Standards

Table 3D
Summary of Compounds Detected in Surface Water
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	AWQC Acute (ug/L)	AWQC Chronic (ug/L)	CSW-3A	CSW-3A	CSW-3A	CSW-3A	CSW-3A	CSW-3A	CSW-3A	CSW-4	CSW-4	CSW-4	CSW-4	CSW-4	CSW-5	CSW-5	CSW-5
			Apr-16	Jun-16	Dec-16	Apr-17	Jun-17	Sep-17	Dec-17	Apr-16	Dec-16	Apr-17	Jun-17	Dec-17	Apr-16	Jun-16	Dec-16
Chlorinated Ethenes (ug/L)																	
Tetrachloroethene			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)			0.76 J	4.5	2.4	1.1	1.8	7.6	2.9	0.64 J	1.4	0.61 J	0.70 J	1.5	1.0 U	1.2	1.0 U
cis-1,2-Dichloroethene			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Metals, Total (ug/L)																	
Calcium (Ca)			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexavalent Chromium	16	11	**14**	**200**	**45**	**20**	**65**	**290**	**68**	**14**	**48**	**20.0**	**58.0**	**68.0**	8.6 J	**24 J**	**30**
Magnesium (Mg)			2,100	2,300	2,900	---	---	---	---	2,000	2,900	---	---	---	2,200	2,400	2,600
Potassium (K)			3,300	3,800	4,300	---	---	---	---	3,200	4,200	---	---	---	3,300	3,200	3,900
Sodium (Na)			37,000	39,000	37,000	---	---	---	---	36,000	41,000	---	---	---	40,000	44,000	53,000
Metals, Dissolved (ug/L)																	
Aluminum (Al)	750	87	200 U	200 U	200 U	---	---	---	---	200 U	200 U	---	---	---	200 U	200 U	200 U
Antimony (Sb)			6.0 U	6.0 U	6.0 U	---	---	---	---	6.0 U	6.0 U	---	---	---	6.0 U	6.0 U	6.0 U
Arsenic (As)	340	150	10 U	10 U	10 U	---	---	---	---	10 U	10 U	---	---	---	10 U	10 U	10 U
Barium (Ba)			21	24	25	---	---	---	---	20	24	---	---	---	20	21	20
Calcium (Ca)			26,000	28,000	34,000	28,000	30,000	27,000	31,000	24,000	33,000	28,000	30,000	32,000	25,000	30,000	29,000
Chromium (Cr)	570	74	13	**180**	49	22	53	**270**	51	12	47	20	45	51	12	12	25
Cobalt (Co)			4.0 U	4.0 U	4.0 U	---	---	---	---	4.0 U	4.0 U	---	---	---	4.0 U	4.0 U	4.0 U
Copper (Cu)	13	9	3.3 J	8.3 J	4.7 J	10 U	5.5 J	**12**	4.6 J	3.0 J	3.7 J	3.1 J	4.6 J	3.0 J	9.0 J	7.8 J	8.5 J
Iron (Fe)		1,000	34 J	50 U	50 U	---	---	---	---	32 J	50 U	---	---	---	24 J	50 U	50 U
Lead (Pb)	65	2.5	5.0 U	5.0 U	5.0 U	---	---	---	---	5.0 U	5.0 U	---	---	---	5.0 U	5.0 U	5.0 U
Magnesium (Mg)			2,100	2,300	2,900	2,400	2,400	2,100	2,500	2,000	2,900	2,300	2,400	2,700	2,200	2,400	2,600
Manganese (Mn)			3.5	16	13	---	---	---	---	2.2 J	1.7 J	---	---	---	2.7 J	14	3.6
Nickel (Ni)	470	52	10 U	2.4 J	10 U	---	---	---	---	10 U	10 U	---	---	---	10 U	1.3 J	10 U
Potassium (K)			3,300	3,800	4,300	3,800	3,400	3,800	3,500	3,200	4,200	3,700	3,400	3,600	3,300	3,200	3,900
Sodium (Na)			37,000	39,000	37,000	41,000	34,000	29,000	29,000	36,000	41,000	42,000	35,000	30,000	40,000	44,000	53,000
Zinc (Zn)	120	120	2.9 J	6.5 J	50 U	---	---	---	---	2.4 J	50 U	---	---	---	7.7 J	4.8 J	50 U
Inorganics (mg/L)																	
Chloride			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Sulfate			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

AWQC - Ambient Water Quality Criteria

* Value for Trivalent Chromium used as a surrogate for Chromium

--- denotes not analyzed for; U = not detected above the indicated detection limit;

B = compound was detected in the blank; J = value was estimated

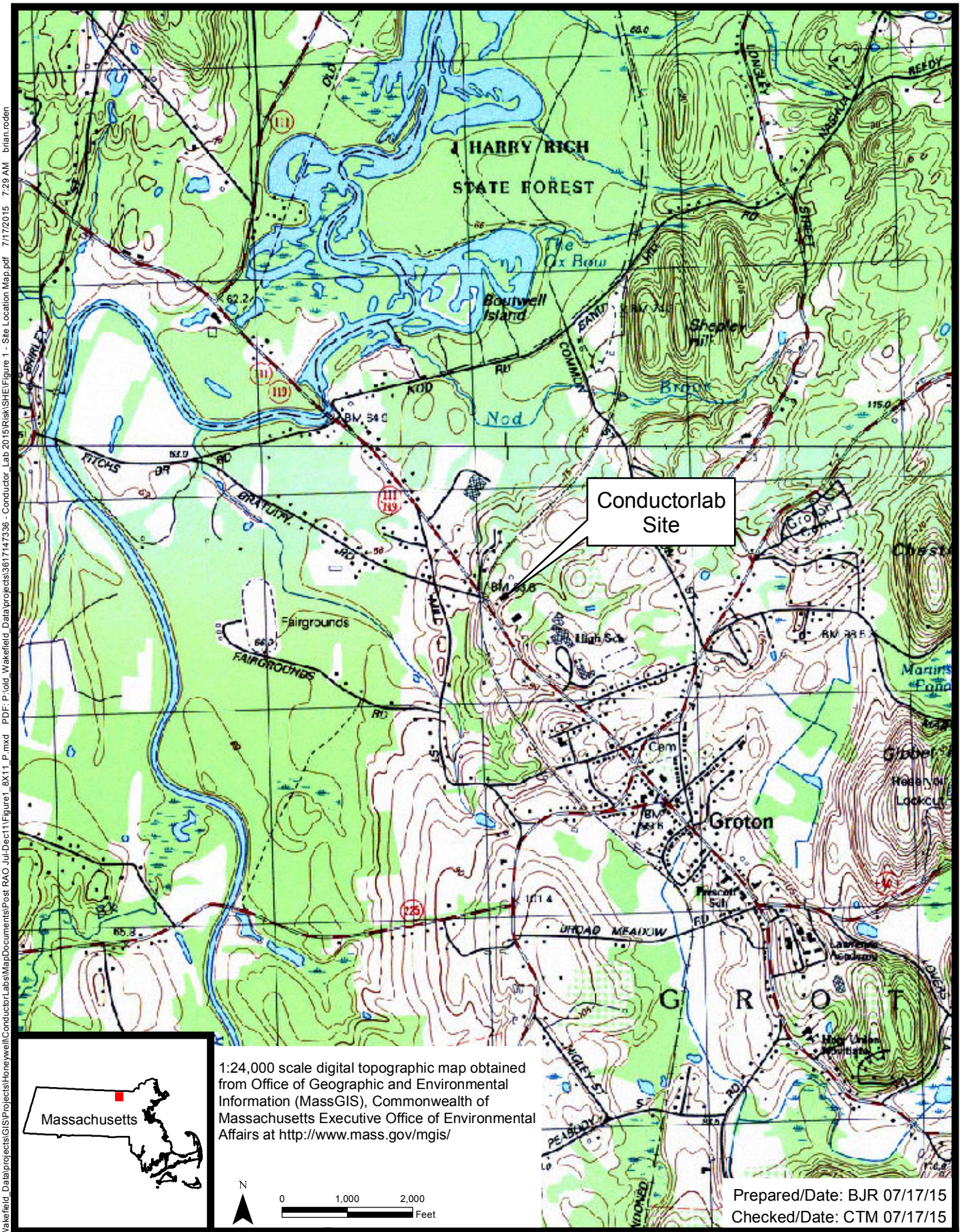
10 - Indicates value exceeds current AWQC Standards

Table 3D
Summary of Compounds Detected in Surface Water
March 2016 - December 2017
Conductorlab Site, Groton, Massachusetts

Parameter	AWQC Acute (ug/L)	AWQC Chronic (ug/L)	CSW-5	CSW-5	CSW-5	CSW-5
			Apr-17	Jun-17	Sep-17	Dec-17
Chlorinated Ethenes (ug/L)						
Tetrachloroethene			1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)			0.70 J	1.0 U	1.4	0.57 J
cis-1,2-Dichloroethene			1.0 U	1.0 U	1.0 U	1.0 U
Metals, Total (ug/L)						
Calcium (Ca)			---	---	---	---
Hexavalent Chromium	16	11	**13**	**17**	6.5 J	**37**
Magnesium (Mg)			---	---	---	---
Potassium (K)			---	---	---	---
Sodium (Na)			---	---	---	---
Metals, Dissolved (ug/L)						
Aluminum (Al)	750	87	---	---	---	---
Antimony (Sb)			---	---	---	---
Arsenic (As)	340	150	---	---	---	---
Barium (Ba)			---	---	---	---
Calcium (Ca)			27,000	29,000	31,000	28,000
Chromium (Cr)	570	74	12	5.7	8.6	20
Cobalt (Co)			---	---	---	---
Copper (Cu)	13	9	**15**	**18**	8.3 J	6.5 J
Iron (Fe)		1,000	---	---	---	---
Lead (Pb)	65	2.5	---	---	---	---
Magnesium (Mg)			2,300	2,400	2,400	2,500
Manganese (Mn)			---	---	---	---
Nickel (Ni)	470	52	---	---	---	---
Potassium (K)			3,700	3,300	3,500	3,500
Sodium (Na)			44,000	38,000	44,000	38,000
Zinc (Zn)	120	120	---	---	---	---
Inorganics (mg/L)						
Chloride			---	---	---	---
Sulfate			---	---	---	---

Prepared by / Date: HTS 02/08/18
Checked by / Date: CTM 02/08/18

FIGURES



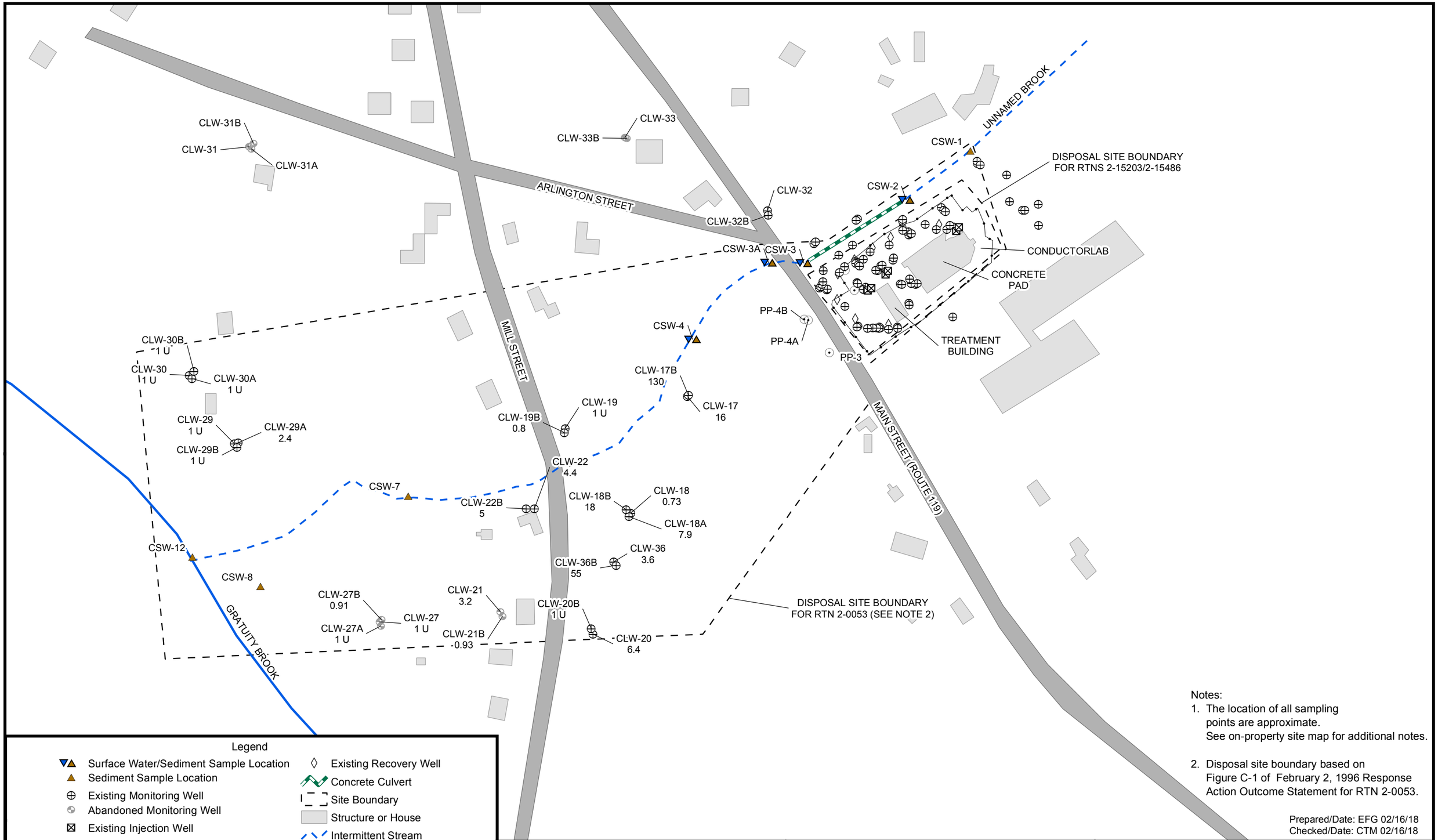
Prepared/Date: BJR 07/17/15
Checked/Date: CTM 07/17/15

Honeywell International Inc.
Conductorlab
Groton, Massachusetts

amec foster wheeler

Site Location Map
Project 3617-18-7421
Figure 1

Document: P:\old_Wakefield_Data\projects\GIS\Projects\Honeywell\ConductorLabs\MapDocuments\Post RAO Jul-Dec11\Figure1_8X11_P.mxd PDF: P:\old_Wakefield_Data\projects\3617147336 - Conductor_Lab 2015\Risk\SHE\Figure 1 - Site Location Map.pdf 7/17/2015 7:29 AM brian.roden



Notes:
1. The location of all sampling points are approximate. See on-property site map for additional notes.
2. Disposal site boundary based on Figure C-1 of February 2, 1996 Response Action Outcome Statement for RTN 2-0053.

Prepared/Date: EFG 02/16/18
Checked/Date: CTM 02/16/18

Conductorlab Site
Honeywell International Inc.
Groton, Massachusetts

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Off-Property Site Map
Project 3617-18-7421
Figure 2

Document Path: P:\old_Wakefield_Data\projects\GIS\Projects\Honeywell\ConductorLabs\MapDocuments\Post RAO Jul-Dec11\Figure2_11X17_LS.mxd

Notes:
1. The location of soil borings, recovery/monitoring wells and significant site features were based on the elevation surveys conducted by CABCO Consult of Clinton, MA in 2004, 2006, and 2007. The vertical datum elevations were based on MA Geodetic survey station 81G which is based on the National Geodetic Vertical Datum of 1929 NGVD29).
2. Utilities shown on drawing were derived from the observation of subsurface evidence, wtility companies paint markings, and maps and utility maps obtained from the town of Groton Engineer and/or DPW offices. It should be noted that the utility information provided on the drawing is to be considered approximate.
3. The locations of the potential release areas (PRA) provided on the drawing are to be considered to be approximate and were obtained from the following documents:
- Environmental Site Assessment, Conductorlab Site, Groton, Massachusetts, GZA (May 1986).
- Summary of Findings, Task 1 Investigation, Conductorlab Site, Groton, Massachusetts, HMM (April 1987).
- Task II Site Investigation, Conductorlab Site, Groton, Massachusetts (March 1988).
- Phase II Risk Characterization, Conductorlab Site, Groton, Massachusetts, Earth Tech (July 1993).
- Topographic Plan of Land in Groton, Massachusetts, Charles Penkins Company (Revised March 1965).

Dirt Path
Drain Catch Basin
Main Street
Driveway
Unnamed Brook
30' X 30' Approx Area Of Easement From Adjacent Property Owner
Approximate Location Of NPDES Permitted Discharge Outlet Pipe For GWTS
Truck Turnaround
Existing Treatment Building
Existing Concrete Pad
6" Conc Curb
Injection Trench #1
Injection Trench #2
Injection Trench #3
Injection Trench #4
Injection Trench #5
Effluent Discharge Pipe (approximate)
Effluent Distribution Tank
Discharge Flow Meter
Infiltration Gallery #1 (Approx Location)
Infiltration Gallery #2 (Approx Location)
418 Main Street

Legend

Monitoring Well	Fence	Overhead Wires
Piezometer	Property Boundary	Underground Electric Line
Recovery Well	Drain Line	Utility Pole
Stream	Active Gas Line	Regulated Wetland Resource Area
Tree Line	Inactive Gas Line	

N
0 12.5 25
Feet

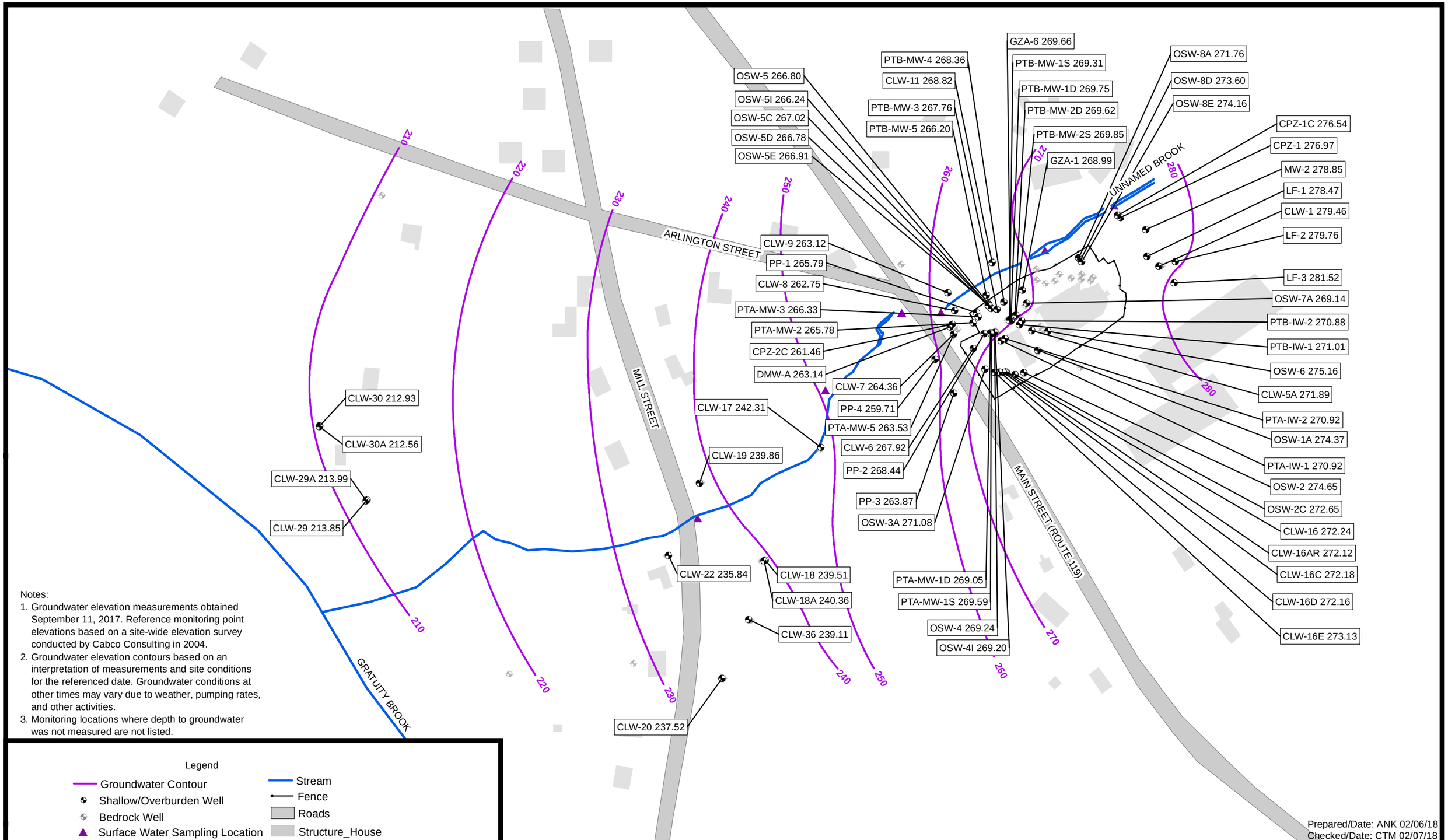
Prepared/Date: BJR 07/17/15 | Checked/Date: CTM 07/17/15

Conductorlab Site
Honeywell International Inc.
Groton, Massachusetts

amec foster wheeler

On-Property Site Map
Project 3617-18-7421
Figure 3

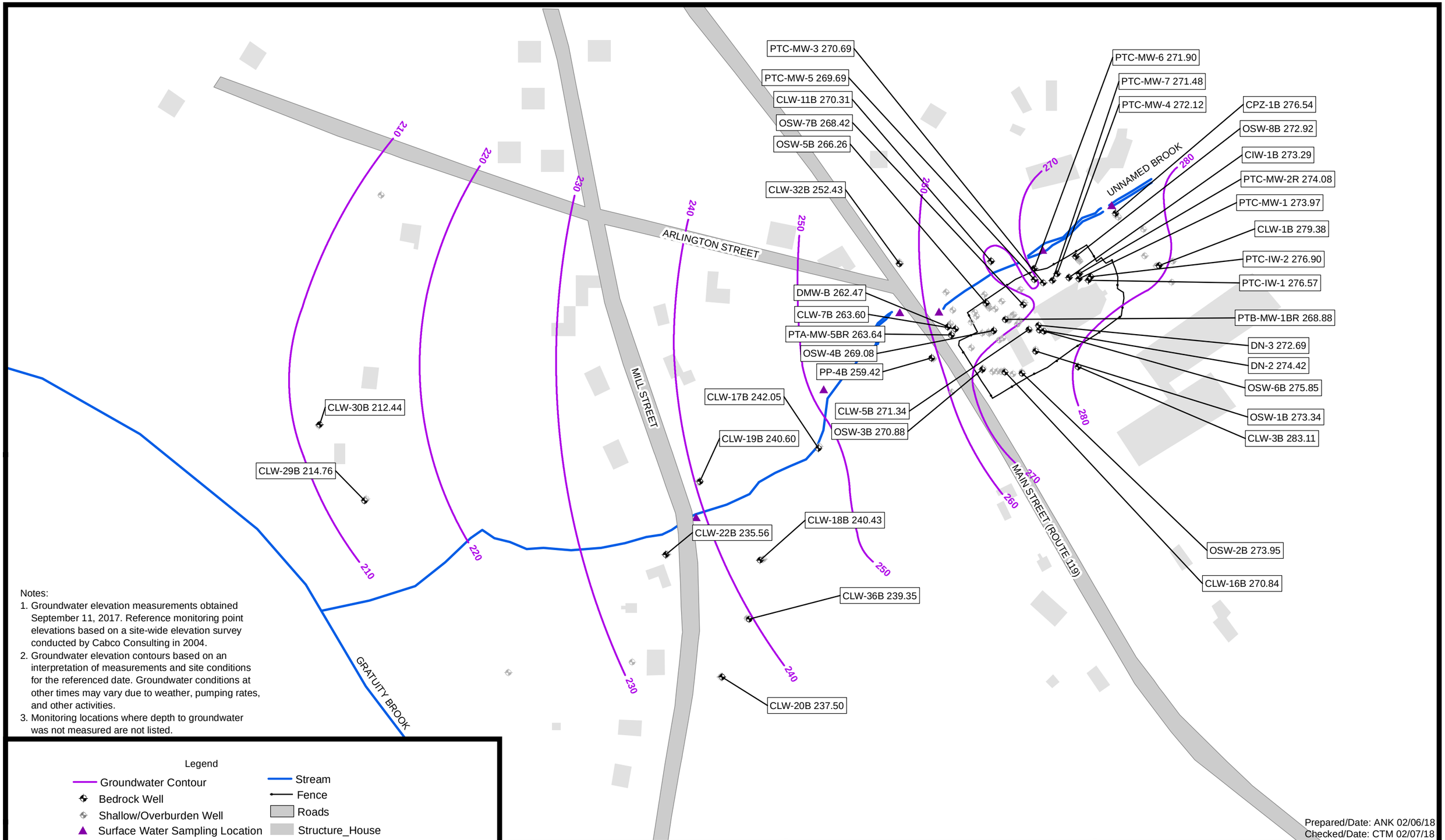
Document: P:\old_Wakefield_Data\projects\GIS\Projects\Honeywell\ConductorLabs\MapDocuments\Post RAO Jul-Dec11\SitePlan_Dsize.mxd PDF: P:\old_Wakefield_Data\projects\3617147336 - Conductor_Lab 2015\Risk\SHE\Figure 3 - On-Property Site Map.pdf 7/17/2015 9:54 AM brian.rooen



Conductorlab Site
Honeywell International Inc.
Groton, MA

amec foster wheeler

Regional Groundwater Contour Plan
Shallow/Overburden Wells September 11, 2017
Project 3617-14-7336
Figure 4A



Conductorlab Site
Honeywell International Inc.
Groton, MA

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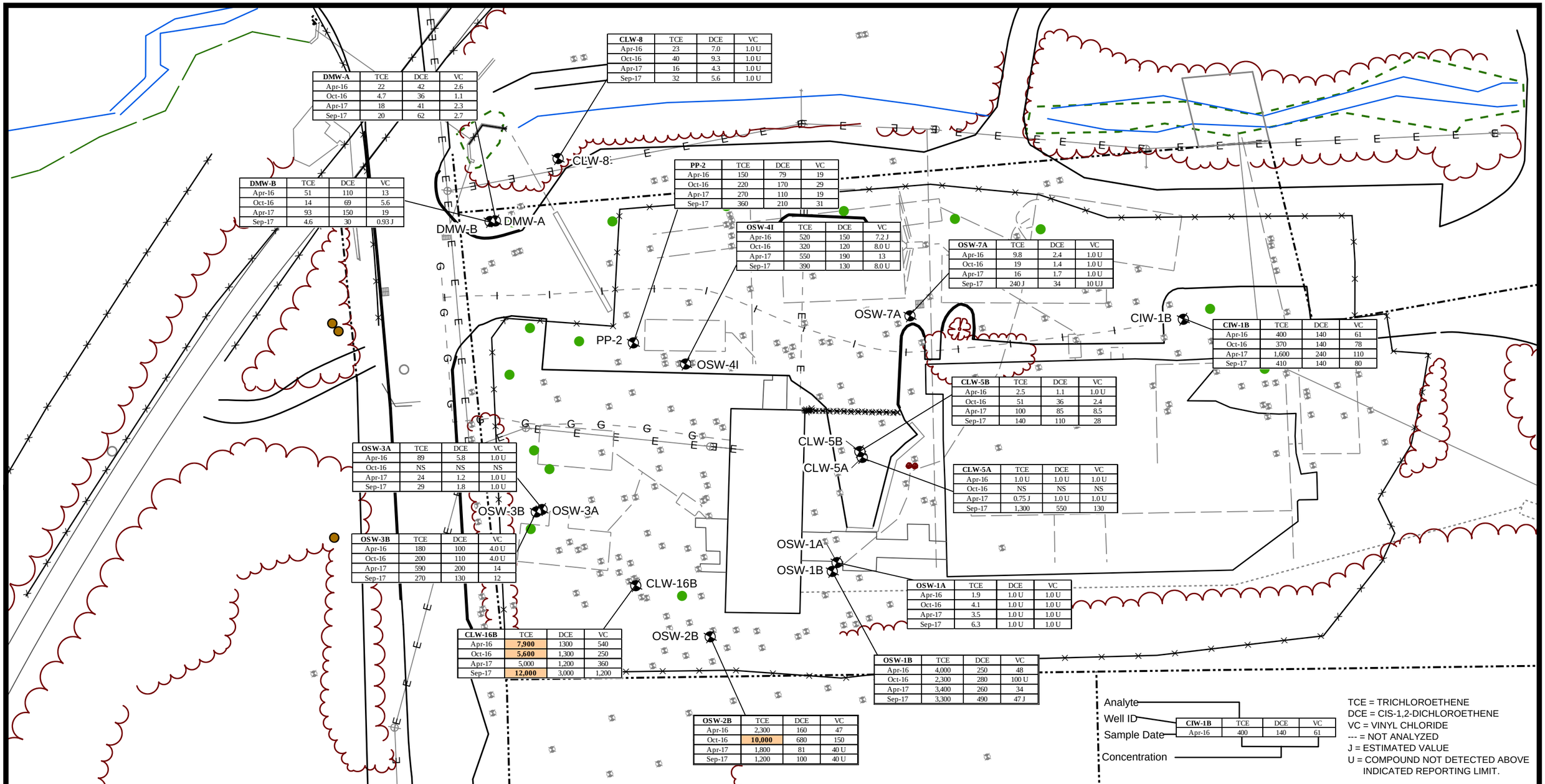
Regional Groundwater Contour Plan
Bedrock Wells September 11, 2017
Project 3617-17-7412
Figure 4B



CLW-8	TCE	DCE	VC
Apr-16	23	7.0	1.0 U
Oct-16	40	9.3	1.0 U
Apr-17	16	4.3	1.0 U
Sep-17	32	5.6	1.0 U

DMW-A	TCE	DCE	VC
Apr-16	22	42	2.6
Oct-16	4.7	36	1.1
Apr-17	18	41	2.3
Sep-17	20	62	2.7

DMW-B	TCE	DCE	VC
Apr-16	51	110	13
Oct-16	14	69	5.6
Apr-17	93	150	19
Sep-17	4.6	30	0.93 J

PP-2	TCE	DCE	VC
Apr-16	150	79	19
Oct-16	220	170	29
Apr-17	270	110	19
Sep-17	360	210	31

OSW-4I	TCE	DCE	VC
Apr-16	520	150	7.2 J
Oct-16	320	120	8.0 U
Apr-17	550	190	13
Sep-17	390	130	8.0 U

OSW-7A	TCE	DCE	VC
Apr-16	9.8	2.4	1.0 U
Oct-16	19	1.4	1.0 U
Apr-17	16	1.7	1.0 U
Sep-17	240 J	34	10 UJ

CIW-1B	TCE	DCE	VC
Apr-16	400	140	61
Oct-16	370	140	78
Apr-17	1,600	240	110
Sep-17	410	140	80

CLW-5B	TCE	DCE	VC
Apr-16	2.5	1.1	1.0 U
Oct-16	51	36	2.4
Apr-17	100	85	8.5
Sep-17	140	110	28

CLW-5A	TCE	DCE	VC
Apr-16	1.0 U	1.0 U	1.0 U
Oct-16	NS	NS	NS
Apr-17	0.75 J	1.0 U	1.0 U
Sep-17	1,300	550	130

OSW-3A	TCE	DCE	VC
Apr-16	89	5.8	1.0 U
Oct-16	NS	NS	NS
Apr-17	24	1.2	1.0 U
Sep-17	29	1.8	1.0 U

OSW-3B	TCE	DCE	VC
Apr-16	180	100	4.0 U
Oct-16	200	110	4.0 U
Apr-17	590	200	14
Sep-17	270	130	12

OSW-1A	TCE	DCE	VC
Apr-16	1.9	1.0 U	1.0 U
Oct-16	4.1	1.0 U	1.0 U
Apr-17	3.5	1.0 U	1.0 U
Sep-17	6.3	1.0 U	1.0 U

CLW-16B	TCE	DCE	VC
Apr-16	**7,900**	1300	540
Oct-16	**5,600**	1,300	250
Apr-17	5,000	1,200	360
Sep-17	**12,000**	3,000	1,200

OSW-1B	TCE	DCE	VC
Apr-16	4,000	250	48
Oct-16	2,300	280	100 U
Apr-17	3,400	260	34
Sep-17	3,300	490	47 J

OSW-2B	TCE	DCE	VC
Apr-16	2,300	160	47
Oct-16	**10,000**	680	150
Apr-17	1,800	81	40 U
Sep-17	1,200	100	40 U

Analyte
Well ID
Sample Date
Concentration

CIW-1B	TCE	DCE	VC
Apr-16	400	140	61

TCE = TRICHLOROETHENE
DCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
--- = NOT ANALYZED
J = ESTIMATED VALUE
U = COMPOUND NOT DETECTED ABOVE INDICATED REPORTING LIMIT.

MCP NUMERICAL STANDARDS	GW-3	UCL
TCE	5,000	50,000
DCE	50,000	100,000
VC	50,000	100,000

Indicates Value Exceeds Current GW-3 Standard

Indicates Value Exceeds Current UCL Standard

Legend

- Piezometer
- Monitoring Well Sample
- Piezometer
- Recovery Well
- Monitoring Well Not Sampled
- Tree Line
- Fence
- Stream
- Property Boundary
- Drain Line
- Inactive Gas Line
- Active Gas Line
- Utility Pole
- V-POWR-OVHD
- V-POWR-UNDR
- Regulated Wetland Resource Area

N
0 20 40 Feet

Notes:
1. Concentrations are reported in ug/L.
2. Results compared to Massachusetts Contingency Plan (MCP) Numerical Standards for perspective only.
3. NS = Not Sampled

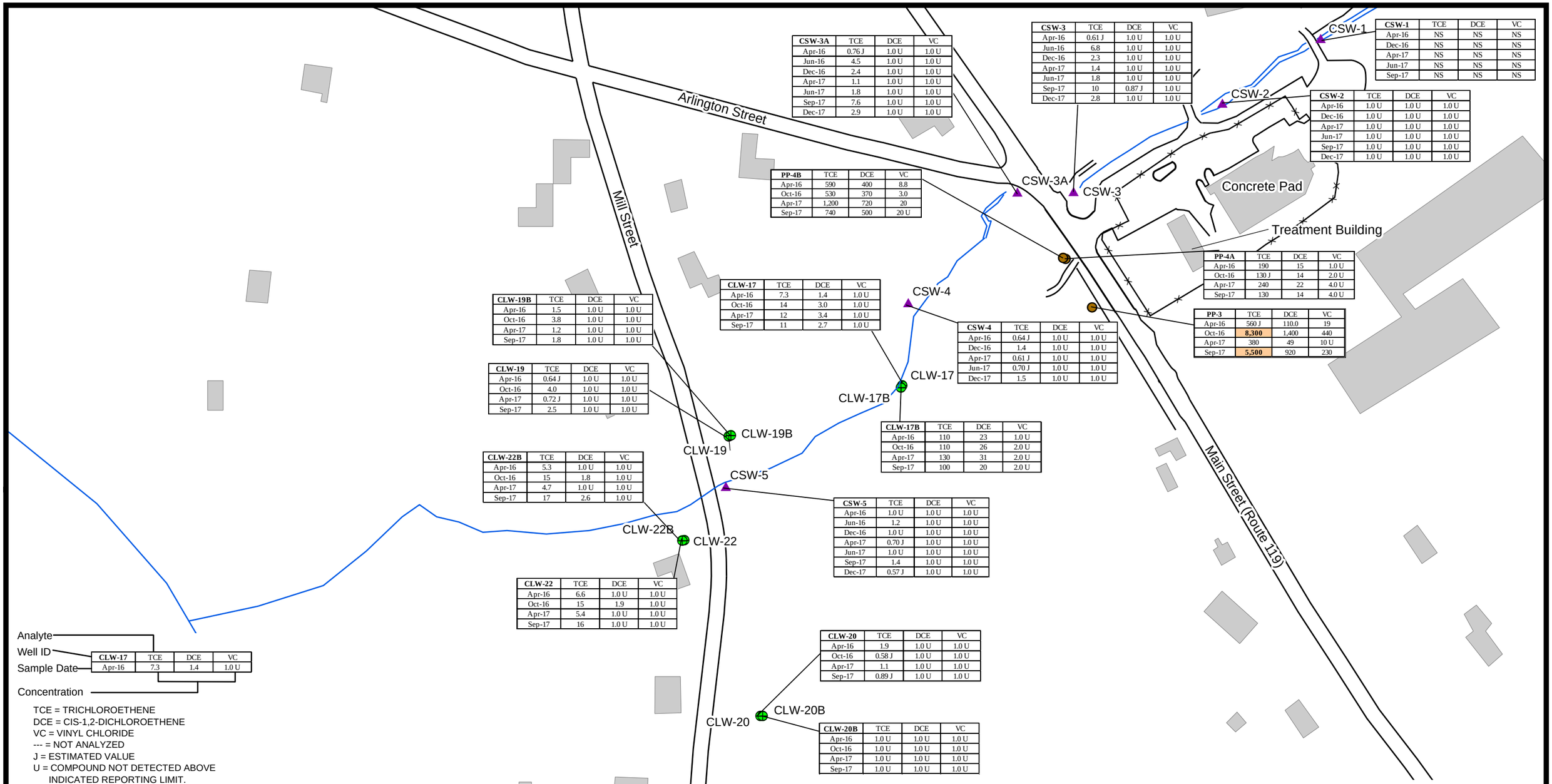
Prepared/Date: ANK 02/09/18
Checked/Date: CTM 02/09/18

Conductorlab Site
Honeywell International Inc.
Groton, MA

amec foster wheeler

On-Property Monitoring Well TCE/DCE/VC
Groundwater Concentrations (2016-2017)
Project 3617-17-7412
Figure 5A

Document: P:\old_Wakefield_Data\projects\GIS\Projects\Honeywell\ConductorLabs\MapDocuments\Post RAO Jul-Dec12\Figure5A_11x17.mxd PDF: P:\old_Wakefield_Data\projects\3650090142 - CLAB ISCO 2009\4.0 Project Deliverables\4.1 Reports\P-RAO July-December 2012\Figures\Figure 5A - TCE DCE VC On Property Monitoring Wells.pdf 4/22/2013 10:54 AM brian.roden



CSW-1	TCE	DCE	VC
Apr-16	NS	NS	NS
Dec-16	NS	NS	NS
Apr-17	NS	NS	NS
Jun-17	NS	NS	NS
Sep-17	NS	NS	NS

CSW-2	TCE	DCE	VC
Apr-16	1.0 U	1.0 U	1.0 U
Dec-16	1.0 U	1.0 U	1.0 U
Apr-17	1.0 U	1.0 U	1.0 U
Jun-17	1.0 U	1.0 U	1.0 U
Sep-17	1.0 U	1.0 U	1.0 U
Dec-17	1.0 U	1.0 U	1.0 U

CSW-3	TCE	DCE	VC
Apr-16	0.61 J	1.0 U	1.0 U
Jun-16	6.8	1.0 U	1.0 U
Dec-16	2.3	1.0 U	1.0 U
Apr-17	1.4	1.0 U	1.0 U
Jun-17	1.8	1.0 U	1.0 U
Sep-17	10	0.87 J	1.0 U
Dec-17	2.8	1.0 U	1.0 U

CSW-3A	TCE	DCE	VC
Apr-16	0.76 J	1.0 U	1.0 U
Jun-16	4.5	1.0 U	1.0 U
Dec-16	2.4	1.0 U	1.0 U
Apr-17	1.1	1.0 U	1.0 U
Jun-17	1.8	1.0 U	1.0 U
Sep-17	7.6	1.0 U	1.0 U
Dec-17	2.9	1.0 U	1.0 U

PP-4B	TCE	DCE	VC
Apr-16	590	400	8.8
Oct-16	530	370	3.0
Apr-17	1,200	720	20
Sep-17	740	500	20 U

PP-4A	TCE	DCE	VC
Apr-16	190	15	1.0 U
Oct-16	130 J	14	2.0 U
Apr-17	240	22	4.0 U
Sep-17	130	14	4.0 U

PP-3	TCE	DCE	VC
Apr-16	560 J	110.0	19
Oct-16	**8,300**	1,400	440
Apr-17	380	49	10 U
Sep-17	**5,500**	920	230

CLW-17	TCE	DCE	VC
Apr-16	7.3	1.4	1.0 U
Oct-16	14	3.0	1.0 U
Apr-17	12	3.4	1.0 U
Sep-17	11	2.7	1.0 U

CSW-4	TCE	DCE	VC
Apr-16	0.64 J	1.0 U	1.0 U
Dec-16	1.4	1.0 U	1.0 U
Apr-17	0.61 J	1.0 U	1.0 U
Jun-17	0.70 J	1.0 U	1.0 U
Dec-17	1.5	1.0 U	1.0 U

CLW-19B	TCE	DCE	VC
Apr-16	1.5	1.0 U	1.0 U
Oct-16	3.8	1.0 U	1.0 U
Apr-17	1.2	1.0 U	1.0 U
Sep-17	1.8	1.0 U	1.0 U

CLW-19	TCE	DCE	VC
Apr-16	0.64 J	1.0 U	1.0 U
Oct-16	4.0	1.0 U	1.0 U
Apr-17	0.72 J	1.0 U	1.0 U
Sep-17	2.5	1.0 U	1.0 U

CLW-17B	TCE	DCE	VC
Apr-16	110	23	1.0 U
Oct-16	110	26	2.0 U
Apr-17	130	31	2.0 U
Sep-17	100	20	2.0 U

CLW-22B	TCE	DCE	VC
Apr-16	5.3	1.0 U	1.0 U
Oct-16	15	1.8	1.0 U
Apr-17	4.7	1.0 U	1.0 U
Sep-17	17	2.6	1.0 U

CSW-5	TCE	DCE	VC
Apr-16	1.0 U	1.0 U	1.0 U
Jun-16	1.2	1.0 U	1.0 U
Dec-16	1.0 U	1.0 U	1.0 U
Apr-17	0.70 J	1.0 U	1.0 U
Jun-17	1.0 U	1.0 U	1.0 U
Sep-17	1.4	1.0 U	1.0 U
Dec-17	0.57 J	1.0 U	1.0 U

CLW-22	TCE	DCE	VC
Apr-16	6.6	1.0 U	1.0 U
Oct-16	15	1.9	1.0 U
Apr-17	5.4	1.0 U	1.0 U
Sep-17	16	1.0 U	1.0 U

CLW-20	TCE	DCE	VC
Apr-16	1.9	1.0 U	1.0 U
Oct-16	0.58 J	1.0 U	1.0 U
Apr-17	1.1	1.0 U	1.0 U
Sep-17	0.89 J	1.0 U	1.0 U

CLW-20B	TCE	DCE	VC
Apr-16	1.0 U	1.0 U	1.0 U
Oct-16	1.0 U	1.0 U	1.0 U
Apr-17	1.0 U	1.0 U	1.0 U
Sep-17	1.0 U	1.0 U	1.0 U

Analyte
Well ID
Sample Date
Concentration

CLW-17	TCE	DCE	VC
Apr-16	7.3	1.4	1.0 U

TCE = TRICHLOROETHENE
DCE = CIS-1,2-DICHLOROETHENE
VC = VINYL CHLORIDE
--- = NOT ANALYZED
J = ESTIMATED VALUE
U = COMPOUND NOT DETECTED ABOVE INDICATED REPORTING LIMIT.

Legend

- Sampled Monitoring Well
- Surface Water Sampling Location
- Existing Piezometer
- Structure or House
- Fence
- Stream

N

0 75 150 Feet

MCP NUMERICAL STANDARDS	GW-3	UCL
TCE	5,000	50,000
DCE	50,000	100,000
VC	50,000	100,000

Indicates Value Exceeds Current GW-3 Standard

Indicates Value Exceeds Current UCL Standard

Notes:
1. On-propety wells shown on Figure 5A.
2. Concentrations are reported in ug/L.
3. Results compared to Massachusetts Contingency Plan (MCP) Numerical Standards for perspective only.
3. NS = Not Sampled

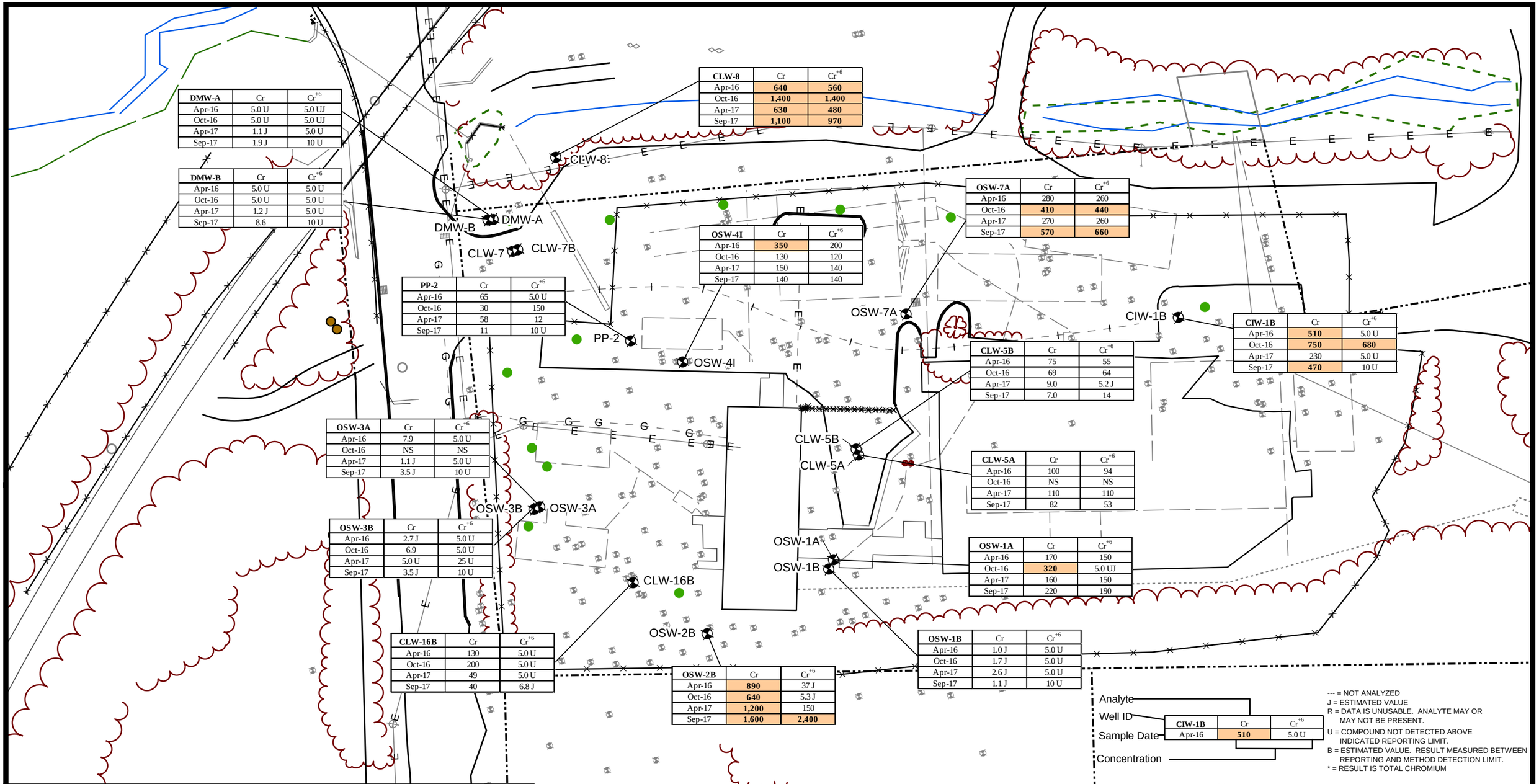
Prepared/Date: ANK 02/09/18
Checked/Date: CTM 02/09/18

Conductorlab Site
Honeywell International Inc.
Groton, MA

amec foster wheeler

Off-Property Monitoring Wells and Surface Water
TCE/DCE/VC Concentrations (2016-2017)
Project 3617-17-7412
Figure 5B

Document: P:\old_Wakefield_Data\projects\GIS\Projects\Honeywell\ConductorLabs\MapDocuments\Post RAO Jul-Dec12\Figure5B_11x17.mxd PDF: P:\old_Wakefield_Data\projects\3650090142 - CLAB ISCO 2009\4.0 Project Deliverables\4.1 Reports\P-RAO July-December 2012\Figures\Figure 5B - TCE DCE VC Off Site Monitoring Wells and Surface Water.pdf 4/22/2013 11:53 AM brian.roden



DMW-A	Cr	Cr^{+6}
Apr-16	5.0 U	5.0 UJ
Oct-16	5.0 U	5.0 UJ
Apr-17	1.1 J	5.0 U
Sep-17	1.9 J	10 U

DMW-B	Cr	Cr^{+6}
Apr-16	5.0 U	5.0 U
Oct-16	5.0 U	5.0 U
Apr-17	1.2 J	5.0 U
Sep-17	8.6	10 U

CLW-8	Cr	Cr^{+6}
Apr-16	**640**	**560**
Oct-16	**1,400**	**1,400**
Apr-17	**630**	**480**
Sep-17	**1,100**	**970**

OSW-7A	Cr	Cr^{+6}
Apr-16	280	260
Oct-16	**410**	**440**
Apr-17	270	260
Sep-17	**570**	**660**

OSW-4I	Cr	Cr^{+6}
Apr-16	**350**	200
Oct-16	130	120
Apr-17	150	140
Sep-17	140	140

PP-2	Cr	Cr^{+6}
Apr-16	65	5.0 U
Oct-16	30	150
Apr-17	58	12
Sep-17	11	10 U

CIW-1B	Cr	Cr^{+6}
Apr-16	**510**	5.0 U
Oct-16	**750**	**680**
Apr-17	230	5.0 U
Sep-17	**470**	10 U

CLW-5B	Cr	Cr^{+6}
Apr-16	75	55
Oct-16	69	64
Apr-17	9.0	5.2 J
Sep-17	7.0	14

OSW-3A	Cr	Cr^{+6}
Apr-16	7.9	5.0 U
Oct-16	NS	NS
Apr-17	1.1 J	5.0 U
Sep-17	3.5 J	10 U

CLW-5A	Cr	Cr^{+6}
Apr-16	100	94
Oct-16	NS	NS
Apr-17	110	110
Sep-17	82	53

OSW-3B	Cr	Cr^{+6}
Apr-16	2.7 J	5.0 U
Oct-16	6.9	5.0 U
Apr-17	5.0 U	25 U
Sep-17	3.5 J	10 U

OSW-1A	Cr	Cr^{+6}
Apr-16	170	150
Oct-16	**320**	5.0 UJ
Apr-17	160	150
Sep-17	220	190

CLW-16B	Cr	Cr^{+6}
Apr-16	130	5.0 U
Oct-16	200	5.0 U
Apr-17	49	5.0 U
Sep-17	40	6.8 J

OSW-2B	Cr	Cr^{+6}
Apr-16	**890**	37 J
Oct-16	**640**	5.3 J
Apr-17	**1,200**	150
Sep-17	**1,600**	**2,400**

OSW-1B	Cr	Cr^{+6}
Apr-16	1.0 J	5.0 U
Oct-16	1.7 J	5.0 U
Apr-17	2.6 J	5.0 U
Sep-17	1.1 J	10 U

Legend

- Piezometer
- Monitoring Well Sample
- Piezometer
- Recovery Well
- Monitoring Well Not Sampled
- Tree Line
- Fence
- Stream
- Property Boundary
- Drain Line
- Inactive Gas Line
- Active Gas Line
- Utility Pole
- Overhead Power Line
- Underground Power Line
- Regulated Wetland Resource Area

N

0 20 40 Feet

MCP NUMERICAL STANDARDS		
	GW-3	UCL
Cr VI	300	3,000
Cr (Total)	300	3,000

INDICATES VALUE EXCEEDS CURRENT GW-3 STANDARD FOR CR+6 AND/OR CR

INDICATES VALUE EXCEEDS CURRENT GW-3 STANDARD AND UCL FOR CR+6 AND/OR CR

Analyte
Well ID
Sample Date
Concentration

CIW-1B	Cr	Cr^{+6}
Apr-16	**510**	5.0 U

--- = NOT ANALYZED
J = ESTIMATED VALUE
R = DATA IS UNUSABLE. ANALYTE MAY OR MAY NOT BE PRESENT.
U = COMPOUND NOT DETECTED ABOVE INDICATED REPORTING LIMIT.
B = ESTIMATED VALUE. RESULT MEASURED BETWEEN REPORTING AND METHOD DETECTION LIMIT.
* = RESULT IS TOTAL CHROMIUM

Notes:
1. Concentrations are reported in ug/L.
2. Results compared to Massachusetts Contingency Plan (MCP) Numerical Standards for perspective only.
3. NS = Not Sampled

Prepared/Date: ANK 02/09/18
Checked/Date: CTM 02/09/18

Conductorlab Site
Honeywell International Inc.
Groton, MA

amec foster wheeler

On-Property Monitoring Well Cr+6 and Cr Groundwater Concentrations (2016-2017)
Project 3617-17-7412
Figure 6A

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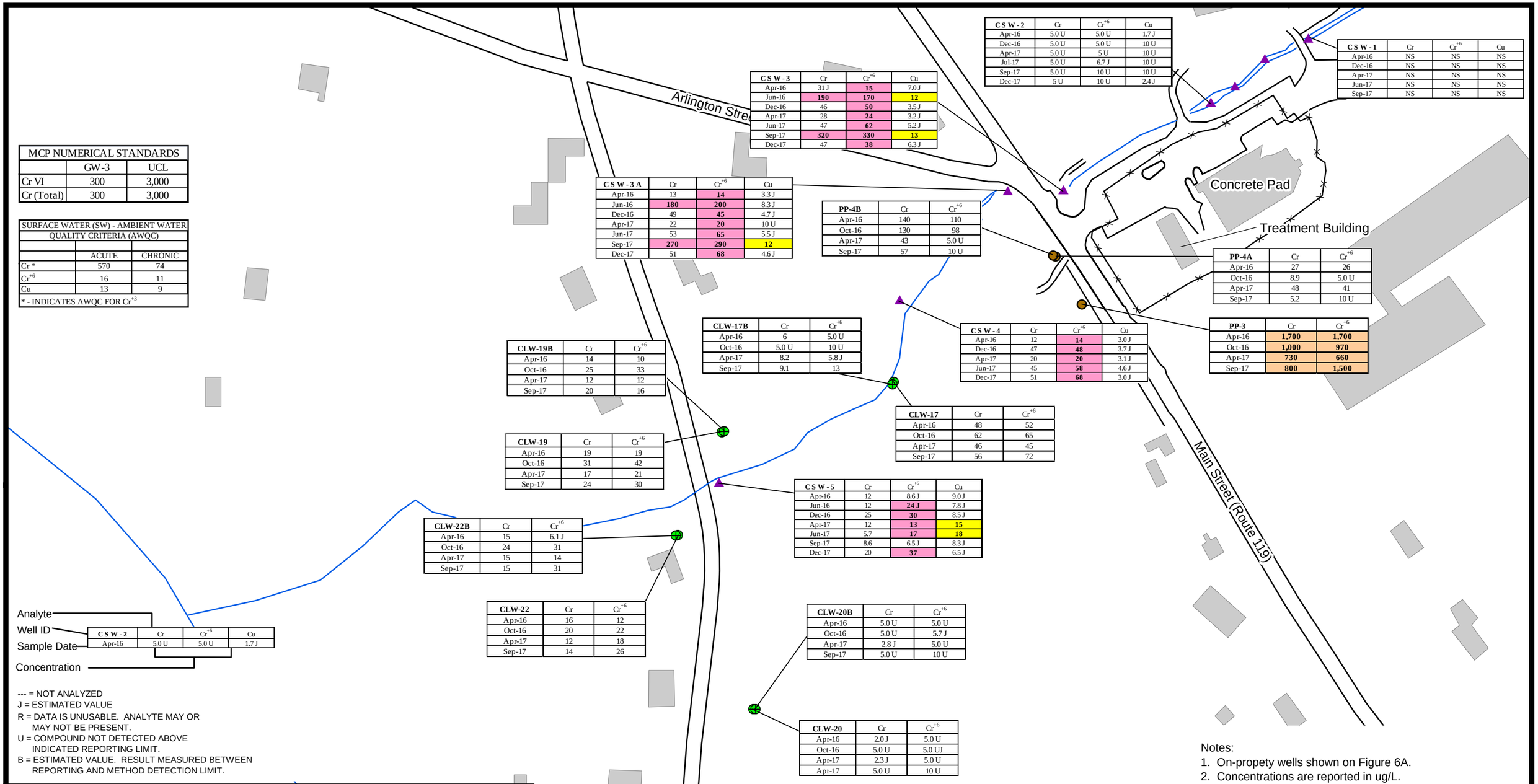

MCP NUMERICAL STANDARDS		
	GW-3	UCL
Cr VI	300	3,000
Cr (Total)	300	3,000

SURFACE WATER (SW) - AMBIENT WATER QUALITY CRITERIA (AWQC)		
	ACUTE	CHRONIC
Cr *	570	74
Cr^{+6}	16	11
Cu	13	9
* - INDICATES AWQC FOR Cr^{+3}		

C S W - 3	Cr	Cr^{+6}	Cu
Apr-16	31 J	15	7.0 J
Jun-16	190	170	12
Dec-16	46	50	3.5 J
Apr-17	28	24	3.2 J
Jun-17	47	62	5.2 J
Sep-17	320	330	13
Dec-17	47	38	6.3 J

C S W - 2	Cr	Cr^{+6}	Cu
Apr-16	5.0 U	5.0 U	1.7 J
Dec-16	5.0 U	5.0 U	10 U
Apr-17	5.0 U	5 U	10 U
Jul-17	5.0 U	6.7 J	10 U
Sep-17	5.0 U	10 U	10 U
Dec-17	5 U	10 U	2.4 J

C S W - 1	Cr	Cr^{+6}	Cu
Apr-16	NS	NS	NS
Dec-16	NS	NS	NS
Apr-17	NS	NS	NS
Jun-17	NS	NS	NS
Sep-17	NS	NS	NS

C S W - 3 A	Cr	Cr^{+6}	Cu
Apr-16	13	14	3.3 J
Jun-16	180	200	8.3 J
Dec-16	49	45	4.7 J
Apr-17	22	20	10 U
Jun-17	53	65	5.5 J
Sep-17	270	290	12
Dec-17	51	68	4.6 J

PP-4B	Cr	Cr^{+6}
Apr-16	140	110
Oct-16	130	98
Apr-17	43	5.0 U
Sep-17	57	10 U

PP-4A	Cr	Cr^{+6}
Apr-16	27	26
Oct-16	8.9	5.0 U
Apr-17	48	41
Sep-17	5.2	10 U

CLW-17B	Cr	Cr^{+6}
Apr-16	6	5.0 U
Oct-16	5.0 U	10 U
Apr-17	8.2	5.8 J
Sep-17	9.1	13

C S W - 4	Cr	Cr^{+6}	Cu
Apr-16	12	14	3.0 J
Dec-16	47	48	3.7 J
Apr-17	20	20	3.1 J
Jun-17	45	58	4.6 J
Dec-17	51	68	3.0 J

PP-3	Cr	Cr^{+6}
Apr-16	1,700	1,700
Oct-16	1,000	970
Apr-17	730	660
Sep-17	800	1,500

CLW-19B	Cr	Cr^{+6}
Apr-16	14	10
Oct-16	25	33
Apr-17	12	12
Sep-17	20	16

CLW-17	Cr	Cr^{+6}
Apr-16	48	52
Oct-16	62	65
Apr-17	46	45
Sep-17	56	72

CLW-19	Cr	Cr^{+6}
Apr-16	19	19
Oct-16	31	42
Apr-17	17	21
Sep-17	24	30

C S W - 5	Cr	Cr^{+6}	Cu
Apr-16	12	8.6 J	9.0 J
Jun-16	12	24 J	7.8 J
Dec-16	25	30	8.5 J
Apr-17	12	13	15
Jun-17	5.7	17	18
Sep-17	8.6	6.5 J	8.3 J
Dec-17	20	37	6.5 J

CLW-22B	Cr	Cr^{+6}
Apr-16	15	6.1 J
Oct-16	24	31
Apr-17	15	14
Sep-17	15	31

CLW-22	Cr	Cr^{+6}
Apr-16	16	12
Oct-16	20	22
Apr-17	12	18
Sep-17	14	26

CLW-20B	Cr	Cr^{+6}
Apr-16	5.0 U	5.0 U
Oct-16	5.0 U	5.7 J
Apr-17	2.8 J	5.0 U
Sep-17	5.0 U	10 U

CLW-20	Cr	Cr^{+6}
Apr-16	2.0 J	5.0 U
Oct-16	5.0 U	5.0 UJ
Apr-17	2.3 J	5.0 U
Apr-17	5.0 U	10 U

Analyte
Well ID
Sample Date
Concentration

C S W - 2	Cr	Cr^{+6}	Cu
Apr-16	5.0 U	5.0 U	1.7 J

--- = NOT ANALYZED
J = ESTIMATED VALUE
R = DATA IS UNUSABLE. ANALYTE MAY OR MAY NOT BE PRESENT.
U = COMPOUND NOT DETECTED ABOVE INDICATED REPORTING LIMIT.
B = ESTIMATED VALUE. RESULT MEASURED BETWEEN REPORTING AND METHOD DETECTION LIMIT.

Legend
- Surface Water Sampling Location
- Sampled Monitoring Well
- Existing Piezometer
- Fence
- Structure or House
- Stream

N
0 75 150 Feet

- INDICATES VALUE EXCEEDS CURRENT GW-3 STANDARD FOR CR+6 AND/OR CR
- INDICATES VALUE EXCEEDS CURRENT GW-3 STANDARD AND UCL FOR CR+6 AND/OR CR
- INDICATES VALUE EXCEEDS AWQC FOR CU
- INDICATES VALUE EXCEEDS AWQC FOR CR+6

Notes:
1. On-propety wells shown on Figure 6A.
2. Concentrations are reported in ug/L.
3. Results compared to Massachusetts Contingency Plan (MCP) Numerical Standards for perspective only.
4. Results are posted for total Cr+6 and dissolved Cr for off-site monitoring wells and total Cr+6 and dissolved Cr and Cu for surface water locations.
3. NS = Not Sampled

Prepared/Date: ANK 02/09/18
Checked/Date: CTM 02/09/18

Conductorlab Site
Honeywell International Inc.
Groton, MA

amec foster wheeler

Off-Property Monitoring Well and Surface Water
Cr, Cr+6, and Cu Concentrations (2016-2017)
Project 3617-17-7412
Figure 6B

Document: P:\GIS\Projects\Honeywell\ConductorLabs\MapDocuments\Post RAO Jun-Dec12\Figure6B_11x17.mxd PDF: \\WFD-fs1\projects\old_Wakefield_Data\projects\36500090142 - CLAB ISCO 2009\4.0 Project Deliverables\4.1 Reports\P-RAO July-December 2012\Figures\Figure 6B - Cr Cr+6 and Cu Off Site Monitoring Wells and Surface Water.pdf

APPENDIX A

GROUNDWATER SAMPLING PROCEDURES

GROUNDWATER SAMPLING AND ANALYSIS PROCEDURES FOR THE CONDUCTORLAB SITE, GROTON, MASSACHUSETTS

Low-flow groundwater sampling is the preferred technique for groundwater sampling of monitoring wells at the Conductorlab Site. However, if low-flow sampling is not possible (e.g., well diameter is too small, insufficient water level depth in the well, or groundwater recharge rate is too slow) an alternate sampling technique may be used. Procedures for both low-flow groundwater sampling and an alternate technique are presented in this subsection.

Monitoring well sampling shall be performed no earlier than 14 days following well development.

Pre-purging Activities. The following activities shall be performed immediately prior to purging each well:

1. Check the well for proper identification and location.
2. Measure and record the height of protective casing (not applicable for flush mount installations).
3. After unlocking the well and removing any well cap, measure and record the ambient and well-mouth organic vapor levels using the PID. Appropriate action levels and safety equipment are described in the Site HASP.
4. Measured and recorded the distance between the top of the well casing and the top of the protective casing.
5. Using the electronic water level meter, measure, and record the static water level from the top of the well riser and the depth to the well bottom to the nearest 0.01 foot. Upon removing the water level wire, rinse the water level with deionized water.
6. Inspect the well for any signs of poor integrity.
7. If <u>not</u> following low flow purging techniques or collecting groundwater grab samples, calculate the volume to be purged using the following formula for a 4-inch and 2-inch diameter water table well and 10-inch diameter sand pack:

8. $$Total\ Purge\ Volume = 5\ x \begin{pmatrix} Bottom \\ Depth \end{pmatrix} - \begin{matrix} Static \\ Water \\ Level \end{matrix} \Bigg) x\ 1.68\ gal/ft\ (4\text{-}inch)\ or\ 0.33\ (2\text{-}inch)$$

9. Place plastic sheeting on the ground surface around the well to protect sampling equipment from becoming contaminated by material located around the well.

Low-Flow Purging Technique and Sample Collection. The following steps outline the purging and sample collection activities for low-flow sampling. A peristaltic pump or stainless steel submersible bladder pump with a Teflon bladder shall be used to conduct the low-flow purging and sampling. Field parameter measurements shall be made using instrumentation and a commercially manufactured flow through cell. Dedicated high density polyethylene (HDPE) tubing shall be used. Further details on the low-flow purging and sampling procedure are presented in the USEPA Region I - New England Low Stress (low-flow) Purging and Sampling Procedures for the Collection of Ground Water Samples from Monitoring Wells, Revision 3, January 19, 2010 (USEPA, 2010). Sample collection information shall be recorded on the Low Flow Groundwater Sampling Record. The USEPA guidance shall be used for purging and sampling procedures only.

1. Determine target depth for location of the pump intake. Target depth should be the portion of the screened interval that intersects the zone of highest hydraulic conductivity. If the zone of highest hydraulic conductivity is unknown, or if the screen is placed within homogenous material, then the target depth shall be the midpoint of the saturated screen length. Primary flow zones should be identified in wells with screen lengths longer than 10 feet, or in wells with open boreholes in bedrock.
2. Measure and record the depth to water. Care should be taken to minimize disturbance of the water column within the well during pre-sample measurements.
3. Decontaminate pump prior to use (if pumps are dedicated then this applies to the initial effort only). Attach appropriate length of dedicated HDPE tubing or mark the tubing at the appropriate point so that when the pump and tubing are lowered into the well, and the mark is at the top of the well riser, the pump shall be located at the target depth within the screened interval.

4. Carefully lower the pump to the predetermined target depth. Start the pump at a purge rate low enough to achieve 0.3 feet of drawdown or less based on historical data. If sampling the well for the first time, start the pump at the lowest possible setting (or approximately 100-milliliter [mL] per minute) and slowly increase the speed until discharge occurs. Check water level. Adjust pump speed until there is little or no drawdown (less than 0.3 feet) if possible. If minimal drawdown that can be achieved exceeds 0.3 feet (at a pump rate of approximately 100 mL per minute) but remains stable, continue purging until indicator field parameters stabilize.
5. Monitor and record pumping rate and water levels every 5 minutes (or as appropriate) during purging. Record any adjustments to pumping rates.
6. During purging, monitor field parameters using a flow through cell (the flow through cell can not be used for turbidity measurements and the sample for turbidity measurement must be collected prior to entering the flow through cell). Purging is considered complete and sampling may begin when the field parameters have stabilized. Stabilization is considered to be achieved when three consecutive readings, taken at 3 to 5 minute intervals, are within the following limits:
    - Turbidity (+/- 10% for values > 5 NTU)
    - DO (+/- 10% for values > 0.5 mg/L)
    - Specific conductivity (+/- 3%)
    - Temperature (+/- 3%)
    - pH (± 0.1 unit)
    - ORP (± 10 millivolts)
7. The final purge volume must be greater than the stabilized drawdown volume plus the tubing extraction volume.
8. During purging and sampling the tubing should remain filled with water.
9. Disconnect the tubing from the flow through cell to collect the analytical samples. Water samples for laboratory analyses must not be collected after water has passed through the flow through assembly. Fill sample containers directly from the tubing without alterations to the pumping rate.
10. The VOC fraction shall be collected first. The VOC sample container shall be completely filled without air space within the container. The remaining samples shall be collected for

11. SVOCs, pesticide/PCBs, metals, and any other fraction specified in the project work plan for the sample location.
12. For subsequent sampling efforts, duplicate the pump intake depth and final purge rate from the initial sampling event (use final pump dial setting information).
13. If using non-dedicated equipment, remove the pump and perform an external and internal rinse with Liquinox and potable water rinse followed by deionized water rinse. Obtain and record a depth to bottom of well measurement before closing the well.

Special Cases:

If the above sampling criteria cannot be met after 2 hours of purging, the following options are available:

- Continue purging until stabilization is achieved;
- Discontinue purging and collect samples.

If the recharge rate of the well is less than the lowest possible extraction rate of the pump (i.e., drawdown does not stabilize at a purge rate of approximately 100 mL per minute or less), the purge rate shall be increased and the water shall be evacuated down to the pump intake level. This shall result in several feet of stagnant water below the pump intake that shall not be evacuated. The pump should then remain in place, and the well should be sampled after the water level has recovered to at or near the initial static water level. Collect the sample from the pump at a pumping rate of approximately 100 mL per minute.

Alternate Purging Technique and Sample Collection. The following steps outline the purging and sample collection activities for conventional groundwater sampling. A peristaltic pump or equivalent pumping device shall be used to purge and sample the monitoring wells. Field parameters shall be monitored using a flow through cell as described in the low flow sampling procedure. Dedicated HDPE tubing shall be used.

1. In all shallow water table wells, lower the sampling equipment intake to just below the top of the water column and begin purging. If drawdown occurs, lower the intake to be maintained at or near the top of the water column.
2. In all deep aquifer wells, place the pump intake at the static water level and begin purging. Do not lower the pump intake below the top of the well screen. In both water table and deep aquifer wells, low permeability formations may require the pumping rate to be reduced to allow continuous pumping. If the pumped flow rate drops below one gallon per minute, notify the project team and discuss modifications to the standard purging procedures.
3. Purging shall be considered complete when the well has be purged of one volume, allowed to recover, and then sampled.
4. Record the in-situ parameters (i.e., pH, specific conductivity, DO, turbidity, ORP, and temperature) on the Groundwater Sample Field Data Sheet during the purging.

5. For groundwater grab samples from screened auger or direct-push borings, each sampling interval shall be purged as described above. Collect screened auger samples using a pump system with an inflatable packer to seal off the screened auger. After the interval is developed and sampled, advance the augers and repeat the procedure for each subsequent sampling interval to obtain samples representative of conditions vertically within the saturated zone.
6. For monitoring well sampling, fill the sample bottles directly from the pump's discharge tube. When sampling groundwater grab samples (e.g., screened auger boring), collect samples using the sampling equipment used to purge the interval. Reduce the pumping rate to minimize turbulence during sample collection.
7. Collect the sample in appropriate containers as provided by the laboratory. Collect the VOC fraction first by completely filling the vials without air space within the container. Collect the remaining samples (e.g., SVOCs, pesticide/PCBs, metals) specified in the work plan for the sample location. Where duplicate, MS/MSD, or split samples are to be collected, fill all containers for a given analytical parameter before moving on to the next parameter.
8. If dedicated tubing is used, remove the tubing and rinse the outside of the tubing after the completion of sampling at each well. Place the tubing in a protective plastic bag and store at the Site. Decontaminate the sampling equipment with deionized water (see Subsection 9.4). When sampling from a screened auger interval, deflate the packer, retrieve and decontaminate.
9. Record the sampling data on the Groundwater Sample Data Sheet.
10. Replace the well cap and secure the well lock.

Non-dedicated pumps and discharge lines used to purge the monitoring wells shall be decontaminated between wells using Liquinox and potable water rinse followed by isopropyl alcohol rinse and a final deionized water rinse.

APPENDIX B

GROUNDWATER AND SURFACE WATER SAMPLING RECORDS

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/12/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	MAM/JHP
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Mark Maggiore
WEATHER CONDITIONS (AM):	Sunny, cool ~ 50's	SAMPLER SIGNATURE:	for MAM
WEATHER CONDITIONS (PM):	Sunny ~ 70's	CHECKED BY: CTM	DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-14

AM CALIBRATION — Start Time: 8:00 End Time: 8:10

PM CALIBRATION CHECK — Start Time: 14:40 End Time: 14:45

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.01	+/- 0.1 pH Units	7.0	7.14	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	247	+/- 10 mV	240	220	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1424	+/- 3% of standard	1413	1442	+/- 5% of standard
DO (saturated)	%	100	99.5	+/- 2% of standard		93.5	%
DO (saturated)	mg/L[1] (see Chart 1)		10.05	+/- 0.2 mg/L		7.38	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		15.01			27.67	°C
Baro. Press.	mmHg		756.3			753.1	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	10.7	10	10.7	+/- 0.3 NTU of stan.
Standard	NTU	20	20.7	20	22.1	+/- 5% of standard
Standard	NTU	100	99.8	100	107	+/- 5% of standard
Standard	NTU	800	779	800	799	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:	Groton Site
Lot#/Date Produced:	
Trip Blank Source:	Lab
Sample Preservatives Source:	Lab
Disposable Filter Type:	0.45µm
Calibration Fluids / Standard Source:	
- DO Calibration Fluid (<0.1 mg/L)	---
- Other	---
- Other	---
- Other	---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	M024-29 set	M024-29 set
20 Turb. Stan.	M024-29 set	M024-29 set
100 Turb. Stan.	M024-29 set	M024-29 set
800 Turb. Stan.	M024-29 set	M024-29 set
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-Field Calibration) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/12/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	JHP/MAM
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Jacob Poirier
WEATHER CONDITIONS (AM):	Sunny ~ 60's	SAMPLER SIGNATURE:	
WEATHER CONDITIONS (PM):	Sunny ~ 80's	CHECKED BY: CTM	DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: 10E101132

AM CALIBRATION — Start Time: 7:40 End Time: 8:00

PM CALIBRATION CHECK — Start Time: 15:40 End Time: 15:55

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	6.95	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	241.7	+/- 10 mV	240	244.1	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1412	+/- 3% of standard	1413	1810	+/- 5% of standard
DO (saturated)	%	100	99.5	+/- 2% of standard		---	%
DO (saturated)	mg/L[1] (see Chart 1)		---	+/- 0.2 mg/L		---	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		15.15			20.86	°C
Baro. Press.	mmHg		756.3			760.1	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-36

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	9.81	10	9.9	+/- 0.3 NTU of stan.
Standard	NTU	20	20.4	20	20.6	+/- 5% of standard
Standard	NTU	100	101	100	98.4	+/- 5% of standard
Standard	NTU	800	783	800	787	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Groton Site
Lot#/Date Produced:
Trip Blank Source: Lab
Sample Preservatives Source: Lab
Disposable Filter Type: 0.45µm
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L) ---
- Other ---
- Other ---
- Other ---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	A6207	10/17
20 Turb. Stan.	A6207	10/17
100 Turb. Stan.	A6208	10/17
800 Turb. Stan.	A6202B	10/17
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-Field Calibration) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/13/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	MAM/JHP
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Mark Maggiore
WEATHER CONDITIONS (AM):	Sunny, cool ~ 50's	SAMPLER SIGNATURE:	for MAM
WEATHER CONDITIONS (PM):	Sunny ~ 80's	CHECKED BY: CTM	DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-14

AM CALIBRATION — Start Time: 7:49 End Time: 8:00

PM CALIBRATION CHECK — Start Time: 15:10 End Time: 15:20

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.01	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.97	+/- 0.1 pH Units	7.0	7.01	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	232	+/- 10 mV	240	239	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1437	+/- 3% of standard	1413	1458	+/- 5% of standard
DO (saturated)	%	100	99.1	+/- 2% of standard		105.3	%
DO (saturated)	mg/L[1] (see Chart 1)		9.53	+/- 0.2 mg/L		7.94	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		17.27			31.49	°C
Baro. Press.	mmHg		753.0			754.4	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	10.2	10	10.3	+/- 0.3 NTU of stan.
Standard	NTU	20	20.4	20	22.1	+/- 5% of standard
Standard	NTU	100	99.5	100	107	+/- 5% of standard
Standard	NTU	800	784	800	811	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:	Groton Site
Lot#/Date Produced:	
Trip Blank Source:	Lab
Sample Preservatives Source:	Lab
Disposable Filter Type:	0.45µm
Calibration Fluids / Standard Source:	
- DO Calibration Fluid (<0.1 mg/L)	---
- Other	---
- Other	---
- Other	---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	M024-29 set	M024-29 set
20 Turb. Stan.	M024-29 set	M024-29 set
100 Turb. Stan.	M024-29 set	M024-29 set
800 Turb. Stan.	M024-29 set	M024-29 set
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-Field Calibration) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/13/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	JHP/MAM
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Jacob Poirier
WEATHER CONDITIONS (AM):	Partly Cloudy ~ 60's	SAMPLER SIGNATURE:	for JHP
WEATHER CONDITIONS (PM):	Sunny ~ 80's	CHECKED BY: CTM	DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: 10E101132

AM CALIBRATION — Start Time: 7:45 End Time: 8:10

PM CALIBRATION CHECK — Start Time: 15:30 End Time: 15:40

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	7.05	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	---	+/- 10 mV	240	234.6	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1412	+/- 3% of standard	1413	1494	+/- 5% of standard
DO (saturated)	%	100	98.8	+/- 2% of standard		82.6	%
DO (saturated)	mg/L[1 (see Chart 1)]		---	+/- 0.2 mg/L		---	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		17.88			25.94	°C
Baro. Press.	mmHg		752.9			749.9	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-36

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	9.92	10	9.89	+/- 0.3 NTU of stan.
Standard	NTU	20	19.5	20	19.7	+/- 5% of standard
Standard	NTU	100	101	100	99.2	+/- 5% of standard
Standard	NTU	800	794	800	796	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:	Groton Site
Lot#/Date Produced:	
Trip Blank Source:	Lab
Sample Preservatives Source:	Lab
Disposable Filter Type:	0.45µm
Calibration Fluids / Standard Source:	
- DO Calibration Fluid (<0.1 mg/L)	---
- Other	---
- Other	---
- Other	---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	A6207	10/17
20 Turb. Stan.	A6207	10/17
100 Turb. Stan.	A6208	10/17
800 Turb. Stan.	A6202B	10/17
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-Field Calibration) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/14/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	MAM
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Mark Maggiore
WEATHER CONDITIONS (AM):	Cloudy ~ 50's	SAMPLER SIGNATURE:	CM for MAM
WEATHER CONDITIONS (PM):	Cloudy ~ 80's	CHECKED BY: CTM	DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-14

AM CALIBRATION — Start Time: 7:55 End Time: 8:05

PM CALIBRATION CHECK — Start Time: 15:35 End Time: 15:45

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.03	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.01	+/- 0.1 pH Units	7.0	7.10	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	239.9	+/- 10 mV	240	237	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1453	+/- 3% of standard	1413	1389	+/- 5% of standard
DO (saturated)	%	100	98.4	+/- 2% of standard		90.9	%
DO (saturated)	mg/L[1 (see Chart 1)]		9.01	+/- 0.2 mg/L		7.46	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		19.86			24.98	°C
Baro. Press.	mmHg		751.6			756.1	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	10.1	10	11.1	+/- 0.3 NTU of stan.
Standard	NTU	20	20.1	20	22.1	+/- 5% of standard
Standard	NTU	100	99.6	100	104	+/- 5% of standard
Standard	NTU	800	769	800	782	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:	Groton Site
Lot#/Date Produced:	
Trip Blank Source:	Lab
Sample Preservatives Source:	Lab
Disposable Filter Type:	0.45µm
Calibration Fluids / Standard Source:	
- DO Calibration Fluid (<0.1 mg/L)	---
- Other	---
- Other	---
- Other	---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	M024-29 set	M024-29 set
20 Turb. Stan.	M024-29 set	M024-29 set
100 Turb. Stan.	M024-29 set	M024-29 set
800 Turb. Stan.	M024-29 set	M024-29 set
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-Field Calibration) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/15/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	MAM/CTM
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Mark Maggiore
WEATHER CONDITIONS (AM):	Cloudy ~ 60's	SAMPLER SIGNATURE:	for MAM
WEATHER CONDITIONS (PM):		CHECKED BY:	CTM DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-14

AM CALIBRATION — Start Time: 8:00 End Time: 8:10

PM CALIBRATION CHECK — Start Time: 13:20 End Time: 13:25

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.03	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.01	+/- 0.1 pH Units	7.0	7.03	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	235.0	+/- 10 mV	240	226	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1439	+/- 3% of standard	1413	1410	+/- 5% of standard
DO (saturated)	%	100	99.1	+/- 2% of standard		88.5	%
DO (saturated)	mg/L[1] (see Chart 1)		8.80	+/- 0.2 mg/L		7.21	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		21.01			25.68	°C
Baro. Press.	mmHg		755.8			756.7	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	10.2	10	11.2	+/- 0.3 NTU of stan.
Standard	NTU	20	20.1	20	20.3	+/- 5% of standard
Standard	NTU	100	98.3	100	98.1	+/- 5% of standard
Standard	NTU	800	774	800	769	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Groton Site
Lot#/Date Produced:
Trip Blank Source: Lab
Sample Preservatives Source: Lab
Disposable Filter Type: 0.45µm
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L) ---
- Other ---
- Other ---
- Other ---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	M024-29 set	M024-29 set
20 Turb. Stan.	M024-29 set	M024-29 set
100 Turb. Stan.	M024-29 set	M024-29 set
800 Turb. Stan.	M024-29 set	M024-29 set
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-Field Calibration) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME:	Honeywell - Conductorlab Site, Groton, MA	TASK NO:	DATE: 9/15/2017
PROJECT NUMBER:	3617177412	AMECFW CREW:	CTM/MAM
PROJECT LOCATION:	Groton, MA	SAMPLER NAME:	Chris Mazzolini
WEATHER CONDITIONS (AM):	Overcast, humid ~ 65°F	SAMPLER SIGNATURE:	Chris M
WEATHER CONDITIONS (PM):	Overcast, humid ~ 65°F	CHECKED BY: CTM	DATE: 9/19/2017

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-01

AM CALIBRATION — Start Time: 7:50 End Time: 8:00

PM CALIBRATION CHECK — Start Time: 10:30 End Time: 10:40

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	6.92	+/- 0.3 pH Units
pH (10)	SU	10.0	---	+/- 0.1 pH Units			
Redox	+/- mV	240	241.0	+/- 10 mV	240	241.1	+/- 10 mV
Sp. Conductivity	uS/cm	1413	1413	+/- 3% of standard	1413	1429	+/- 5% of standard
DO (saturated)	%	100	99.4	+/- 2% of standard		84.9	%
DO (saturated)	mg/L[1 (see Chart 1)]		9.07	+/- 0.2 mg/L		7.67	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1	---	< 0.5 mg/L	DO (<0.1)	---	< 0.5 mg/L
Temperature	°C		19.48			20.22	°C
Baro. Press.	mmHg		755.9			757.1	mmHg

TURBIDITY METER

METER TYPE: Hach
MODEL NO.: 2100Q
UNIT ID NO.: M024-36

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	9.90	10	10.2	+/- 0.3 NTU of stan.
Standard	NTU	20	20.2	20	20.6	+/- 5% of standard
Standard	NTU	100	99.2	100	100	+/- 5% of standard
Standard	NTU	800	774	800	787	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

[X] Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

[ ] Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Groton Site
Lot#/Date Produced:
Trip Blank Source: Lab
Sample Preservatives Source: Lab
Disposable Filter Type: 0.45µm
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L) ---
- Other ---
- Other ---
- Other ---

	Cal. Standard Lot Number	Exp. Date
pH (4)	7GD788	4/19
pH (7)	6GF140	6/19
pH (10)	---	---
ORP	0278	11/21
Conductivity	7GE476	5/18
10 Turb. Stan.	A6207	10/17
20 Turb. Stan.	A6207	10/17
100 Turb. Stan.	A6208	10/17
800 Turb. Stan.	A6202B	10/17
PID Span Gas	---	---
O_2-LEL Span Gas	---	---
DO	---	---

NOTES:

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Field Calibration), dated 1/19/2010.

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FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CIW-1B	FIELD SAMPLE ID	C091517-CIW1B	CLIENT	Honeywell
ACTIVITY	START: 11:34 END: 12:45	SAMPLE TIME	12:40	DATE	9/15/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	5.75 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	7.27 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	28.75 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	10 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.24 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 2.50 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.10

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
11:34	5.75	150	Start purge						~ 26 ft.	
11:52	7.00	100	19.50	589	6.45	0.77	63.2	62		
12:00	7.20	100	18.58	559	6.39	0.79	24.9	12.4		
12:20	7.20	100	18.47	566	6.38	0.58	19.2	8.1		
12:25	7.25	100	18.50	576	6.40	0.53	17.4	4.8		
12:30	7.26	100	18.47	581	6.41	0.54	17.1	1.9		
12:35	7.27	100	18.51	584	6.41	0.52	17.0	0.0		
12:40	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-5A	FIELD SAMPLE ID	C091417-CLW5A	CLIENT	Honeywell
ACTIVITY	START: 8:32 END: 9:35	SAMPLE TIME	9:30	DATE	9/14/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	3.44 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	3.93 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	6.80 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	---
REFILL SETTING	--- seconds
DISCHARGE SETTING	--- seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.08 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.90 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.04

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
8:32	3.44	120	Start purge						~ 6 ft.	used Geopump to sample
8:42	3.90	120	19.11	607	5.82	0.96	3.52	267		
8:47	3.91	120	19.09	574	5.82	0.91	2.61	262		
8:52	3.92	120	19.08	557	5.83	1.00	1.76	256		
8:57	3.92	120	19.05	550	5.86	1.01	1.70	252		
9:02	3.92	120	19.08	530	5.87	1.33	1.81	240		
9:07	3.92	120	19.09	517	5.89	1.30	1.82	244		
9:12	3.92	120	19.06	506	5.89	1.22	1.77	241		
9:17	3.93	120	19.09	495	5.89	1.25	1.76	240		
9:22	3.93	120	19.07	488	5.90	1.26	1.77	239		
9:27	3.93	120	19.08	485	5.90	1.27	1.90	238		
9:30	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[ ] QED SAMPLE PRO (1-3/4")
[X] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-5B	FIELD SAMPLE ID	C091417-CLW5B	CLIENT	Honeywell
ACTIVITY	START: 14:41 (9/13/17) END: 10:15 (9/14/17)	SAMPLE TIME	10:10	DATE	9/14/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	3.44 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	N/A feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	18.42 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5.5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: N/A GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 2.40 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: N/A

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
14:41	3.44	200	Start purge						~ 17 ft.	9/13/2017
14:57	Purge well									
15:05	Dry									
10:00	9.33	100	Start purge							9/14/2017
10:05	9.33	100	17.40	1141	6.98	1.17	3.91	225	~ 17 ft.	
10:10	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-8A	FIELD SAMPLE ID	C091217-CLW8A	CLIENT	Honeywell
ACTIVITY	START: 11:45 END: 12:20	SAMPLE TIME	12:10	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	7.50 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	7.79 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	11.30 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	10 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.05 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.80 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.03

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
11:45	7.50	250	Start purge						~ 11.3 ft.	
11:50	7.79	250	18.30	275	5.70	6.98	5.40	143		
11:55	7.79	250	18.07	273	5.72	6.62	3.19	148		
12:00	7.79	250	17.98	273	5.73	6.30	3.80	152		
12:05	7.79	250	17.92	273	5.71	6.01	2.17	156		
12:10	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-16B	FIELD SAMPLE ID	C091417-CLW16B	CLIENT	Honeywell
ACTIVITY	START: 11:42 (9/13/17) END: 14:00 (9/14/17)	SAMPLE TIME	13:55	DATE	9/14/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	10.44 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	N/A feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	31.60 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	10 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	10 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: N/A GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.38 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: N/A

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
11:42	10.44	300	Start purge						~ 31 ft.	9/13/2017
	Purge well									
12:30	Dry									
13:40	10.42	200	Start purge							9/14/2017
13:50	11.00	200	16.27	2534	6.65	1.24	16.9	62	~ 31 ft.	
13:55	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[X] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	DMW-A	FIELD SAMPLE ID	C091217-DMWA	CLIENT	Honeywell
ACTIVITY	START: 8:48 END: 10:10	SAMPLE TIME	10:10	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	4.01 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	4.15 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	14.55 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.02 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 2.60 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
8:48	4.01	100	Start purge						~ 13 ft.	
8:58	4.15	100	17.70	531	5.69	1.43	26.0	228		
9:08	4.15	100	17.69	511	5.79	1.41	17.0	206		
9:13	4.15	100	17.76	505	5.84	1.90	11.2	190		
9:18	4.15	100	17.81	504	5.85	1.60	10.3	180		
9:23	4.15	100	17.84	503	5.86	1.37	9.80	173		
9:28	4.15	100	17.89	503	5.87	1.12	9.10	159		
9:33	4.15	100	17.90	502	5.87	1.10	8.70	146		
9:38	4.15	100	17.93	502	5.87	0.85	8.13	133		
9:43	4.15	100	17.97	503	5.88	0.77	7.78	116		
9:48	4.15	100	18.02	503	5.88	0.76	7.77	108		
9:53	4.15	100	18.10	503	5.89	0.70	7.01	93		
9:58	4.15	100	18.16	503	5.90	0.65	6.53	81		
10:03	4.15	100	18.24	503	5.90	0.62	6.41	77		
10:08	4.15	100	18.27	504	5.90	0.60	6.40	76		
10:10	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	DMW-B	FIELD SAMPLE ID	C091217-DMWB	CLIENT	Honeywell
ACTIVITY	START: 10:28 END: 11:20	SAMPLE TIME	11:15	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	4.30 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	4.30 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	32.07 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	10 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	10 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME	<0.01 GAL	TOTAL VOL. PURGED	1.20 GAL	RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: <0.01

(initial - final x 0.16 {2-inch} or x 0.65 {4-inch}) (purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
10:28	4.30	100	Start purge						~ 30 ft.	
10:38	4.30	100	17.64	572	7.05	6.56	31.3	58		
10:48	4.30	100	17.34	565	7.24	8.34	12.5	58		
10:58	4.30	100	17.34	556	7.35	9.31	10.13	66		
11:03	4.30	100	17.20	553	7.39	9.30	10.01	73		
11:08	4.30	100	17.09	552	7.45	9.30	10.12	76		
11:15	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [ ] **NO** [X] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-1A	FIELD SAMPLE ID	C091417-OSW1A	CLIENT	Honeywell
ACTIVITY	START: 10:21 END: 11:05	SAMPLE TIME	11:00	DATE	9/14/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	4.10 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	4.20 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	10.20 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	10 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.02 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.20 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
10:21	4.20	120	Start purge						~ 9 ft.	
10:31	4.20	120	16.77	325	6.18	3.31	2.33	216		
10:36	4.20	120	16.67	318	6.12	3.26	2.16	216		
10:41	4.20	120	16.94	315	6.11	3.30	2.22	215		
10:46	4.20	120	16.89	313	6.10	3.36	2.17	214		
10:51	4.20	120	16.85	311	6.10	3.31	2.22	214		
11:00	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-1B	FIELD SAMPLE ID	C091417-OSW1B	CLIENT	Honeywell
ACTIVITY	START: 12:12 END: 13:15	SAMPLE TIME	13:10	DATE	9/14/2017

WATER LEVEL / WELL INFORMATION

INITIAL DEPTH TO WATER	4.33 feet	MEASUREMENT POINT	[X] TOP OF WELL RISER [ ] TOP OF CASING
FINAL DEPTH TO WATER	9.98 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
WELL DEPTH	24.50 feet	CASING / WELL DIFFERENCE	see survey
SCREEN LENGTH	5 feet	WELL DIAMETER	2 inches

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.9 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.69 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.53

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
12:12	4.33	250	Start purge						~ 22 ft.	
12:20	9.98	100	16.24	998	6.84	2.31	14.3	80.0		
12:35	9.98	100	16.30	998	6.85	1.17	11.2	67.0		
12:45	9.98	100	17.17	1001	6.87	0.98	10.3	38		
12:50	9.98	100	16.78	1001	6.86	0.88	9.1	18		
12:55	9.98	100	16.43	998	6.85	0.80	8.99	12		
13:00	9.98	100	16.14	993	6.85	0.74	8.55	9		
13:05	9.98	100	16.09	992	6.84	0.69	8.16	12		
13:10	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-2B	FIELD SAMPLE ID	C091317-OSW2B	CLIENT	Honeywell
ACTIVITY	START: 9:36 END: 11:25	SAMPLE TIME	11:20	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

INITIAL DEPTH TO WATER	6.88 feet	MEASUREMENT POINT	[X] TOP OF WELL RISER [ ] TOP OF CASING
FINAL DEPTH TO WATER	6.88 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
WELL DEPTH	23.10 feet	CASING / WELL DIFFERENCE	see survey
SCREEN LENGTH	5 feet	WELL DIAMETER	2 inches

PUMP SETTINGS

PRESSURE TO PUMP (psi)	20 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME <0.01 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED 3.51 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED <0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
9:36	6.88	150	Start purge						~ 22 ft.	
9:46	6.88	150	13.31	1655	6.81	1.70	66.4	167.0		
9:56	6.88	150	12.73	1488	6.77	0.65	34.3	168		
10:06	6.88	150	12.85	1472	6.78	0.66	22.9	175		
10:16	6.88	150	13.11	1466	6.78	0.74	17.0	176.0		
10:26	6.88	150	12.93	1457	6.78	0.63	10.1	177		
10:36	6.88	150	12.97	1402	6.73	0.62	5.86	178		
10:41	6.88	150	13.01	1342	6.69	0.75	5.93	178		
10:46	6.88	150	13.04	1215	6.66	1.46	4.98	178		
11:05	6.88	150	13.11	653	6.66	4.96	4.90	182		
11:15	6.88	150	13.06	560	6.66	5.73	4.91	184		
11:20	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [**NO**] To ground

MISC. OBSERVATIONS

SC and DO not stable

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C), pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-3A	FIELD SAMPLE ID	C091317-OSW3A	CLIENT	Honeywell
ACTIVITY	START: 12:50 END: 13:35	SAMPLE TIME	13:30	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	7.99 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	10.15 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	13.00 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	-- psi
REFILL SETTING	-- seconds
DISCHARGE SETTING	-- seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.34 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.78 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.19

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
12:50	7.99	200	Start purge						~ 12 ft.	
13:13	10.22	200	15.51	295	5.80	0.99	2.26	183		
13:18	10.15	150	15.32	290	5.72	1.00	2.02	184		
13:23	10.15	150	15.31	286	5.68	1.01	1.71	184		
13:28	10.15	150	15.46	286	5.68	1.00	1.70	183		
13:30	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[ ] QED SAMPLE PRO (1-3/4")
[ ] OTHER _____
[X] PERISTALTIC

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-3B	FIELD SAMPLE ID	C091417-OSW3B	CLIENT	Honeywell
ACTIVITY	START: 13:56 (9/13/17) END: 14:50 (9/14/17)	SAMPLE TIME	14:45	DATE	9/14/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	8.33 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	N/A feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	32.15 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	20 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: N/A GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.81 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: N/A

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
13:56	8.33	350	Start purge						~ 31 ft.	9/13/2017
	Purge well									
14:20	Dry									
14:34	8.34	200	Start purge							9/14/2017
14:40	9.11	200	14.90	1548	6.73	4.35	26.6	8.4	~ 31 ft.	
14:45	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-4i	FIELD SAMPLE ID	C091217-OSW4i	CLIENT	Honeywell
ACTIVITY	START: 12:27 END: 13:00	SAMPLE TIME	12:55	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	4.03 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	4.60 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	17.20 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	10 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.09 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 0.91 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.10

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
12:27	4.03	100	Start purge						~ 16 ft.	
12:39	4.65	100	17.42	409	6.08	1.41	8.21	168		
14:44	4.60	100	17.55	404	6.05	1.40	3.15	163		
12:49	4.60	100	17.86	400	6.03	1.39	3.16	158		
12:54	4.60	100	17.97	400	5.98	1.30	1.81	156		
12:55	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	OSW-7	FIELD SAMPLE ID	C091217-OSW7	CLIENT	Honeywell
ACTIVITY	START: 13:20 END: 14:20	SAMPLE TIME	14:15	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	6.30 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	6.51 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	13.81 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.03 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 2.10 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
13:20	6.30	150	Start purge						~ 12 ft.	
13:30	6.51	150	19.31	281	5.90	3.99	58.0	154		
13:38	6.51	150	18.87	281	5.98	3.25	34.7	149		
13:45	6.51	150	18.71	281	5.93	2.92	19.5	147		
13:55	6.51	150	18.50	281	5.99	2.77	11.20	141		
14:00	6.51	150	18.47	282	5.99	2.71	4.47	140		
14:05	6.51	150	18.42	282	5.99	2.83	3.34	139		
14:10	6.51	150	18.17	280	5.99	2.78	2.98	139		
14:15	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C), pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	PP-2	FIELD SAMPLE ID	C091317-PP2	CLIENT	Honeywell
ACTIVITY	START: 8:26 END: 9:10	SAMPLE TIME	9:05	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	6.70 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	7.44 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	16.90 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.12 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.10 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.11

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
8:29	6.70	120	Start purge						~ 15 ft.	
8:35	7.44	120	17.68	436	5.64	1.07	14.0	261		
8:40	7.44	120	17.64	438	5.80	0.99	10.0	242		
8:45	7.44	120	17.53	438	5.86	1.00	9.88	236		
8:50	7.44	120	17.60	436	5.91	1.11	9.63	230		
8:55	7.44	120	17.62	436	5.92	1.10	9.31	227		
9:00	7.44	120	17.74	437	5.94	1.10	9.30	222		
9:05	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	PP-3	FIELD SAMPLE ID	C091317-PP3	CLIENT	Honeywell
ACTIVITY	START: 14:00 END: 15:20	SAMPLE TIME	15:15	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	17.03 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	19.23 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	24.89 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	18 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.35 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.60 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.10

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
14:10	18.05	170	15.39	1185	7.05	27.3	21.1	105.3	~ 23 ft.	
14:20	18.71	170	14.50	1189	7.21	1.61	11.2	35.5		
14:35	19.10	170	14.45	1201	7.26	0.41	9.6	2.9		
14:50	19.18	170	13.48	1209	7.18	0.33	6.82	5.1		
15:00	19.20	170	13.10	1199	7.17	0.42	4.71	20.2		
15:05	19.22	170	12.98	1196	7.16	0.47	2.93	27.3		
15:10	19.23	170	12.96	1194	7.16	0.49	2.43	28.3		
15:15	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	PP-4A	FIELD SAMPLE ID	C091517-PP4A	CLIENT	Honeywell
ACTIVITY	START: 8:30 END: 9:35	SAMPLE TIME	9:35	DATE	9/15/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	12.30 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	13.72 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	24.35 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	10 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.23 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.70 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.13

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
8:30	12.30	110	Start purge						~ 22 ft.	
8:45	13.71	110	16.16	738	6.51	1.29	87.9	272		turbid
8:55	13.71	110	15.62	688	6.67	0.67	61.2	262		
9:05	13.71	110	15.55	682	6.67	0.60	41.1	258		
9:10	13.72	110	15.52	682	6.61	0.63	20.7	255		
9:15	13.72	110	15.58	684	6.75	0.65	16.1	253		
9:20	13.72	110	16.33	688	6.76	0.72	14.2	251		
9:25	13.72	110	16.50	690	6.78	0.71	14.1	248		
9:30	13.72	110	16.06	696	6.78	0.68	14.2	241		
9:35	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	PP-4B	FIELD SAMPLE ID	C091517-PP4B	CLIENT	Honeywell
ACTIVITY	START: 9:58 END: 11:05	SAMPLE TIME	11:00	DATE	9/15/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	11.98 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	17.00 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	33.73 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.80 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.78 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.45

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
9:58	11.98	110	Start purge						~ 32 ft.	
10:08	12.35	110	14.86	3069	6.08	2.61	96.8	237		
10:13	13.30	110	15.18	3079	6.05	1.88	63.1	237		
10:18	13.58	110	15.98	2965	6.08	1.52	49.8	236		
10:31	15.70	110	16.59	2255	6.33	0.91	32.1	234		
10:41	16.80	110	17.06	2183	6.31	0.90	25.2	232		
10:51	16.85	110	17.15	2163	6.41	0.89	18.6	232		
10:56	17.00	110	17.04	2160	6.41	0.85	17.6	231		
11:00	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [ ] QED SAMPLE PRO (1-3/4")
- [X] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: MAM

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-17	FIELD SAMPLE ID	C091317-CLW17	CLIENT	Honeywell
ACTIVITY	START: 10:00 END: 11:30	SAMPLE TIME	11:25	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

INITIAL DEPTH TO WATER	7.52 feet	MEASUREMENT POINT	[X] TOP OF WELL RISER [ ] TOP OF CASING
FINAL DEPTH TO WATER	7.90 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
WELL DEPTH	19.97 feet	CASING / WELL DIFFERENCE	see survey
SCREEN LENGTH	5 feet	WELL DIAMETER	2 inches

PUMP SETTINGS

PRESSURE TO PUMP (psi)	18 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.06 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.70 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
10:20	7.90	200	14.54	331	6.85	14.53	46.1	137.6	~ 18 ft.	
10:35	7.90	200	13.53	434	6.85	1.12	26.1	137.6		
10:50	7.90	200	13.24	486	6.89	0.96	16.10	126.0		
11:00	7.90	200	13.61	499	6.88	0.97	4.98	120.7		
11:10	7.90	200	12.83	551	6.88	0.97	4.67	117.8		
11:15	7.90	200	12.82	554	6.88	0.97	3.98	115.7		
11:20	7.90	200	12.81	557	6.88	0.96	4.14	114.2		
11:25	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [**NO**] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-17B	FIELD SAMPLE ID	C091317-CLW17B	CLIENT	Honeywell
ACTIVITY	START: 11:40 END: 13:10	SAMPLE TIME	13:05	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	6.61 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	11.56 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	31.60 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	18 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.80 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.20 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.25

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
11:50	7.42	170	12.83	743	7.90	1.48	7.81	-32.7	~ 29 ft.	
12:05	9.46	170	14.40	732	8.53	1.1	5.78	-44.7		
12:20	10.50	150	14.48	740	8.32	1.13	2.61	-4.7		
12:30	11.08	150	14.31	774	7.76	0.92	2.21	10.8		
12:40	11.40	150	14.42	790	7.61	0.85	3.10	16.6		
12:50	11.50	150	14.46	797	7.54	0.70	4.71	18.2		
12:55	11.54	150	14.48	810	7.50	0.65	3.62	19.1		
13:00	11.56	150	14.49	812	7.49	0.63	2.98	20.1		
13:05	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-19	FIELD SAMPLE ID	C091217-CLW19	CLIENT	Honeywell
ACTIVITY	START: 12:00 END: 12:50	SAMPLE TIME	12:45	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	4.54 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	4.65 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	13.35 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	15 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME	0.02 GAL	TOTAL VOL. PURGED	2.70 GAL	RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: <0.01

(initial - final x 0.16 {2-inch} or x 0.65 {4-inch}) (purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
12:00	4.65	220	15.56	446	6.74	6.50	31.2	111.5	~ 12 ft.	
12:15	4.65	220	14.96	438	6.66	0.77	11.4	95.6		
12:25	4.65	200	14.84	437	6.64	0.74	9.20	89.6		
12:30	4.65	200	14.98	436	6.62	0.69	1.74	87.4		
12:35	4.65	200	15.01	437	6.61	0.67	2.17	86.2		
12:40	4.65	200	15.03	437	6.61	0.67	1.96	86.1		
12:45	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-19B	FIELD SAMPLE ID	C091217-CLW19B	CLIENT	Honeywell
ACTIVITY	START: 13:00 END: 13:55	SAMPLE TIME	13:50	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	3.44 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	3.57 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	21.92 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	18 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.02 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 2.70 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: <0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
13:10	3.56	260	15.10	505	7.05	2.25	28.4	78.4	~ 20 ft.	
13:25	3.57	260	13.91	460	6.70	0.73	8.15	40.6		
13:30	3.57	260	14.23	451	6.54	0.60	5.77	36.2		
13:35	3.57	260	13.92	448	6.34	0.57	3.86	40.5		
13:40	3.57	260	13.97	448	6.36	0.55	2.98	38.2		
13:45	3.57	260	13.99	447	6.36	0.54	2.26	36.1		
13:50	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[X] QED SAMPLE PRO (1-3/4")
[ ] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-20	FIELD SAMPLE ID	C091217-CLW20	CLIENT	Honeywell
ACTIVITY	START: 8:30 END: 10:00	SAMPLE TIME	9:50	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	4.91 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	5.08 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	15.14 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	10 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	17 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.03 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.24 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: <0.01

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
8:50	5.07	220	13.44	381	6.14	5.05	34.0	192.8	~ 12 ft.	
9:00	5.08	220	13.60	350	6.09	2.20	44.2	180.0		
9:10	5.08	220	13.82	355	6.13	1.45	23.4	172.7		
9:25	5.08	220	14.03	363	6.14	1.47	7.67	159.5		
9:35	5.08	220	14.70	363	6.16	1.50	5.21	146.5		
9:40	5.08	220	14.68	368	6.15	1.61	5.16	139.6		
9:45	5.08	220	14.66	370	6.15	1.64	5.08	137.4		
9:50	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-20B	FIELD SAMPLE ID	C091217-CLW20B	CLIENT	Honeywell
ACTIVITY	START: 10:05 END: 11:20	SAMPLE TIME	11:15	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
- [X] TOP OF WELL RISER
- [ ] TOP OF CASING

INITIAL DEPTH TO WATER	5.05 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	6.20 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	42.73 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	10 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	25 psi
REFILL SETTING	10 seconds
DISCHARGE SETTING	5 seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.20 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 3.10 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.06

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
10:20	5.51	200	13.40	707	7.59	2.46	25.2	107.1	~ 40 ft.	
10:35	6.19	200	12.18	753	7.71	0.65	34.3	81.5		
10:50	6.20	200	12.13	762	7.70	0.52	20.4	59.1		
11:00	6.20	200	12.08	775	7.70	0.49	9.65	43.4		
11:05	6.20	200	12.09	775	7.69	0.46	9.89	41.6		
11:10	6.20	200	12.14	776	7.68	0.47	10.2	39.7		
11:15	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] QED SAMPLE PRO (1-3/4")
- [ ] PERISTALTIC
- [ ] OTHER _____

TYPE OF TUBING
- [X] LOW DENSITY POLYETHYLENE (Teflon-lined)
- [ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-22	FIELD SAMPLE ID	C091217-CLW22	CLIENT	Honeywell
ACTIVITY	START: 14:20 END: 15:25	SAMPLE TIME	15:20	DATE	9/12/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	7.90 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	8.98 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	11.85 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	5 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	-- psi
REFILL SETTING	-- seconds
DISCHARGE SETTING	-- seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.17 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 1.60 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.11

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
14:40	8.70	150	14.03	2137	6.22	1.43	1.19	94.9	~ 10 ft.	
14:50	8.90	150	13.76	2311	6.36	0.78	1.60	54.5		
15:00	8.95	150	13.60	2042	6.48	1.09	2.86	40.4		
15:05	8.97	150	13.42	1842	6.57	1.46	2.22	33.1		
15:10	8.97	150	13.50	1780	6.58	1.52	1.97	32.7		
15:15	8.98	150	13.52	1769	6.58	1.61	1.51	32.8		
15:20	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[ ] QED SAMPLE PRO (1-3/4")
[X] PERISTALTIC
[ ] OTHER _____

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

amec foster wheeler

QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	Honeywell Conductorlab Site, Groton, MA	EVENT NAME	Sept. 2017 Semi-Annual	JOB NUMBER	3617177412
LOCATION ID	CLW-22B	FIELD SAMPLE ID	C091317-CLW22B	CLIENT	Honeywell
ACTIVITY	START: 8:15 END: 9:30	SAMPLE TIME	9:25	DATE	9/13/2017

WATER LEVEL / WELL INFORMATION

MEASUREMENT POINT
[X] TOP OF WELL RISER
[ ] TOP OF CASING

INITIAL DEPTH TO WATER	8.23 feet	PROTECTIVE CASING STICKUP (FROM GROUND)	see survey
FINAL DEPTH TO WATER	9.23 feet	CASING / WELL DIFFERENCE	see survey
WELL DEPTH	23.47 feet	WELL DIAMETER	2 inches
SCREEN LENGTH	10 feet		

PUMP SETTINGS

PRESSURE TO PUMP (psi)	-- psi
REFILL SETTING	-- seconds
DISCHARGE SETTING	-- seconds

PID READINGS

PID MODEL	----
PID WELL MOUTH	----
PID AMBIENT AIR	----

WELL DIAMETER FACTORS / VOLUME INFORMATION

DIAMETER (inches)	1.0	1.5	2.0	4.0	6.0	8.0
GALLONS/FOOT	0.041	0.092	0.163	0.653	1.469	2.611

DRAWDOWN VOLUME: 0.16 GAL
(initial - final x 0.16 {2-inch} or x 0.65 {4-inch})

TOTAL VOL. PURGED: 2.70 GAL
(purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter)

RATIO OF DRAWDOWN VOLUME TO VOLUME PURGED: 0.06

PURGE DATA

TIME	DEPTH TO WATER (ft.)	PURGE RATE (ml/min)	TEMP. (+/- deg. C)	SPECIFIC CONDUCTIVITY (µS/cm)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (NTU)	ORP (+/- mV)	PUMP INTAKE DEPTH (ft.)	COMMENTS
8:40	8.95	170	12.04	1408	6.59	17.26	2.62	222.0	~ 22 ft.	
8:50	9.20	170	12.12	1392	6.67	3.17	4.88	208.2		
9:00	9.22	170	12.32	1277	6.71	2.02	2.67	192.1		
9:10	9.23	170	12.43	1274	6.71	1.81	2.07	181.1		
9:15	9.23	170	12.51	1280	6.71	1.75	1.96	175.4		
9:20	9.23	170	12.53	1282	6.71	1.74	1.84	174.1		
9:25	Collect sample									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
[ ] QED SAMPLE PRO (1-3/4")
[ ] OTHER _____
[X] PERISTALTIC

TYPE OF TUBING
[X] LOW DENSITY POLYETHYLENE (Teflon-lined)
[ ] OTHER _____

ANALYTICAL PARAMETERS

LAB ANALYSIS	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[X] VOCs	SW 846 Method 8260B MCP	HCL / 4 DEG. C	3 X 40 mL VOA	[X]
[X] Hexavalent Chromium	SW 846 Method 7196A MCP	4 DEG. C	1 X 250 mL P	[X]
[X] Total Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 250 mL P	[X]
[ ] Sel. Total Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Dissolved Chromium	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] Sel. Dissolved Metals (Fe)	SW846 6010B MCP	HNO3 to pH <2	1 X 500 mL P	[ ]
[ ] TOC	415.1	H2SO4/ 4 DEG. C	2 X 40 mL VOA	[ ]
[ ] Alkalinity	310.1	4 DEG. C	1 X 500 mL P	[ ]

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED **YES** [NO] To ground

MISC. OBSERVATIONS

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QC INFORMATION

SAMPLED BY: JHP

FIELD FORM PREP. BY: MAM

FIELD FORM CHECK BY: CTM

NOTES:

Stabilization is considered to be achieved when three consecutive readings are taken at 5 minute intervals and are within the following limits:
turbidity (10% for values > than 5 NTU), specific conductivity (3%), temperature (3%˚C),
pH (± 0.1units), dissolved oxygen (10%) for values > 0.5 mg/L, ORP (±10 mV)

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 9/15/2017
FIELD SAMPLE ID: C091517-CSW2
ACTIVITY TIME: START 9:20 END 9:30
BOTTLE TIME: 9:25
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.40 ft.	SPEC. COND	291 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.20 ft.	D.O.	4.26 mg/L
TEMPERATURE	17.29 DEG C	SALINITY	--- %
TURBIDITY	0.94 NTU	ORP	108.0 mV
pH	7.11 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]
SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

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SIGNATURE: _____

Sampled by: CTM
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 9/15/2017
FIELD SAMPLE ID: C091517-CSW3
ACTIVITY TIME: START 9:00 END 9:10
BOTTLE TIME: 9:05
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	1.00 ft.	SPEC. COND	283 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.50 ft.	D.O.	3.82 mg/L
TEMPERATURE	15.71 DEG C	SALINITY	--- %
TURBIDITY	0.71 NTU	ORP	156.7 mV
pH	6.64 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]

SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

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SIGNATURE: Ch M

Sampled by: CTM
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 9/15/2017
FIELD SAMPLE ID: C091517-CSW3A
ACTIVITY TIME: START 8:45 END 8:55
BOTTLE TIME: 8:50
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION: 0.40 ft.
SPEC. COND: 311 µS/cm
DEPTH OF SAMPLE FROM SURFACE: 0.20 ft.
D.O.: 6.01 mg/L
TEMPERATURE: 15.88 DEG C
SALINITY: --- %
TURBIDITY: 1.09 NTU
ORP: 140.6 mV
pH: 6.76 UNITS

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]

SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

amec foster wheeler

SIGNATURE: Ch Mm

Sampled by: CTM
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 9/15/2017
FIELD SAMPLE ID: C091517-CSW5
ACTIVITY TIME: START 8:30 END 8:40
BOTTLE TIME: 8:35
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.40 ft.	SPEC. COND	391 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.20 ft.	D.O.	4.22 mg/L
TEMPERATURE	15.14 DEG C	SALINITY	--- %
TURBIDITY	0.98 NTU	ORP	83.7 mV
pH	6.63 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]
SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

amec foster wheeler

SIGNATURE: Ch Mm

Sampled by: CTM
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA | JOB NUMBER: 3617177412 | DATE: 12/18/2017

FIELD SAMPLE ID: C121817-CSW2 | ACTIVITY TIME: START 12:25 END 12:30 | BOTTLE TIME: 12:30

QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.60 ft.	SPEC. COND	341 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.30 ft.	D.O.	12.87 mg/L
TEMPERATURE	1.01 DEG C	SALINITY	--- %
TURBIDITY	0.50 NTU	ORP	289.1 mV
pH	7.41 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ] END DEPTH [ ]

TYPE OF SAMPLE GRAB [ ]

SAMPLE OBSERVATIONS

ODOR _____

COLOR _____

FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

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SIGNATURE: [signature] for SAI

Sampled by: SAI
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 12/18/2017
FIELD SAMPLE ID: C121817-CSW3
ACTIVITY TIME: START 12:10 END 12:15
BOTTLE TIME: 12:15
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.60 ft.	SPEC. COND	341 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.30 ft.	D.O.	11.63 mg/L
TEMPERATURE	1.58 DEG C	SALINITY	--- %
TURBIDITY	0.59 NTU	ORP	288.4 mV
pH	7.35 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]
SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

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SIGNATURE: [signature] for SAI

Sampled by: SAI
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 12/18/2017
FIELD SAMPLE ID: C121817-CSW3A
ACTIVITY TIME: START 11:45 END 11:50
BOTTLE TIME: 11:50
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.60 ft.	SPEC. COND	349 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.30 ft.	D.O.	11.51 mg/L
TEMPERATURE	1.76 DEG C	SALINITY	--- %
TURBIDITY	0.51 NTU	ORP	281.0 mV
pH	7.41 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]

SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

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SIGNATURE: Ch for SAI

Sampled by: SAI
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 12/18/2017
FIELD SAMPLE ID: C121817-CSW4
ACTIVITY TIME: START 11:25 END 11:30
BOTTLE TIME: 11:30
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.60 ft.	SPEC. COND	350 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.30 ft.	D.O.	12.40 mg/L
TEMPERATURE	1.36 DEG C	SALINITY	--- %
TURBIDITY	0.57 NTU	ORP	227.5 mV
pH	7.55 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]

SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

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SIGNATURE: Ch Mr for SAI

Sampled by: SAI
Prepared by: MAM
Checked by: CTM

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - SURFACE WATER

PROJECT: HONEYWELL - CONDUCTORLAB, GROTON, MA
JOB NUMBER: 3617177412
DATE: 12/18/2017
FIELD SAMPLE ID: C121817-CSW5
ACTIVITY TIME: START 11:00 END 11:05
BOTTLE TIME: 11:05
QC SAMPLES COLLECTED: ---

SURFACE WATER DATA

WATER DEPTH AT LOCATION	0.60 ft.	SPEC. COND	391 µS/cm
DEPTH OF SAMPLE FROM SURFACE	0.30 ft.	D.O.	12.49 mg/L
TEMPERATURE	1.51 DEG C	SALINITY	--- %
TURBIDITY	0.97 NTU	ORP	138.1 mV
pH	7.49 UNITS		

EQUIPMENT USED
- [ ] BEAKER
- [X] DIRECT DIP
- [ ] PERISTALTIC PUMP
- [ ] FILTER (0.45 micron)
- [ ] LDPE Tubing & Silicon

TYPE OF SURFACE WATER
- [X] STREAM/ RIVER
- [ ] LAKE/ POND
- [ ] SEEP
- [ ] MARSH
- [ ] OTHER _____

DECON FLUIDS USED:
- [ ] DI WATER
- [ ] POTABLE WATER
- [X] NONE

SEDIMENT DATA

SEDIMENT SAMPLE START DEPTH [ ]
END DEPTH [ ]
TYPE OF SAMPLE GRAB [ ]
SAMPLE OBSERVATIONS
ODOR _____
COLOR _____
FLOC OBSERVED _____

TYPE OF SEDIMENT
- [ ] ORGANIC
- [ ] SAND
- [ ] GRAVEL
- [ ] CLAY
- [ ] OTHER _____

CLEAR OF LEAF LITTER _____

EQUIPMENT FOR COLLECTION
- [ ] HAND AUGER
- [ ] S.S. SPOON
- [ ] ALUMINIUM PAN
- [ ] DREDGE
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] DI WATER
- [ ] POTABLE WATER
- [ ] LIQUINOX
- [ ] OTHER _____

ANALYTICAL PARAMETERS
SURFACE WATER

		METHOD NUMBER	FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
X	VOCs	8260	N	HCl / 4 DEG. C	3 X 40 mL	X
X	Dissolved Metals	6010B	Lab	4 DEG. C	1 X 250 mL	X
X	Hex Cr.	7196A	N	4 DEG. C	1 X 250 mL	X
	Sulfate/Chloride/Alkalinity	300	N	4 DEG. C	1 X 60 mL	
	Dissolved Organic/Inorganic Carbon	SM 5310 B	N	4 DEG. C	2 X 40 mL	
	Sulfide	SM 4500	N	4 DEG. Zinc NAOH	1 X 250 mL	

ANALYTICAL PARAMETERS
SEDIMENT

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED

NOTES

amec foster wheeler

SIGNATURE: [signature] for SAI

Sampled by: SAI
Prepared by: MAM
Checked by: CTM

APPENDIX C

DATA VALIDATION REPORTS AND ANALYTICAL DATA PACKAGES *(PROVIDED ON CD)*

DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

1.0 INTRODUCTION

Data validation was completed on samples collected during the groundwater sampling event completed in September 2017. A summary of samples included in this report is presented in Table 1. Samples were reported in data packages 480-124040-1, 480-124118-1, 480-124202-1, 480-124283-1 and 480-124284-1. Samples were analyzed by the following Test America Laboratory (TAL):

TAL BUF- Test America Buffalo, Amherst, NY

The following U.S. Environmental Protection Agency (USEPA) SW-846 (USEPA, 1996a) analytical methods were performed:

- Volatile organic compounds (VOCs) by USEPA Method 8260C
- Metals by USEPA Method 6010
- Hexavalent chromium by USEPA Method 7196A

Data validation was completed using Level II procedures described for Honeywell projects. Quality control (QC) data were compared to limits established for the Massachusetts Contingency Plan (MCP) in the Massachusetts Compendium of analytical methods (MassDEP, 2010) if available. Data qualifiers were added to results if needed in accordance with general procedures described in USEPA data validation guidelines (USEPA, 1996b). A summary of QC limits used during this review is presented on Table 2.

During the Level II data validation the following data quality indicators are reviewed.

- Lab Report Narrative
- Data Completeness and Chain of Custody
- Sample Collection and Holding Times
- Blanks
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Field Duplicates
- Surrogate Spikes
- Reporting Limits
- Electronic Data Verification

Data reviews are completed using laboratory QC summary forms. Data qualifications are completed if necessary in accordance with the guidelines using the following qualifiers:

U = The target compound was not detected at a concentration greater than, or equal to, the quantitation limit.
J = The reported concentration is considered an estimated value
UJ = The target compound was not detected and the reporting limit is considered to be estimated.

R= The reported value is rejected and is considered to be unusable.

The Level II validation qualification actions for this data set and associated validation reason codes are presented on Table 3. The following data validation reason codes were applied to one or more sample results,

BL2 = Result qualified due to Equipment Blank
LCSL= LCS duplicate recovery less than the lower limit
LCSDL= LCS duplicate recovery less than the lower limit
MSL= Matrix spike recovery less than the lower limit
MSDL= Matrix spike duplicate recovery less than the lower limit

A complete summary of final sample results is provided on Table 4.

2.0 DATA VALIDATION ACTIONS AND OBSERVATIONS

Quality control (QC) parameters and measurements checked during validation met requirements in the analytical method and/or validation guidelines. Unless specified below, results are interpreted to be usable as reported by the laboratory.

2.1 VOCs

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
  LCS/LCSD
  MS/MSD
* Field Duplicates
* Surrogate Recoveries
  Project Reporting Limits

* - Validation checks met project and method goals.

<u>LCS/LCSD</u>

LCS and LCSD percent recoveries were lower than the QC limit of 70 percent for dichlorodifluoromethane (69/62) in batch 480-376934, which may indicate low bias. Dichlorodifluoromethane was not detected in associated samples and reporting limits were qualified as estimated (UJ) with reason code LCSL, LCSDL.

<u>MS/MSD</u>

MS and MSD analyses were completed using sample C041917-OSW4I. The MS and/or MSD percent recoveries for dichlorodifluoromethane (58/72), trichloroethene (52/61) and vinyl chloride (69/82) were lower than the QC limit of 70, which may indicate low bias. These compound results in the sample C091217-OSW7 and its field duplicate C091217-OSW7DUP were qualified as estimated (UJ) with reason code MSL, MSDL.

Reporting Limits

A subset of samples was analyzed at a dilution. Reporting limits for target compounds in the following samples are elevated due to dilution

Field Sample ID	Lab Sample ID	Method	DF
C091317-CLW17B	480-124118-6	SW8260	2
C091417-CLW5B	480-124202-2	SW8260	2
C0901517-PP4A	480-124283-1	SW8260	4
C091217-OSW4I	480-124040-9	SW8260	8
C091217-OSW7	480-124040-10	SW8260	10
C091217-OSW7DUP	480-124040-11	SW8260	10
C091317-PP2	480-124118-1	SW8260	10
C091317-PP3	480-124118-7	SW8260	10
C091417-OSW3B	480-124202-5	SW8260	10
C0901517-CIW1B	480-124283-3	SW8260	20
C0901517-PP4B	480-124283-2	SW8260	20
C091317-OSW2B	480-124118-2	SW8260	40
C091417-OSW1B	480-124202-4	SW8260	50
C091417-CLW16B	480-124202-6	SW8260	100

2.2 Metals

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
* LCS/LCSD
* MS/MSD
* Field Duplicates
* Project Reporting Limits

* - Validation checks met project and method goals.

2.3 General Chemistry – Hexavalent Chromium

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
  Blank Contamination
* LCS/LCSD
* MS/MSD
* Field Duplicates
* Laboratory Duplicates

* Project Reporting Limits

* - Validation checks met project and method goals.

Blanks

Hexavalent chromium was detected below the reporting limit (0.0056 mg/l) in equipment blank C0901517. Hence, an action limit was established at five times of the reported blank concentration. Hexavalent chromium result in associated sample was detected less than the action limit and was qualified as non-detect (U) at the reporting limit with reason code BL2.

References:

American Public Health Association (APHA), 2008. "Standard Methods for Examination of Water and Wastewater"; On-line Publication; APHA, 1015 Fifteenth St., NW. Washington, D.C. 20005.

Massachusetts Department of Environmental Protection (MassDEP), 2010. "The Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the Massachusetts Contingency Plan (MCP)"; Bureau of Waste Site Cleanup; 1 Winter Street, Boston, Massachusetts 02108; WSC-CAM; July 2010.

U.S. Environmental Protection Agency (USEPA), 1996a. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 -December 1996.

U.S. Environmental Protection Agency (USEPA), 1996b. "Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses"; Quality Assurance Unit Staff; Office of Environmental Measurement and Evaluation; December, 1996.

Data Validator: Sandhyasree

October 24, 2017

Senior Chemist: Chris Ricardi, NRCC-EAC

Chris Ricardi

October 27, 2017

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

				Parameter	VOCs	Dissolved Metals	Chromium (Total)	Cr (VI)
				Method	SW8260C	SW846 6010	SW846 6010	SW846 7196A
SDG	Field Sample ID	Location ID	Type	Date				
480-124040-1	C091217-CLW19	CLW-19	REG	9/12/2017	71		1	1
480-124040-1	C091217-CLW19B	CLW-19B	REG	9/12/2017	71		1	1
480-124040-1	C091217-CLW20	CLW-20	REG	9/12/2017	71		1	1
480-124040-1	C091217-CLW20B	CLW-20B	REG	9/12/2017	71		1	1
480-124040-1	C091217-CLW22	CLW-22	REG	9/12/2017	71		1	1
480-124040-1	C091217-CLW8A	CLW-8	REG	9/12/2017	71		1	1
480-124040-1	C091217-DMWA	DMW-A	REG	9/12/2017	71		1	1
480-124040-1	C091217-DMWB	DMW-B	REG	9/12/2017	71		1	1
480-124040-1	C091217-OSW4I	OSW-4I	REG	9/12/2017	71		1	1
480-124040-1	C091217-OSW7	OSW-7A	REG	9/12/2017	71		1	1
480-124040-1	C091217-OSW7DUP	OSW-7A	FD	9/12/2017	71		1	1
480-124118-1	C091317-CLW17	CLW-17	REG	9/13/2017	71		1	1
480-124118-1	C091317-CLW17B	CLW-17B	REG	9/13/2017	71		1	1
480-124118-1	C091317-CLW22B	CLW-22B	REG	9/13/2017	71		1	1
480-124118-1	C091317-OSW2B	OSW-2B	REG	9/13/2017	71		1	1
480-124118-1	C091317-OSW3A	OSW-3A	REG	9/13/2017	71		1	1
480-124118-1	C091317-PP2	PP-2	REG	9/13/2017	71		1	1
480-124118-1	C091317-PP3	PP-3	REG	9/13/2017	71		1	1
480-124202-1	C091417-CLW16B	CLW-16B	REG	9/14/2017	71		1	1
480-124202-1	C091417-CLW5A	CLW-5A	REG	9/14/2017	71		1	1
480-124202-1	C091417-CLW5B	CLW-5B	REG	9/14/2017	71		1	1
480-124202-1	C091417-OSW1A	OSW-1A	REG	9/14/2017	71		1	1
480-124202-1	C091417-OSW1B	OSW-1B	REG	9/14/2017	71		1	1
480-124202-1	C091417-OSW3B	OSW-3B	REG	9/14/2017	71		1	1
480-124283-1	C0901517-CIW1B	CIW-1B	REG	9/15/2017	71		1	1
480-124283-1	C0901517-PP4A	PP-4A	REG	9/15/2017	71		1	1
480-124283-1	C0901517-PP4B	PP-4B	REG	9/15/2017	71		1	1
480-124283-1	C0901517-RB1	QC	EB	9/15/2017	71		1	1

Prepared by:Sandhyasree 10/24/2017
Checked by: Suresh 10/24/2017

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

				Parameter	VOCs	Dissolved Metals	Chromium (Total)	Cr (VI)
				Method	SW8260C	SW846 6010	SW846 6010	SW846 7196A
SDG	Field Sample ID	Location ID	Type	Date				
480-124283-1	C0901517-RB2	QC	EB	9/15/2017	71		1	1
480-124283-1	C0901517-TRIP BLANK	QC	TB	9/15/2017	71			
480-124284-1	C091517-CSW2	CSW-2	REG	9/15/2017	71	6		1
480-124284-1	C091517-CSW3	CSW-3	REG	9/15/2017	71	6		1
480-124284-1	C091517-CSW3A	CSW-3A	REG	9/15/2017	71	6		1
480-124284-1	C091517-CSW5	CSW-5	REG	9/15/2017	71	6		1

REG: Regular Sample
FD: Field Duplicate
TB : Trip Blank
EB:Equipment Blank

Prepared by:Sandhyasree 10/24/2017
Checked by: Suresh 10/24/2017

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

PARAMETER	QC TEST	ANALYTE	WATER	
			(%R)	RPD
Volatiles	**Surrogate**	All Surrogates	70 - 130	
	LCS/LCSD	All Target Compounds	70 - 130	20
	MS/MSD	All Target Compounds	70 - 130	20
	Field Duplicates	All Target Compounds	n/a	30
Inorganics	**LCS/LCSD**	All Target Analytes	80 - 120	20
	MS/MSD	All Target Analytes	75 - 125	20
	Lab Duplicates	All Target Analytes	n/a	20
	Field Duplicates	All Target Analytes	n/a	30

Notes:
LCS/LCSD = Laboratory Control Sample/Laboratory Control Sample
MS/MSD = Matrix spike/ Matrix Spike Duplicate
RPD = Relative percent difference
%R = Percent Recovery
QC = Quality Control

TABLE 3
VALIDATON ACTIONS SUMMARY
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

Field Sample ID	Type	SDG	Method	Parameter	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
C091217-OSW7	REG	480-124040-1	SW8260	Dichlorodifluoromethane	10	U	UJ	MSL	µg/L
C091217-OSW7	REG	480-124040-1	SW8260	Trichloroethene	240		J	MSL,MSDL	µg/L
C091217-OSW7	REG	480-124040-1	SW8260	Vinyl chloride	10	U	UJ	MSL	µg/L
C091217-OSW7DUP	FD	480-124040-1	SW8260	Dichlorodifluoromethane	10	U	UJ	MSL	µg/L
C091217-OSW7DUP	FD	480-124040-1	SW8260	Trichloroethene	230		J	MSL,MSDL	µg/L
C091217-OSW7DUP	FD	480-124040-1	SW8260	Vinyl chloride	10	U	UJ	MSL	µg/L
C091217-DMWB	REG	480-124040-1	SW8260	Dichlorodifluoromethane	1.0	U	UJ	LCSL,LCSDL	µg/L
C091317-PP2	REG	480-124118-1	SW8260	Dichlorodifluoromethane	10	U	UJ	LCSL,LCSDL	µg/L
C091317-OSW2B	REG	480-124118-1	SW8260	Dichlorodifluoromethane	40	U	UJ	LCSL,LCSDL	µg/L
C091317-CLW22B	REG	480-124118-1	SW8260	Dichlorodifluoromethane	1.0	U	UJ	LCSL,LCSDL	µg/L
C091317-CLW17	REG	480-124118-1	SW8260	Dichlorodifluoromethane	1.0	U	UJ	LCSL,LCSDL	µg/L
C091317-CLW17B	REG	480-124118-1	SW8260	Dichlorodifluoromethane	2.0	U	UJ	LCSL,LCSDL	µg/L
C091317-PP3	REG	480-124118-1	SW8260	Dichlorodifluoromethane	10	U	UJ	LCSL,LCSDL	µg/L
C0901517-PP4B	REG	480-124283-1	SW7196	Chromium, hexavalent	0.010	J	U	BL2	mg/L

Notes:

BL2= Result qualified due to Equipment Blank
LCSL= LCS recovery less than the lower limit
LCSDL= LCS duplicate recovery less than the lower limit
MSL = Matrix spike recovery less than the lower limit
MSDL= Matrix spike duplicate recovery less than the lower limit
U = Undetected
J = Estimated value

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091217-CLW19	C091217-CLW19B	C091217-CLW20	C091217-CLW20B	C091217-CLW22	C091217-CLW8A
		Location	CLW-19	CLW-19B	CLW-20	CLW-20B	CLW-22	CLW-8
		Sample Date	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017
		Sample Delivery Group	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1
Units	Method	Parameter Name						
mg/L	SW7196	Chromium, hexavalent	0.030	0.016	0.010 U	0.010 U	0.026	0.97
µg/L	SW6010	Chromium	24	20	5.0 U	5.0 U	14	1100
µg/L	SW8260	1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	0.42 J	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3,5-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dioxane	50 U	50 U	50 U	50 U	50 U	50 U
µg/L	SW8260	2,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Butanone (MEK)	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	2-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	4-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Isopropyltoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Acetone	50 U	50 U	50 U	50 U	50 U	50 U
µg/L	SW8260	Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Carbon disulfide	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091217-CLW19	C091217-CLW19B	C091217-CLW20	C091217-CLW20B	C091217-CLW22	C091217-CLW8A
		Location	CLW-19	CLW-19B	CLW-20	CLW-20B	CLW-22	CLW-8
		Sample Date	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017
		Sample Delivery Group	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1
Units	Method	Parameter Name						
µg/L	SW8260	Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorodibromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.6
µg/L	SW8260	cis-1,3-Dichloropropene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Dichlorobromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylene Dibromide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Hexachlorobutadiene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Isopropyl ether	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	m-Xylene & p-Xylene	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Methyl tert-butyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methylene Chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	n-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	N-Propylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Naphthalene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	sec-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tert-amyl methyl ether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	Tert-butyl ethyl ether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	tert-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrahydrofuran	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Trichloroethene	2.5	1.8	0.89 J	1.0 U	16	32
µg/L	SW8260	Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091217-CLW19	C091217-CLW19B	C091217-CLW20	C091217-CLW20B	C091217-CLW22	C091217-CLW8A
		Location	CLW-19	CLW-19B	CLW-20	CLW-20B	CLW-22	CLW-8
		Sample Date	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017
		Sample Delivery Group	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1
Units	**Method**	**Parameter Name**						
µg/L	SW8260	Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
U = undetected
J = estimated value

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Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091217-DMWA	C091217-DMWB	C091217-OSW4I	C091217-OSW7	C091217-OSW7DUP
		Location	DMW-A	DMW-B	OSW-4I	OSW-7A	OSW-7A
		Sample Date	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017
		Sample Delivery Group	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1
Units	Method	Parameter Name					
mg/L	SW7196	Chromium, hexavalent	0.010 U	0.010 U	0.14	0.66	0.60
µg/L	SW6010	Chromium	1.9 J	8.6	140	560	570
µg/L	SW8260	1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,1,1-Trichloroethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	4.0 U	5.0 U	5.0 U
µg/L	SW8260	1,1,2-Trichloroethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,1-Dichloroethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,1-Dichloroethene	1.1	1.0 U	5.2 J	10 U	10 U
µg/L	SW8260	1,1-Dichloropropene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2,3-Trichlorobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2,3-Trichloropropane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2,4-Trichlorobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2,4-Trimethylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	5.0 U	5.0 U	40 U	50 U	50 U
µg/L	SW8260	1,2-Dichlorobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2-Dichloroethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,2-Dichloropropane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,3,5-Trimethylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,3-Dichlorobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,3-Dichloropropane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,4-Dichlorobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	1,4-Dioxane	50 U	50 U	400 U	500 U	500 U
µg/L	SW8260	2,2-Dichloropropane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	2-Butanone (MEK)	10 U	10 U	80 U	100 U	100 U
µg/L	SW8260	2-Chlorotoluene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	2-Hexanone	10 U	10 U	80 U	100 U	100 U
µg/L	SW8260	4-Chlorotoluene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	4-Isopropyltoluene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	10 U	10 U	80 U	100 U	100 U
µg/L	SW8260	Acetone	50 U	50 U	400 U	500 U	500 U
µg/L	SW8260	Benzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Bromobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Bromoform	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Bromomethane	2.0 U	2.0 U	16 U	20 U	20 U
µg/L	SW8260	Carbon disulfide	10 U	0.21 J	80 U	100 U	100 U
µg/L	SW8260	Carbon tetrachloride	1.0 U	1.0 U	8.0 U	10 U	10 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091217-DMWA	C091217-DMWB	C091217-OSW4I	C091217-OSW7	C091217-OSW7DUP
		Location	DMW-A	DMW-B	OSW-4I	OSW-7A	OSW-7A
		Sample Date	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017
		Sample Delivery Group	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1
Units	Method	Parameter Name					
µg/L	SW8260	Chlorobenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Chlorobromomethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Chlorodibromomethane	0.50 U	0.50 U	4.0 U	5.0 U	5.0 U
µg/L	SW8260	Chloroethane	2.0 U	2.0 U	16 U	20 U	20 U
µg/L	SW8260	Chloroform	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Chloromethane	2.0 U	2.0 U	16 U	20 U	20 U
µg/L	SW8260	cis-1,2-Dichloroethene	62	30	130	34	33
µg/L	SW8260	cis-1,3-Dichloropropene	0.40 U	0.40 U	3.2 U	4.0 U	4.0 U
µg/L	SW8260	Dibromomethane	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Dichlorobromomethane	0.50 U	0.50 U	4.0 U	5.0 U	5.0 U
µg/L	SW8260	Dichlorodifluoromethane	1.0 U	1.0 UJ	8.0 U	10 UJ	10 UJ
µg/L	SW8260	Ethyl ether	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Ethylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Ethylene Dibromide	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Hexachlorobutadiene	0.40 U	0.40 U	3.2 U	4.0 U	4.0 U
µg/L	SW8260	Isopropyl ether	10 U	10 U	80 U	100 U	100 U
µg/L	SW8260	Isopropylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	m-Xylene & p-Xylene	2.0 U	2.0 U	16 U	20 U	20 U
µg/L	SW8260	Methyl tert-butyl ether	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Methylene Chloride	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	n-Butylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	N-Propylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Naphthalene	5.0 U	5.0 U	40 U	50 U	50 U
µg/L	SW8260	o-Xylene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	sec-Butylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Styrene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Tert-amyl methyl ether	5.0 U	5.0 U	40 U	50 U	50 U
µg/L	SW8260	Tert-butyl ethyl ether	5.0 U	5.0 U	40 U	50 U	50 U
µg/L	SW8260	tert-Butylbenzene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Tetrachloroethene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	Tetrahydrofuran	10 U	10 U	80 U	100 U	100 U
µg/L	SW8260	Toluene	1.0 U	1.0 U	8.0 U	10 U	10 U
µg/L	SW8260	trans-1,2-Dichloroethene	1.0 U	4.5	8.0 U	10 U	10 U
µg/L	SW8260	trans-1,3-Dichloropropene	0.40 U	0.40 U	3.2 U	4.0 U	4.0 U
µg/L	SW8260	Trichloroethene	20	4.6	390	240 J	230 J
µg/L	SW8260	Trichlorofluoromethane	1.0 U	1.0 U	8.0 U	10 U	10 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091217-DMWA	C091217-DMWB	C091217-OSW4I	C091217-OSW7	C091217-OSW7DUP
		Location	DMW-A	DMW-B	OSW-4I	OSW-7A	OSW-7A
		Sample Date	09/12/2017	09/12/2017	09/12/2017	09/12/2017	09/12/2017
		Sample Delivery Group	480-124040-1	480-124040-1	480-124040-1	480-124040-1	480-124040-1
Units	**Method**	**Parameter Name**					
µg/L	SW8260	Vinyl chloride	2.7	0.93 J	8.0 U	10 UJ	10 UJ

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091317-CLW17	C091317-CLW17B	C091317-CLW22B	C091317-OSW2B	C091317-OSW3A
		Location	CLW-17	CLW-17B	CLW-22B	OSW-2B	OSW-3A
		Sample Date	09/13/2017	09/13/2017	09/13/2017	09/13/2017	09/13/2017
		Sample Delivery Group	480-124118-1	480-124118-1	480-124118-1	480-124118-1	480-124118-1
Units	Method	Parameter Name					
mg/L	SW7196	Chromium, hexavalent	0.072	0.013	0.031	2.4	0.010 U
µg/L	SW6010	Chromium	56	9.1	15	1600	3.5 J
µg/L	SW8260	1,1,1,2-Tetrachloroethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,1,1-Trichloroethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	0.50 U	1.0 U	0.50 U	20 U	0.50 U
µg/L	SW8260	1,1,2-Trichloroethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,1-Dichloroethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,1-Dichloroethene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,1-Dichloropropene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2,3-Trichlorobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2,3-Trichloropropane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2,4-Trimethylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	5.0 U	10 U	5.0 U	200 U	5.0 U
µg/L	SW8260	1,2-Dichlorobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2-Dichloroethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,2-Dichloropropane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,3,5-Trimethylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,3-Dichlorobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,3-Dichloropropane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,4-Dichlorobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	1,4-Dioxane	50 U	100 U	50 U	2000 U	50 U
µg/L	SW8260	2,2-Dichloropropane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	2-Butanone (MEK)	10 U	20 U	10 U	400 U	10 U
µg/L	SW8260	2-Chlorotoluene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	2-Hexanone	10 U	20 U	10 U	400 U	10 U
µg/L	SW8260	4-Chlorotoluene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	4-Isopropyltoluene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	10 U	20 U	10 U	400 U	10 U
µg/L	SW8260	Acetone	50 U	100 U	50 U	2000 U	50 U
µg/L	SW8260	Benzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Bromobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Bromoform	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Bromomethane	2.0 U	4.0 U	2.0 U	80 U	2.0 U
µg/L	SW8260	Carbon disulfide	10 U	20 U	10 U	400 U	10 U
µg/L	SW8260	Carbon tetrachloride	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Chlorobenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Chlorobromomethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Chlorodibromomethane	0.50 U	1.0 U	0.50 U	20 U	0.50 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091317-CLW17	C091317-CLW17B	C091317-CLW22B	C091317-OSW2B	C091317-OSW3A
		Location	CLW-17	CLW-17B	CLW-22B	OSW-2B	OSW-3A
		Sample Date	09/13/2017	09/13/2017	09/13/2017	09/13/2017	09/13/2017
		Sample Delivery Group	480-124118-1	480-124118-1	480-124118-1	480-124118-1	480-124118-1
Units	**Method**	**Parameter Name**					
µg/L	SW8260	Chloroethane	2.0 U	4.0 U	2.0 U	80 U	2.0 U
µg/L	SW8260	Chloroform	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Chloromethane	2.0 U	4.0 U	2.0 U	80 U	2.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	2.7	20	2.6	100	1.8
µg/L	SW8260	cis-1,3-Dichloropropene	0.40 U	0.80 U	0.40 U	16 U	0.40 U
µg/L	SW8260	Dibromomethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Dichlorobromomethane	0.50 U	1.0 U	0.50 U	20 U	0.50 U
µg/L	SW8260	Dichlorodifluoromethane	1.0 UJ	2.0 UJ	1.0 UJ	40 UJ	1.0 U
µg/L	SW8260	Ethyl ether	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Ethylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Ethylene Dibromide	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Hexachlorobutadiene	0.40 U	0.80 U	0.40 U	16 U	0.40 U
µg/L	SW8260	Isopropyl ether	10 U	20 U	10 U	400 U	10 U
µg/L	SW8260	Isopropylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	m-Xylene & p-Xylene	2.0 U	4.0 U	2.0 U	80 U	2.0 U
µg/L	SW8260	Methyl tert-butyl ether	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Methylene Chloride	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	n-Butylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	N-Propylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Naphthalene	5.0 U	10 U	5.0 U	200 U	5.0 U
µg/L	SW8260	o-Xylene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	sec-Butylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Styrene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Tert-amyl methyl ether	5.0 U	10 U	5.0 U	200 U	5.0 U
µg/L	SW8260	Tert-butyl ethyl ether	5.0 U	10 U	5.0 U	200 U	5.0 U
µg/L	SW8260	tert-Butylbenzene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Tetrachloroethene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Tetrahydrofuran	10 U	20 U	10 U	400 U	10 U
µg/L	SW8260	Toluene	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	1.0 U	5.7	1.0 U	280	1.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	0.40 U	0.80 U	0.40 U	16 U	0.40 U
µg/L	SW8260	Trichloroethene	11	100	17	1200	29
µg/L	SW8260	Trichlorofluoromethane	1.0 U	2.0 U	1.0 U	40 U	1.0 U
µg/L	SW8260	Vinyl chloride	1.0 U	2.0 U	1.0 U	40 U	1.0 U

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091317-PP2	C091317-PP3
		Location	PP-2	PP-3
		Sample Date	09/13/2017	09/13/2017
		Sample Delivery Group	480-124118-1	480-124118-1
Units	Method	Parameter Name		
mg/L	SW7196	Chromium, hexavalent	0.010 U	1.5
µg/L	SW6010	Chromium	11	800
µg/L	SW8260	1,1,1,2-Tetrachloroethane	10 U	10 U
µg/L	SW8260	1,1,1-Trichloroethane	10 U	10 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	5.0 U	5.0 U
µg/L	SW8260	1,1,2-Trichloroethane	10 U	10 U
µg/L	SW8260	1,1-Dichloroethane	10 U	10 U
µg/L	SW8260	1,1-Dichloroethene	8.8 J	3.9 J
µg/L	SW8260	1,1-Dichloropropene	10 U	10 U
µg/L	SW8260	1,2,3-Trichlorobenzene	10 U	10 U
µg/L	SW8260	1,2,3-Trichloropropane	10 U	10 U
µg/L	SW8260	1,2,4-Trichlorobenzene	10 U	10 U
µg/L	SW8260	1,2,4-Trimethylbenzene	10 U	10 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	50 U	50 U
µg/L	SW8260	1,2-Dichlorobenzene	10 U	10 U
µg/L	SW8260	1,2-Dichloroethane	10 U	10 U
µg/L	SW8260	1,2-Dichloropropane	10 U	10 U
µg/L	SW8260	1,3,5-Trimethylbenzene	10 U	10 U
µg/L	SW8260	1,3-Dichlorobenzene	10 U	10 U
µg/L	SW8260	1,3-Dichloropropane	10 U	10 U
µg/L	SW8260	1,4-Dichlorobenzene	10 U	10 U
µg/L	SW8260	1,4-Dioxane	500 U	500 U
µg/L	SW8260	2,2-Dichloropropane	10 U	10 U
µg/L	SW8260	2-Butanone (MEK)	100 U	100 U
µg/L	SW8260	2-Chlorotoluene	10 U	10 U
µg/L	SW8260	2-Hexanone	100 U	100 U
µg/L	SW8260	4-Chlorotoluene	10 U	10 U
µg/L	SW8260	4-Isopropyltoluene	10 U	10 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	100 U	100 U
µg/L	SW8260	Acetone	500 U	500 U
µg/L	SW8260	Benzene	10 U	10 U
µg/L	SW8260	Bromobenzene	10 U	10 U
µg/L	SW8260	Bromoform	10 U	10 U
µg/L	SW8260	Bromomethane	20 U	20 U
µg/L	SW8260	Carbon disulfide	100 U	100 U
µg/L	SW8260	Carbon tetrachloride	10 U	10 U
µg/L	SW8260	Chlorobenzene	10 U	10 U
µg/L	SW8260	Chlorobromomethane	10 U	10 U
µg/L	SW8260	Chlorodibromomethane	5.0 U	5.0 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091317-PP2	C091317-PP3
		Location	PP-2	PP-3
		Sample Date	09/13/2017	09/13/2017
		Sample Delivery Group	480-124118-1	480-124118-1
Units	Method	Parameter Name		
µg/L	SW8260	Chloroethane	20 U	20 U
µg/L	SW8260	Chloroform	10 U	10 U
µg/L	SW8260	Chloromethane	20 U	20 U
µg/L	SW8260	cis-1,2-Dichloroethene	210	920
µg/L	SW8260	cis-1,3-Dichloropropene	4.0 U	4.0 U
µg/L	SW8260	Dibromomethane	10 U	10 U
µg/L	SW8260	Dichlorobromomethane	5.0 U	5.0 U
µg/L	SW8260	Dichlorodifluoromethane	10 UJ	10 UJ
µg/L	SW8260	Ethyl ether	10 U	10 U
µg/L	SW8260	Ethylbenzene	10 U	10 U
µg/L	SW8260	Ethylene Dibromide	10 U	10 U
µg/L	SW8260	Hexachlorobutadiene	4.0 U	4.0 U
µg/L	SW8260	Isopropyl ether	100 U	100 U
µg/L	SW8260	Isopropylbenzene	10 U	10 U
µg/L	SW8260	m-Xylene & p-Xylene	20 U	20 U
µg/L	SW8260	Methyl tert-butyl ether	10 U	10 U
µg/L	SW8260	Methylene Chloride	10 U	10 U
µg/L	SW8260	n-Butylbenzene	10 U	10 U
µg/L	SW8260	N-Propylbenzene	10 U	10 U
µg/L	SW8260	Naphthalene	50 U	50 U
µg/L	SW8260	o-Xylene	10 U	10 U
µg/L	SW8260	sec-Butylbenzene	10 U	10 U
µg/L	SW8260	Styrene	10 U	10 U
µg/L	SW8260	Tert-amyl methyl ether	50 U	50 U
µg/L	SW8260	Tert-butyl ethyl ether	50 U	50 U
µg/L	SW8260	tert-Butylbenzene	10 U	10 U
µg/L	SW8260	Tetrachloroethene	10 U	5.5 J
µg/L	SW8260	Tetrahydrofuran	100 U	100 U
µg/L	SW8260	Toluene	10 U	10 U
µg/L	SW8260	trans-1,2-Dichloroethene	10 U	10 U
µg/L	SW8260	trans-1,3-Dichloropropene	4.0 U	4.0 U
µg/L	SW8260	Trichloroethene	360	5500
µg/L	SW8260	Trichlorofluoromethane	10 U	10 U
µg/L	SW8260	Vinyl chloride	31	230

Notes:
U = undetected
J = estimated value

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Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091417-CLW16B	C091417-CLW5A	C091417-CLW5B	C091417-OSW1A	C091417-OSW1B	C091417-OSW3B
		Location	CLW-16B	CLW-5A	CLW-5B	OSW-1A	OSW-1B	OSW-3B
		Sample Date	09/14/2017	09/14/2017	09/14/2017	09/14/2017	09/14/2017	09/14/2017
		Sample Delivery Group	480-124202-1	480-124202-1	480-124202-1	480-124202-1	480-124202-1	480-124202-1
Units	**Method**	**Parameter Name**						
mg/L	SW7196	Chromium, hexavalent	0.0068 J	0.053	0.014	0.19	0.010 U	0.010 U
µg/L	SW6010	Chromium	40	82	7.0	220	1.1 J	3.5 J
µg/L	SW8260	1,1,1,2-Tetrachloroethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,1,1-Trichloroethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	50 U	0.50 U	1.0 U	0.50 U	25 U	5.0 U
µg/L	SW8260	1,1,2-Trichloroethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,1-Dichloroethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,1-Dichloroethene	100 U	4.9	1.9 J	1.0 U	50 U	10 U
µg/L	SW8260	1,1-Dichloropropene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2,3-Trichlorobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2,3-Trichloropropane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2,4-Trichlorobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2,4-Trimethylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	500 U	5.0 U	10 U	5.0 U	250 U	50 U
µg/L	SW8260	1,2-Dichlorobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2-Dichloroethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,2-Dichloropropane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,3,5-Trimethylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,3-Dichlorobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,3-Dichloropropane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,4-Dichlorobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	1,4-Dioxane	5000 U	50 U	100 U	50 U	2500 U	500 U
µg/L	SW8260	2,2-Dichloropropane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	2-Butanone (MEK)	1000 U	10 U	20 U	10 U	500 U	100 U
µg/L	SW8260	2-Chlorotoluene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	2-Hexanone	1000 U	10 U	20 U	10 U	500 U	100 U
µg/L	SW8260	4-Chlorotoluene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	4-Isopropyltoluene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	1000 U	10 U	20 U	10 U	500 U	100 U
µg/L	SW8260	Acetone	5000 U	50 U	100 U	50 U	2500 U	500 U
µg/L	SW8260	Benzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Bromobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Bromoform	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Bromomethane	200 U	2.0 U	4.0 U	2.0 U	100 U	20 U
µg/L	SW8260	Carbon disulfide	1000 U	10 U	20 U	10 U	500 U	100 U
µg/L	SW8260	Carbon tetrachloride	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Chlorobenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Chlorobromomethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091417-CLW16B	C091417-CLW5A	C091417-CLW5B	C091417-OSW1A	C091417-OSW1B	C091417-OSW3B
		Location	CLW-16B	CLW-5A	CLW-5B	OSW-1A	OSW-1B	OSW-3B
		Sample Date	09/14/2017	09/14/2017	09/14/2017	09/14/2017	09/14/2017	09/14/2017
		Sample Delivery Group	480-124202-1	480-124202-1	480-124202-1	480-124202-1	480-124202-1	480-124202-1
Units	**Method**	**Parameter Name**						
µg/L	SW8260	Chlorodibromomethane	50 U	0.50 U	1.0 U	0.50 U	25 U	5.0 U
µg/L	SW8260	Chloroethane	200 U	1.4 J	6.9	2.0 U	100 U	20 U
µg/L	SW8260	Chloroform	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Chloromethane	200 U	2.0 U	4.0 U	2.0 U	100 U	20 U
µg/L	SW8260	cis-1,2-Dichloroethene	3000	550	110	1.0 U	490	130
µg/L	SW8260	cis-1,3-Dichloropropene	40 U	0.40 U	0.80 U	0.40 U	20 U	4.0 U
µg/L	SW8260	Dibromomethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Dichlorobromomethane	50 U	0.50 U	1.0 U	0.50 U	25 U	5.0 U
µg/L	SW8260	Dichlorodifluoromethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Ethyl ether	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Ethylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Ethylene Dibromide	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Hexachlorobutadiene	40 U	0.40 U	0.80 U	0.40 U	20 U	4.0 U
µg/L	SW8260	Isopropyl ether	1000 U	10 U	20 U	10 U	500 U	100 U
µg/L	SW8260	Isopropylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	m-Xylene & p-Xylene	200 U	2.0 U	4.0 U	2.0 U	100 U	20 U
µg/L	SW8260	Methyl tert-butyl ether	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Methylene Chloride	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	n-Butylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	N-Propylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Naphthalene	500 U	5.0 U	10 U	5.0 U	250 U	50 U
µg/L	SW8260	o-Xylene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	sec-Butylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Styrene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Tert-amyl methyl ether	500 U	5.0 U	10 U	5.0 U	250 U	50 U
µg/L	SW8260	Tert-butyl ethyl ether	500 U	5.0 U	10 U	5.0 U	250 U	50 U
µg/L	SW8260	tert-Butylbenzene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Tetrachloroethene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Tetrahydrofuran	1000 U	10 U	20 U	10 U	500 U	100 U
µg/L	SW8260	Toluene	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	trans-1,2-Dichloroethene	350	3.7	7.5	1.0 U	50 U	10 U
µg/L	SW8260	trans-1,3-Dichloropropene	40 U	0.40 U	0.80 U	0.40 U	20 U	4.0 U
µg/L	SW8260	Trichloroethene	12000	1300	140	6.3	3300	270
µg/L	SW8260	Trichlorofluoromethane	100 U	1.0 U	2.0 U	1.0 U	50 U	10 U
µg/L	SW8260	Vinyl chloride	1200	130	28	1.0 U	47 J	12

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C0901517-CIW1B	C0901517-PP4A	C0901517-PP4B	C0901517-RB1	C0901517-RB2	C0901517-TRIP BLANK
		Location	CIW-1B	PP-4A	PP-4B	QC	QC	QC
		Sample Date	09/15/2017	09/15/2017	09/15/2017	09/15/2017	09/15/2017	09/15/2017
		Sample Delivery Group	480-124283-1	480-124283-1	480-124283-1	480-124283-1	480-124283-1	480-124283-1
Units	Method	Parameter Name						
mg/L	SW7196	Chromium, hexavalent	0.010 U	0.010 U	0.010 U	0.010 U	0.0056 J	
µg/L	SW6010	Chromium	470	5.2	57	5.0 U	5.0 U	
µg/L	SW8260	1,1,1,2-Tetrachloroethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,1-Trichloroethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	10 U	2.0 U	10 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	1,1,2-Trichloroethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloropropene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichlorobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichloropropane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trimethylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	100 U	20 U	100 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	1,2-Dichlorobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloroethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloropropane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3,5-Trimethylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichlorobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichloropropane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dichlorobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dioxane	1000 U	200 U	1000 U	50 U	50 U	50 U
µg/L	SW8260	2,2-Dichloropropane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Butanone (MEK)	200 U	40 U	200 U	10 U	10 U	10 U
µg/L	SW8260	2-Chlorotoluene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Hexanone	200 U	40 U	200 U	10 U	10 U	10 U
µg/L	SW8260	4-Chlorotoluene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Isopropyltoluene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	200 U	40 U	200 U	2.1 J	2.3 J	10 U
µg/L	SW8260	Acetone	1000 U	200 U	1000 U	3.5 J	50 U	50 U
µg/L	SW8260	Benzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromoform	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromomethane	40 U	8.0 U	40 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Carbon disulfide	200 U	40 U	200 U	10 U	10 U	10 U
µg/L	SW8260	Carbon tetrachloride	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobromomethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C0901517-CIW1B	C0901517-PP4A	C0901517-PP4B	C0901517-RB1	C0901517-RB2	C0901517-TRIP BLANK
		Location	CIW-1B	PP-4A	PP-4B	QC	QC	QC
		Sample Date	09/15/2017	09/15/2017	09/15/2017	09/15/2017	09/15/2017	09/15/2017
		Sample Delivery Group	480-124283-1	480-124283-1	480-124283-1	480-124283-1	480-124283-1	480-124283-1
Units	**Method**	**Parameter Name**						
µg/L	SW8260	Chlorodibromomethane	10 U	2.0 U	10 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Chloroethane	40 U	8.0 U	40 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Chloroform	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloromethane	40 U	8.0 U	40 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	140	14	500	1.0 U	1.0 U	1.0 U
µg/L	SW8260	cis-1,3-Dichloropropene	8.0 U	1.6 U	8.0 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Dibromomethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Dichlorobromomethane	10 U	2.0 U	10 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Dichlorodifluoromethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethyl ether	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylene Dibromide	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Hexachlorobutadiene	8.0 U	1.6 U	8.0 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Isopropyl ether	200 U	40 U	200 U	10 U	10 U	10 U
µg/L	SW8260	Isopropylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	m-Xylene & p-Xylene	40 U	8.0 U	40 U	0.82 J	2.0 U	2.0 U
µg/L	SW8260	Methyl tert-butyl ether	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methylene Chloride	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	n-Butylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	N-Propylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Naphthalene	100 U	20 U	100 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	o-Xylene	20 U	4.0 U	20 U	0.79 J	1.0 U	1.0 U
µg/L	SW8260	sec-Butylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Styrene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tert-amyl methyl ether	100 U	20 U	100 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	Tert-butyl ethyl ether	100 U	20 U	100 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	tert-Butylbenzene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrachloroethene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrahydrofuran	200 U	40 U	200 U	10 U	10 U	10 U
µg/L	SW8260	Toluene	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	18 J	4.0 U	24	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	8.0 U	1.6 U	8.0 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Trichloroethene	410	130	740	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Trichlorofluoromethane	20 U	4.0 U	20 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Vinyl chloride	80	4.0 U	20 U	1.0 U	1.0 U	1.0 U

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091517-CSW2	C091517-CSW3	C091517-CSW3A	C091517-CSW5
		Location	CSW-2	CSW-3	CSW-3A	CSW-5
		Sample Date	09/15/2017	09/15/2017	09/15/2017	09/15/2017
		Sample Delivery Group	480-124284-1	480-124284-1	480-124284-1	480-124284-1
Units	Method	Parameter Name				
mg/L	SW7196	Chromium, hexavalent	0.010 U	0.33	0.29	0.0065 J
µg/L	SW6010	Calcium, Dissolved	25000	27000	27000	31000
µg/L	SW6010	Chromium, Dissolved	5.0 U	320	270	8.6
µg/L	SW6010	Copper, Dissolved	10 U	13	12	8.3 J
µg/L	SW6010	Magnesium, Dissolved	1800	2100	2100	2400
µg/L	SW6010	Potassium, Dissolved	3300	4000	3800	3500
µg/L	SW6010	Sodium, Dissolved	27000	26000	29000	44000
µg/L	SW8260	1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dibromo-3-Chloropropane	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3,5-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dioxane	50 U	50 U	50 U	50 U
µg/L	SW8260	2,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Butanone (MEK)	10 U	10 U	10 U	10 U
µg/L	SW8260	2-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Hexanone	10 U	10 U	10 U	10 U
µg/L	SW8260	4-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Isopropyltoluene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	10 U	10 U	10 U	10 U
µg/L	SW8260	Acetone	50 U	50 U	50 U	50 U
µg/L	SW8260	Benzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromoform	1.0 U	1.0 U	1.0 U	1.0 U

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C091517-CSW2	C091517-CSW3	C091517-CSW3A	C091517-CSW5
		Location	CSW-2	CSW-3	CSW-3A	CSW-5
		Sample Date	09/15/2017	09/15/2017	09/15/2017	09/15/2017
		Sample Delivery Group	480-124284-1	480-124284-1	480-124284-1	480-124284-1
Units	Method	Parameter Name				
µg/L	SW8260	Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Carbon disulfide	10 U	10 U	10 U	10 U
µg/L	SW8260	Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobromomethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorodibromomethane	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Chloroform	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	1.0 U	0.87 J	1.0 U	1.0 U
µg/L	SW8260	cis-1,3-Dichloropropene	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Dichlorobromomethane	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethyl ether	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylene Dibromide	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Hexachlorobutadiene	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Isopropyl ether	10 U	10 U	10 U	10 U
µg/L	SW8260	Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	m-Xylene & p-Xylene	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Methyl tert-butyl ether	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Methylene Chloride	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	n-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	N-Propylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Naphthalene	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	sec-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Styrene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tert-amyl methyl ether	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	Tert-butyl ethyl ether	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	tert-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrahydrofuran	10 U	10 U	10 U	10 U
µg/L	SW8260	Toluene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Trichloroethene	1.0 U	10	7.6	1.4

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 4
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
SEPTEMBER 2017 GROUNDWATER/SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	**C091517-CSW2**	**C091517-CSW3**	**C091517-CSW3A**	**C091517-CSW5**
		Location	**CSW-2**	**CSW-3**	**CSW-3A**	**CSW-5**
		Sample Date	**09/15/2017**	**09/15/2017**	**09/15/2017**	**09/15/2017**
		Sample Delivery Group	**480-124284-1**	**480-124284-1**	**480-124284-1**	**480-124284-1**
Units	**Method**	**Parameter Name**				
µg/L	SW8260	Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-124040-1
Client Project/Site: September 2017 Semi Annual Ground Water
Sampling Event: Semi Annual Ground Water

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Authorized for release by:
9/20/2017 2:04:28 PM
Rebecca Jones, Project Management Assistant I
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Designee for

John Schove, Project Manager II
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LINKS

Review your project results through TotalAccess

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

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-124040-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-124040-1

Comments
No additional comments.

Receipt
The samples were received on 9/13/2017 2:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

GC/MS VOA
Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: C091217-OSW4I (480-124040-9), C091217-OSW7 (480-124040-10), C091217-OSW7MS (480-124040-10[MS]), C091217-OSW7MSD (480-124040-10[MSD]) and C091217-OSW7DUP (480-124040-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) for Acetone associated with batch 480-376485 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected: C091217-DMWA (480-124040-1), C091217-CLW19 (480-124040-3), C091217-CLW19B (480-124040-4), C091217-CLW20 (480-124040-5), C091217-CLW20B (480-124040-6), C091217-CLW22 (480-124040-7), C091217-CLW8A (480-124040-8), C091217-OSW4I (480-124040-9), C091217-OSW7 (480-124040-10) and C091217-OSW7DUP (480-124040-11).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-376485 exceeded control limits for the following analyte: 2-Butanone and 2-Hexanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and n-butyl Acetate, in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C091217-DMWA (480-124040-1), C091217-CLW19 (480-124040-3), C091217-CLW19B (480-124040-4), C091217-CLW20 (480-124040-5), C091217-CLW20B (480-124040-6), C091217-CLW22 (480-124040-7), C091217-CLW8A (480-124040-8), C091217-OSW4I (480-124040-9), C091217-OSW7 (480-124040-10) and C091217-OSW7DUP (480-124040-11).

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for batch 480-376485 exceeded control limits for the following analytes: Tetrachloroethene. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : C091217-DMWA (480-124040-1), C091217-CLW19 (480-124040-3), C091217-CLW19B (480-124040-4), C091217-CLW20 (480-124040-5), C091217-CLW20B (480-124040-6), C091217-CLW22 (480-124040-7), C091217-CLW8A (480-124040-8), C091217-OSW4I (480-124040-9), C091217-OSW7 (480-124040-10) and C091217-OSW7DUP (480-124040-11).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-376485 were outside control limits. The following samples were affected: C091217-OSW7MS (480-124040-10[MS]) and C091217-OSW7MSD (480-124040-10[MSD]).

Method(s) 8260C: The continuing calibration verification (CCV) for Acetone, Dichlorodifluoromethane, and 1,1-Dichloroethene associated with batch 480-376934 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following sample was affected : C091217-DMWB (480-124040-2).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-376934 exceeded control limits for the following analytes: 2-Butanone and 2-Hexanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and n-butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample was affected : C091217-DMWB (480-124040-2).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-376934 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be

Job ID: 480-124040-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

outside of the limits provided the recoveries are over 10%. The following sample was affected : C091217-DMWB (480-124040-2).

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

Metals
Method(s) 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

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

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-124040-1**

Project Location: **Groton** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-124040-1(1-11, 10MS/MSD)

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Management Assistant

Printed Name: Rebecca Jones Date: 9/20/17 13:44

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Client Sample ID: C091217-DMWA — Lab Sample ID: 480-124040-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.1		1.0	0.29	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	62		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	20		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	2.7		1.0	0.90	ug/L	1		8260C	Total/NA
Chromium	1.9	J	5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C091217-DMWB — Lab Sample ID: 480-124040-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.21	J	10	0.19	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	30		1.0	0.81	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	4.5		1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	4.6		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	0.93	J	1.0	0.90	ug/L	1		8260C	Total/NA
Chromium	8.6		5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C091217-CLW19 — Lab Sample ID: 480-124040-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.5		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	24		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.030		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091217-CLW19B — Lab Sample ID: 480-124040-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.8		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	20		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.016		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091217-CLW20 — Lab Sample ID: 480-124040-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.89	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: C091217-CLW20B — Lab Sample ID: 480-124040-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.42	J	1.0	0.38	ug/L	1		8260C	Total/NA

Client Sample ID: C091217-CLW22 — Lab Sample ID: 480-124040-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	16		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	14		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.026		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091217-CLW8A — Lab Sample ID: 480-124040-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: C091217-CLW8A (Continued) — Lab Sample ID: 480-124040-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.6		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	32		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	1100		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.97		0.25	0.13	mg/L	25		7196A	Total/NA

Client Sample ID: C091217-OSW4I — Lab Sample ID: 480-124040-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	5.2	J	8.0	2.3	ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene	130		8.0	6.5	ug/L	8		8260C	Total/NA
Trichloroethene	390		8.0	3.7	ug/L	8		8260C	Total/NA
Chromium	140		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.14		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091217-OSW7 — Lab Sample ID: 480-124040-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	34		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	240	F1	10	4.6	ug/L	10		8260C	Total/NA
Chromium	560		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.66		0.050	0.025	mg/L	5		7196A	Total/NA

Client Sample ID: C091217-OSW7DUP — Lab Sample ID: 480-124040-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	33		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	230		10	4.6	ug/L	10		8260C	Total/NA
Chromium	570		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.60		0.10	0.050	mg/L	10		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: C091217-DMWA

Lab Sample ID: 480-124040-1

Date Collected: 09/12/17 10:10

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 13:48	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 13:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 13:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 13:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 13:48	1
1,1-Dichloroethene	**1.1**		1.0	0.29	ug/L			09/13/17 13:48	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 13:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 13:48	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 13:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 13:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 13:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 13:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 13:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 13:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 13:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 13:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 13:48	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 13:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 13:48	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 13:48	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 13:48	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 13:48	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 13:48	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 13:48	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 13:48	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 13:48	1
Acetone	ND		50	3.0	ug/L			09/13/17 13:48	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 13:48	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 13:48	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 13:48	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 13:48	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 13:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 13:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 13:48	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 13:48	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 13:48	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 13:48	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 13:48	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 13:48	1
cis-1,2-Dichloroethene	**62**		1.0	0.81	ug/L			09/13/17 13:48	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 13:48	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 13:48	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 13:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 13:48	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 13:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 13:48	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 13:48	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 13:48	1

Client Sample ID: C091217-DMWA

Lab Sample ID: 480-124040-1

Date Collected: 09/12/17 10:10

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 13:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 13:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 13:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 13:48	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 13:48	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 13:48	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 13:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 13:48	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 13:48	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 13:48	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 13:48	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 13:48	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 13:48	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 13:48	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 13:48	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 13:48	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 13:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 13:48	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 13:48	1
Trichloroethene	**20**		1.0	0.46	ug/L			09/13/17 13:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 13:48	1
Vinyl chloride	**2.7**		1.0	0.90	ug/L			09/13/17 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/13/17 13:48*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/13/17 13:48*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/13/17 13:48*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/17 13:48*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**1.9**	**J**	5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-DMWB

Lab Sample ID: 480-124040-2

Date Collected: 09/12/17 11:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/14/17 23:23	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/17 23:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/14/17 23:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/17 23:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/17 23:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/17 23:23	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/14/17 23:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/17 23:23	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/14/17 23:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/17 23:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/14/17 23:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/14/17 23:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/17 23:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/17 23:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/17 23:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/14/17 23:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/17 23:23	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/14/17 23:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/17 23:23	1
1,4-Dioxane	ND		50	9.3	ug/L			09/14/17 23:23	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/14/17 23:23	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/14/17 23:23	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/14/17 23:23	1
2-Hexanone	ND	*	10	1.2	ug/L			09/14/17 23:23	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/14/17 23:23	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/14/17 23:23	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/14/17 23:23	1
Acetone	ND		50	3.0	ug/L			09/14/17 23:23	1
Benzene	ND		1.0	0.41	ug/L			09/14/17 23:23	1
Bromobenzene	ND		1.0	0.80	ug/L			09/14/17 23:23	1
Bromoform	ND		1.0	0.26	ug/L			09/14/17 23:23	1
Bromomethane	ND		2.0	0.69	ug/L			09/14/17 23:23	1
Carbon disulfide	**0.21**	**J**	10	0.19	ug/L			09/14/17 23:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/17 23:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/17 23:23	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/14/17 23:23	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/14/17 23:23	1
Chloroethane	ND		2.0	0.32	ug/L			09/14/17 23:23	1
Chloroform	ND		1.0	0.34	ug/L			09/14/17 23:23	1
Chloromethane	ND		2.0	0.35	ug/L			09/14/17 23:23	1
cis-1,2-Dichloroethene	**30**		1.0	0.81	ug/L			09/14/17 23:23	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/14/17 23:23	1
Dibromomethane	ND		1.0	0.41	ug/L			09/14/17 23:23	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/14/17 23:23	1
Dichlorodifluoromethane	ND	*	1.0	0.68	ug/L			09/14/17 23:23	1
Ethyl ether	ND		1.0	0.72	ug/L			09/14/17 23:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/17 23:23	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/14/17 23:23	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/14/17 23:23	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Client Sample ID: C091217-DMWB

Lab Sample ID: 480-124040-2

Date Collected: 09/12/17 11:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/14/17 23:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/17 23:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/17 23:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/17 23:23	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/14/17 23:23	1
Naphthalene	ND		5.0	0.43	ug/L			09/14/17 23:23	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/14/17 23:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/17 23:23	1
o-Xylene	ND		1.0	0.76	ug/L			09/14/17 23:23	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/14/17 23:23	1
Styrene	ND		1.0	0.73	ug/L			09/14/17 23:23	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/14/17 23:23	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/14/17 23:23	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/14/17 23:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/17 23:23	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/14/17 23:23	1
Toluene	ND		1.0	0.51	ug/L			09/14/17 23:23	1
trans-1,2-Dichloroethene	**4.5**		1.0	0.90	ug/L			09/14/17 23:23	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/14/17 23:23	1
Trichloroethene	**4.6**		1.0	0.46	ug/L			09/14/17 23:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/17 23:23	1
Vinyl chloride	**0.93**	**J**	1.0	0.90	ug/L			09/14/17 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/14/17 23:23*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/14/17 23:23*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/14/17 23:23*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*09/14/17 23:23*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**8.6**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-CLW19

Lab Sample ID: 480-124040-3

Date Collected: 09/12/17 12:45

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 14:38	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 14:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 14:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 14:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 14:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 14:38	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 14:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 14:38	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 14:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 14:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 14:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 14:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 14:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 14:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 14:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 14:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 14:38	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 14:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 14:38	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 14:38	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 14:38	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 14:38	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 14:38	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 14:38	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 14:38	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 14:38	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 14:38	1
Acetone	ND		50	3.0	ug/L			09/13/17 14:38	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 14:38	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 14:38	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 14:38	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 14:38	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 14:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 14:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 14:38	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 14:38	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 14:38	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 14:38	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 14:38	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 14:38	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/17 14:38	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 14:38	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 14:38	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 14:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 14:38	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 14:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 14:38	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 14:38	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 14:38	1

Client Sample ID: C091217-CLW19

Lab Sample ID: 480-124040-3

Date Collected: 09/12/17 12:45

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 14:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 14:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 14:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 14:38	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 14:38	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 14:38	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 14:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 14:38	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 14:38	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 14:38	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 14:38	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 14:38	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 14:38	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 14:38	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 14:38	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 14:38	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 14:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 14:38	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 14:38	1
Trichloroethene	**2.5**		1.0	0.46	ug/L			09/13/17 14:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 14:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/13/17 14:38*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/13/17 14:38*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/13/17 14:38*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/17 14:38*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**24**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.030**		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-CLW19B

Lab Sample ID: 480-124040-4

Date Collected: 09/12/17 13:50

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 15:03	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 15:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 15:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 15:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 15:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 15:03	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 15:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 15:03	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 15:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 15:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 15:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 15:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 15:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 15:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 15:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 15:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 15:03	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 15:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 15:03	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 15:03	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 15:03	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 15:03	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 15:03	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 15:03	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 15:03	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 15:03	1
Acetone	ND		50	3.0	ug/L			09/13/17 15:03	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 15:03	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 15:03	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 15:03	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 15:03	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 15:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 15:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 15:03	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 15:03	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 15:03	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 15:03	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 15:03	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 15:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/17 15:03	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 15:03	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 15:03	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 15:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 15:03	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 15:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 15:03	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 15:03	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 15:03	1

Client Sample ID: C091217-CLW19B

Lab Sample ID: 480-124040-4

Date Collected: 09/12/17 13:50

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 15:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 15:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 15:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 15:03	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 15:03	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 15:03	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 15:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 15:03	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 15:03	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 15:03	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 15:03	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 15:03	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 15:03	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 15:03	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 15:03	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 15:03	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 15:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 15:03	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 15:03	1
Trichloroethene	**1.8**		1.0	0.46	ug/L			09/13/17 15:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 15:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/13/17 15:03*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/13/17 15:03*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/13/17 15:03*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/13/17 15:03*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**20**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.016**		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-CLW20

Lab Sample ID: 480-124040-5

Date Collected: 09/12/17 09:50

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 15:28	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 15:28	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 15:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 15:28	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 15:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 15:28	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 15:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 15:28	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 15:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 15:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 15:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 15:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 15:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 15:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 15:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 15:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 15:28	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 15:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 15:28	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 15:28	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 15:28	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 15:28	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 15:28	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 15:28	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 15:28	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 15:28	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 15:28	1
Acetone	ND		50	3.0	ug/L			09/13/17 15:28	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 15:28	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 15:28	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 15:28	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 15:28	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 15:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 15:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 15:28	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 15:28	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 15:28	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 15:28	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 15:28	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 15:28	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/17 15:28	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 15:28	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 15:28	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 15:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 15:28	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 15:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 15:28	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 15:28	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 15:28	1

Client Sample ID: C091217-CLW20

Lab Sample ID: 480-124040-5

Date Collected: 09/12/17 09:50

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 15:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 15:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 15:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 15:28	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 15:28	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 15:28	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 15:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 15:28	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 15:28	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 15:28	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 15:28	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 15:28	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 15:28	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 15:28	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 15:28	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 15:28	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 15:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 15:28	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 15:28	1
Trichloroethene	**0.89**	**J**	1.0	0.46	ug/L			09/13/17 15:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 15:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/13/17 15:28*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/13/17 15:28*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/13/17 15:28*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/13/17 15:28*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-CLW20B

Lab Sample ID: 480-124040-6

Date Collected: 09/12/17 11:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 15:53	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 15:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 15:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 15:53	1
1,1-Dichloroethane	**0.42**	**J**	1.0	0.38	ug/L			09/13/17 15:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 15:53	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 15:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 15:53	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 15:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 15:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 15:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 15:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 15:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 15:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 15:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 15:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 15:53	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 15:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 15:53	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 15:53	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 15:53	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 15:53	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 15:53	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 15:53	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 15:53	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 15:53	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 15:53	1
Acetone	ND		50	3.0	ug/L			09/13/17 15:53	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 15:53	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 15:53	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 15:53	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 15:53	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 15:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 15:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 15:53	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 15:53	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 15:53	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 15:53	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 15:53	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 15:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/17 15:53	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 15:53	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 15:53	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 15:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 15:53	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 15:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 15:53	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 15:53	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 15:53	1

Client Sample ID: C091217-CLW20B

Lab Sample ID: 480-124040-6

Date Collected: 09/12/17 11:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 15:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 15:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 15:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 15:53	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 15:53	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 15:53	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 15:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 15:53	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 15:53	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 15:53	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 15:53	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 15:53	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 15:53	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 15:53	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 15:53	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 15:53	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 15:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 15:53	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 15:53	1
Trichloroethene	ND		1.0	0.46	ug/L			09/13/17 15:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 15:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/13/17 15:53*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/13/17 15:53*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*09/13/17 15:53*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/13/17 15:53*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-CLW22

Lab Sample ID: 480-124040-7

Date Collected: 09/12/17 15:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 16:19	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 16:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 16:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 16:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 16:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 16:19	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 16:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 16:19	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 16:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 16:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 16:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 16:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 16:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 16:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 16:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 16:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 16:19	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 16:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 16:19	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 16:19	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 16:19	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 16:19	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 16:19	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 16:19	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 16:19	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 16:19	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 16:19	1
Acetone	ND		50	3.0	ug/L			09/13/17 16:19	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 16:19	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 16:19	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 16:19	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 16:19	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 16:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 16:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 16:19	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 16:19	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 16:19	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 16:19	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 16:19	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 16:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/17 16:19	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 16:19	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 16:19	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 16:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 16:19	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 16:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 16:19	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 16:19	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 16:19	1

Client Sample ID: C091217-CLW22

Lab Sample ID: 480-124040-7

Date Collected: 09/12/17 15:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 16:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 16:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 16:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 16:19	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 16:19	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 16:19	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 16:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 16:19	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 16:19	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 16:19	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 16:19	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 16:19	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 16:19	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 16:19	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 16:19	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 16:19	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 16:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 16:19	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 16:19	1
Trichloroethene	**16**		1.0	0.46	ug/L			09/13/17 16:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 16:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/13/17 16:19*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/13/17 16:19*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/13/17 16:19*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/17 16:19*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**14**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.026**		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-CLW8A

Lab Sample ID: 480-124040-8

Date Collected: 09/12/17 12:10

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 16:44	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 16:44	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 16:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 16:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 16:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 16:44	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 16:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 16:44	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 16:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 16:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 16:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 16:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 16:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 16:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 16:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 16:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 16:44	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 16:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 16:44	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 16:44	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 16:44	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/13/17 16:44	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 16:44	1
2-Hexanone	ND	*	10	1.2	ug/L			09/13/17 16:44	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 16:44	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 16:44	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 16:44	1
Acetone	ND		50	3.0	ug/L			09/13/17 16:44	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 16:44	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 16:44	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 16:44	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 16:44	1
Carbon disulfide	ND		10	0.19	ug/L			09/13/17 16:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 16:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 16:44	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 16:44	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 16:44	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 16:44	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 16:44	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 16:44	1
cis-1,2-Dichloroethene	**5.6**		1.0	0.81	ug/L			09/13/17 16:44	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 16:44	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 16:44	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 16:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 16:44	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 16:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 16:44	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 16:44	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 16:44	1

Client Sample ID: C091217-CLW8A

Lab Sample ID: 480-124040-8

Date Collected: 09/12/17 12:10

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 16:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 16:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 16:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 16:44	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 16:44	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 16:44	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 16:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 16:44	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 16:44	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 16:44	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 16:44	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 16:44	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 16:44	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 16:44	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/13/17 16:44	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 16:44	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 16:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 16:44	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 16:44	1
Trichloroethene	**32**		1.0	0.46	ug/L			09/13/17 16:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 16:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/13/17 16:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/13/17 16:44*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/13/17 16:44*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/13/17 16:44*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**1100**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.97**		0.25	0.13	mg/L			09/13/17 08:12	25

Client Sample ID: C091217-OSW4I

Lab Sample ID: 480-124040-9

Date Collected: 09/12/17 12:55

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.0	2.8	ug/L			09/13/17 17:10	8
1,1,1-Trichloroethane	ND		8.0	6.6	ug/L			09/13/17 17:10	8
1,1,2,2-Tetrachloroethane	ND		4.0	1.7	ug/L			09/13/17 17:10	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			09/13/17 17:10	8
1,1-Dichloroethane	ND		8.0	3.0	ug/L			09/13/17 17:10	8
1,1-Dichloroethene	**5.2**	**J**	8.0	2.3	ug/L			09/13/17 17:10	8
1,1-Dichloropropene	ND		8.0	5.8	ug/L			09/13/17 17:10	8
1,2,3-Trichlorobenzene	ND		8.0	3.3	ug/L			09/13/17 17:10	8
1,2,3-Trichloropropane	ND		8.0	7.1	ug/L			09/13/17 17:10	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			09/13/17 17:10	8
1,2,4-Trimethylbenzene	ND		8.0	6.0	ug/L			09/13/17 17:10	8
1,2-Dibromo-3-Chloropropane	ND		40	3.1	ug/L			09/13/17 17:10	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			09/13/17 17:10	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			09/13/17 17:10	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			09/13/17 17:10	8
1,3,5-Trimethylbenzene	ND		8.0	6.2	ug/L			09/13/17 17:10	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			09/13/17 17:10	8
1,3-Dichloropropane	ND		8.0	6.0	ug/L			09/13/17 17:10	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			09/13/17 17:10	8
1,4-Dioxane	ND		400	75	ug/L			09/13/17 17:10	8
2,2-Dichloropropane	ND		8.0	3.2	ug/L			09/13/17 17:10	8
2-Butanone (MEK)	ND	*	80	11	ug/L			09/13/17 17:10	8
2-Chlorotoluene	ND		8.0	6.9	ug/L			09/13/17 17:10	8
2-Hexanone	ND	*	80	9.9	ug/L			09/13/17 17:10	8
4-Chlorotoluene	ND		8.0	6.7	ug/L			09/13/17 17:10	8
4-Isopropyltoluene	ND		8.0	2.5	ug/L			09/13/17 17:10	8
4-Methyl-2-pentanone (MIBK)	ND		80	17	ug/L			09/13/17 17:10	8
Acetone	ND		400	24	ug/L			09/13/17 17:10	8
Benzene	ND		8.0	3.3	ug/L			09/13/17 17:10	8
Bromobenzene	ND		8.0	6.4	ug/L			09/13/17 17:10	8
Bromoform	ND		8.0	2.1	ug/L			09/13/17 17:10	8
Bromomethane	ND		16	5.5	ug/L			09/13/17 17:10	8
Carbon disulfide	ND		80	1.5	ug/L			09/13/17 17:10	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			09/13/17 17:10	8
Chlorobenzene	ND		8.0	6.0	ug/L			09/13/17 17:10	8
Chlorobromomethane	ND		8.0	7.0	ug/L			09/13/17 17:10	8
Chlorodibromomethane	ND		4.0	2.6	ug/L			09/13/17 17:10	8
Chloroethane	ND		16	2.6	ug/L			09/13/17 17:10	8
Chloroform	ND		8.0	2.7	ug/L			09/13/17 17:10	8
Chloromethane	ND		16	2.8	ug/L			09/13/17 17:10	8
cis-1,2-Dichloroethene	**130**		8.0	6.5	ug/L			09/13/17 17:10	8
cis-1,3-Dichloropropene	ND		3.2	2.9	ug/L			09/13/17 17:10	8
Dibromomethane	ND		8.0	3.3	ug/L			09/13/17 17:10	8
Dichlorobromomethane	ND		4.0	3.1	ug/L			09/13/17 17:10	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			09/13/17 17:10	8
Ethyl ether	ND		8.0	5.8	ug/L			09/13/17 17:10	8
Ethylbenzene	ND		8.0	5.9	ug/L			09/13/17 17:10	8
Ethylene Dibromide	ND		8.0	5.8	ug/L			09/13/17 17:10	8
Hexachlorobutadiene	ND		3.2	2.2	ug/L			09/13/17 17:10	8

Client Sample ID: C091217-OSW4I

Lab Sample ID: 480-124040-9

Date Collected: 09/12/17 12:55

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		80	4.7	ug/L			09/13/17 17:10	8
Isopropylbenzene	ND		8.0	6.3	ug/L			09/13/17 17:10	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			09/13/17 17:10	8
Methylene Chloride	ND		8.0	3.5	ug/L			09/13/17 17:10	8
m-Xylene & p-Xylene	ND		16	5.3	ug/L			09/13/17 17:10	8
Naphthalene	ND		40	3.4	ug/L			09/13/17 17:10	8
n-Butylbenzene	ND		8.0	5.1	ug/L			09/13/17 17:10	8
N-Propylbenzene	ND		8.0	5.5	ug/L			09/13/17 17:10	8
o-Xylene	ND		8.0	6.1	ug/L			09/13/17 17:10	8
sec-Butylbenzene	ND		8.0	6.0	ug/L			09/13/17 17:10	8
Styrene	ND		8.0	5.8	ug/L			09/13/17 17:10	8
Tert-amyl methyl ether	ND		40	2.2	ug/L			09/13/17 17:10	8
Tert-butyl ethyl ether	ND		40	2.4	ug/L			09/13/17 17:10	8
tert-Butylbenzene	ND		8.0	6.5	ug/L			09/13/17 17:10	8
Tetrachloroethene	ND	*	8.0	2.9	ug/L			09/13/17 17:10	8
Tetrahydrofuran	ND		80	10	ug/L			09/13/17 17:10	8
Toluene	ND		8.0	4.1	ug/L			09/13/17 17:10	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			09/13/17 17:10	8
trans-1,3-Dichloropropene	ND		3.2	3.0	ug/L			09/13/17 17:10	8
Trichloroethene	**390**		8.0	3.7	ug/L			09/13/17 17:10	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			09/13/17 17:10	8
Vinyl chloride	ND		8.0	7.2	ug/L			09/13/17 17:10	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/13/17 17:10*	*8*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/13/17 17:10*	*8*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/13/17 17:10*	*8*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/13/17 17:10*	*8*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**140**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 15:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.14**		0.010	0.0050	mg/L			09/13/17 08:12	1

Client Sample ID: C091217-OSW7

Lab Sample ID: 480-124040-10

Date Collected: 09/12/17 14:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	3.5	ug/L			09/13/17 17:35	10
1,1,1-Trichloroethane	ND		10	8.2	ug/L			09/13/17 17:35	10
1,1,2,2-Tetrachloroethane	ND		5.0	2.1	ug/L			09/13/17 17:35	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/13/17 17:35	10
1,1-Dichloroethane	ND		10	3.8	ug/L			09/13/17 17:35	10
1,1-Dichloroethene	ND		10	2.9	ug/L			09/13/17 17:35	10
1,1-Dichloropropene	ND		10	7.2	ug/L			09/13/17 17:35	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/13/17 17:35	10
1,2,3-Trichloropropane	ND		10	8.9	ug/L			09/13/17 17:35	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/13/17 17:35	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			09/13/17 17:35	10
1,2-Dibromo-3-Chloropropane	ND		50	3.9	ug/L			09/13/17 17:35	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/13/17 17:35	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/13/17 17:35	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/13/17 17:35	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			09/13/17 17:35	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/13/17 17:35	10
1,3-Dichloropropane	ND		10	7.5	ug/L			09/13/17 17:35	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/13/17 17:35	10
1,4-Dioxane	ND		500	93	ug/L			09/13/17 17:35	10
2,2-Dichloropropane	ND		10	4.0	ug/L			09/13/17 17:35	10
2-Butanone (MEK)	ND	F1 *	100	13	ug/L			09/13/17 17:35	10
2-Chlorotoluene	ND		10	8.6	ug/L			09/13/17 17:35	10
2-Hexanone	ND	F1 *	100	12	ug/L			09/13/17 17:35	10
4-Chlorotoluene	ND		10	8.4	ug/L			09/13/17 17:35	10
4-Isopropyltoluene	ND		10	3.1	ug/L			09/13/17 17:35	10
4-Methyl-2-pentanone (MIBK)	ND		100	21	ug/L			09/13/17 17:35	10
Acetone	ND		500	30	ug/L			09/13/17 17:35	10
Benzene	ND		10	4.1	ug/L			09/13/17 17:35	10
Bromobenzene	ND		10	8.0	ug/L			09/13/17 17:35	10
Bromoform	ND		10	2.6	ug/L			09/13/17 17:35	10
Bromomethane	ND		20	6.9	ug/L			09/13/17 17:35	10
Carbon disulfide	ND		100	1.9	ug/L			09/13/17 17:35	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/13/17 17:35	10
Chlorobenzene	ND		10	7.5	ug/L			09/13/17 17:35	10
Chlorobromomethane	ND		10	8.7	ug/L			09/13/17 17:35	10
Chlorodibromomethane	ND		5.0	3.2	ug/L			09/13/17 17:35	10
Chloroethane	ND		20	3.2	ug/L			09/13/17 17:35	10
Chloroform	ND		10	3.4	ug/L			09/13/17 17:35	10
Chloromethane	ND		20	3.5	ug/L			09/13/17 17:35	10
cis-1,2-Dichloroethene	**34**		10	8.1	ug/L			09/13/17 17:35	10
cis-1,3-Dichloropropene	ND		4.0	3.6	ug/L			09/13/17 17:35	10
Dibromomethane	ND		10	4.1	ug/L			09/13/17 17:35	10
Dichlorobromomethane	ND		5.0	3.9	ug/L			09/13/17 17:35	10
Dichlorodifluoromethane	ND	F1 F2	10	6.8	ug/L			09/13/17 17:35	10
Ethyl ether	ND		10	7.2	ug/L			09/13/17 17:35	10
Ethylbenzene	ND		10	7.4	ug/L			09/13/17 17:35	10
Ethylene Dibromide	ND		10	7.3	ug/L			09/13/17 17:35	10
Hexachlorobutadiene	ND		4.0	2.8	ug/L			09/13/17 17:35	10

Client Sample ID: C091217-OSW7

Lab Sample ID: 480-124040-10

Date Collected: 09/12/17 14:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		100	5.9	ug/L			09/13/17 17:35	10
Isopropylbenzene	ND		10	7.9	ug/L			09/13/17 17:35	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/13/17 17:35	10
Methylene Chloride	ND		10	4.4	ug/L			09/13/17 17:35	10
m-Xylene & p-Xylene	ND		20	6.6	ug/L			09/13/17 17:35	10
Naphthalene	ND		50	4.3	ug/L			09/13/17 17:35	10
n-Butylbenzene	ND		10	6.4	ug/L			09/13/17 17:35	10
N-Propylbenzene	ND		10	6.9	ug/L			09/13/17 17:35	10
o-Xylene	ND		10	7.6	ug/L			09/13/17 17:35	10
sec-Butylbenzene	ND		10	7.5	ug/L			09/13/17 17:35	10
Styrene	ND		10	7.3	ug/L			09/13/17 17:35	10
Tert-amyl methyl ether	ND		50	2.7	ug/L			09/13/17 17:35	10
Tert-butyl ethyl ether	ND		50	2.9	ug/L			09/13/17 17:35	10
tert-Butylbenzene	ND		10	8.1	ug/L			09/13/17 17:35	10
Tetrachloroethene	ND	*	10	3.6	ug/L			09/13/17 17:35	10
Tetrahydrofuran	ND		100	13	ug/L			09/13/17 17:35	10
Toluene	ND		10	5.1	ug/L			09/13/17 17:35	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/13/17 17:35	10
trans-1,3-Dichloropropene	ND		4.0	3.7	ug/L			09/13/17 17:35	10
Trichloroethene	**240**	**F1**	10	4.6	ug/L			09/13/17 17:35	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/13/17 17:35	10
Vinyl chloride	ND	F1	10	9.0	ug/L			09/13/17 17:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/13/17 17:35*	*10*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/13/17 17:35*	*10*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/13/17 17:35*	*10*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/13/17 17:35*	*10*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**560**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.66**		0.050	0.025	mg/L			09/13/17 08:12	5

Client Sample ID: C091217-OSW7DUP

Lab Sample ID: 480-124040-11

Date Collected: 09/12/17 14:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	3.5	ug/L			09/13/17 18:00	10
1,1,1-Trichloroethane	ND		10	8.2	ug/L			09/13/17 18:00	10
1,1,2,2-Tetrachloroethane	ND		5.0	2.1	ug/L			09/13/17 18:00	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/13/17 18:00	10
1,1-Dichloroethane	ND		10	3.8	ug/L			09/13/17 18:00	10
1,1-Dichloroethene	ND		10	2.9	ug/L			09/13/17 18:00	10
1,1-Dichloropropene	ND		10	7.2	ug/L			09/13/17 18:00	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/13/17 18:00	10
1,2,3-Trichloropropane	ND		10	8.9	ug/L			09/13/17 18:00	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/13/17 18:00	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			09/13/17 18:00	10
1,2-Dibromo-3-Chloropropane	ND		50	3.9	ug/L			09/13/17 18:00	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/13/17 18:00	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/13/17 18:00	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/13/17 18:00	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			09/13/17 18:00	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/13/17 18:00	10
1,3-Dichloropropane	ND		10	7.5	ug/L			09/13/17 18:00	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/13/17 18:00	10
1,4-Dioxane	ND		500	93	ug/L			09/13/17 18:00	10
2,2-Dichloropropane	ND		10	4.0	ug/L			09/13/17 18:00	10
2-Butanone (MEK)	ND	*	100	13	ug/L			09/13/17 18:00	10
2-Chlorotoluene	ND		10	8.6	ug/L			09/13/17 18:00	10
2-Hexanone	ND	*	100	12	ug/L			09/13/17 18:00	10
4-Chlorotoluene	ND		10	8.4	ug/L			09/13/17 18:00	10
4-Isopropyltoluene	ND		10	3.1	ug/L			09/13/17 18:00	10
4-Methyl-2-pentanone (MIBK)	ND		100	21	ug/L			09/13/17 18:00	10
Acetone	ND		500	30	ug/L			09/13/17 18:00	10
Benzene	ND		10	4.1	ug/L			09/13/17 18:00	10
Bromobenzene	ND		10	8.0	ug/L			09/13/17 18:00	10
Bromoform	ND		10	2.6	ug/L			09/13/17 18:00	10
Bromomethane	ND		20	6.9	ug/L			09/13/17 18:00	10
Carbon disulfide	ND		100	1.9	ug/L			09/13/17 18:00	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/13/17 18:00	10
Chlorobenzene	ND		10	7.5	ug/L			09/13/17 18:00	10
Chlorobromomethane	ND		10	8.7	ug/L			09/13/17 18:00	10
Chlorodibromomethane	ND		5.0	3.2	ug/L			09/13/17 18:00	10
Chloroethane	ND		20	3.2	ug/L			09/13/17 18:00	10
Chloroform	ND		10	3.4	ug/L			09/13/17 18:00	10
Chloromethane	ND		20	3.5	ug/L			09/13/17 18:00	10
cis-1,2-Dichloroethene	**33**		10	8.1	ug/L			09/13/17 18:00	10
cis-1,3-Dichloropropene	ND		4.0	3.6	ug/L			09/13/17 18:00	10
Dibromomethane	ND		10	4.1	ug/L			09/13/17 18:00	10
Dichlorobromomethane	ND		5.0	3.9	ug/L			09/13/17 18:00	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/13/17 18:00	10
Ethyl ether	ND		10	7.2	ug/L			09/13/17 18:00	10
Ethylbenzene	ND		10	7.4	ug/L			09/13/17 18:00	10
Ethylene Dibromide	ND		10	7.3	ug/L			09/13/17 18:00	10
Hexachlorobutadiene	ND		4.0	2.8	ug/L			09/13/17 18:00	10

Client Sample ID: C091217-OSW7DUP

Lab Sample ID: 480-124040-11

Date Collected: 09/12/17 14:15

Matrix: Water

Date Received: 09/13/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		100	5.9	ug/L			09/13/17 18:00	10
Isopropylbenzene	ND		10	7.9	ug/L			09/13/17 18:00	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/13/17 18:00	10
Methylene Chloride	ND		10	4.4	ug/L			09/13/17 18:00	10
m-Xylene & p-Xylene	ND		20	6.6	ug/L			09/13/17 18:00	10
Naphthalene	ND		50	4.3	ug/L			09/13/17 18:00	10
n-Butylbenzene	ND		10	6.4	ug/L			09/13/17 18:00	10
N-Propylbenzene	ND		10	6.9	ug/L			09/13/17 18:00	10
o-Xylene	ND		10	7.6	ug/L			09/13/17 18:00	10
sec-Butylbenzene	ND		10	7.5	ug/L			09/13/17 18:00	10
Styrene	ND		10	7.3	ug/L			09/13/17 18:00	10
Tert-amyl methyl ether	ND		50	2.7	ug/L			09/13/17 18:00	10
Tert-butyl ethyl ether	ND		50	2.9	ug/L			09/13/17 18:00	10
tert-Butylbenzene	ND		10	8.1	ug/L			09/13/17 18:00	10
Tetrachloroethene	ND	*	10	3.6	ug/L			09/13/17 18:00	10
Tetrahydrofuran	ND		100	13	ug/L			09/13/17 18:00	10
Toluene	ND		10	5.1	ug/L			09/13/17 18:00	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/13/17 18:00	10
trans-1,3-Dichloropropene	ND		4.0	3.7	ug/L			09/13/17 18:00	10
Trichloroethene	**230**		10	4.6	ug/L			09/13/17 18:00	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/13/17 18:00	10
Vinyl chloride	ND		10	9.0	ug/L			09/13/17 18:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/13/17 18:00*	*10*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/13/17 18:00*	*10*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/13/17 18:00*	*10*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/13/17 18:00*	*10*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**570**		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 15:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.60**		0.10	0.050	mg/L			09/13/17 08:12	10

Surrogate Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-124040-1	C091217-DMWA	98	100	96	97
480-124040-2	C091217-DMWB	104	100	101	105
480-124040-3	C091217-CLW19	98	101	97	97
480-124040-4	C091217-CLW19B	100	99	97	96
480-124040-5	C091217-CLW20	100	101	98	100
480-124040-6	C091217-CLW20B	97	100	96	100
480-124040-7	C091217-CLW22	99	97	97	97
480-124040-8	C091217-CLW8A	100	99	98	99
480-124040-9	C091217-OSW4I	96	102	99	95
480-124040-10	C091217-OSW7	98	99	97	97
480-124040-10 MS	C091217-OSW7MS	88	101	95	83
480-124040-10 MSD	C091217-OSW7MSD	88	101	98	82
480-124040-11	C091217-OSW7DUP	99	100	98	100
LCS 480-376485/5	Lab Control Sample	100	100	97	93
LCS 480-376934/5	Lab Control Sample	106	98	99	99
LCSD 480-376485/28	Lab Control Sample Dup	102	101	97	93
LCSD 480-376934/6	Lab Control Sample Dup	104	104	102	99
MB 480-376485/7	Method Blank	99	102	100	96
MB 480-376934/8	Method Blank	103	103	103	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 480-376485/7
Matrix: Water
Analysis Batch: 376485

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/17 11:41	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/17 11:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/13/17 11:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/17 11:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/17 11:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/17 11:41	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/13/17 11:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 11:41	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/13/17 11:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/17 11:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/17 11:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/13/17 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/17 11:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/17 11:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/17 11:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/17 11:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/17 11:41	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/13/17 11:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/17 11:41	1
1,4-Dioxane	ND		50	9.3	ug/L			09/13/17 11:41	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/13/17 11:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/13/17 11:41	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/13/17 11:41	1
2-Hexanone	ND		10	1.2	ug/L			09/13/17 11:41	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/13/17 11:41	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/13/17 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/13/17 11:41	1
Acetone	ND		50	3.0	ug/L			09/13/17 11:41	1
Benzene	ND		1.0	0.41	ug/L			09/13/17 11:41	1
Bromobenzene	ND		1.0	0.80	ug/L			09/13/17 11:41	1
Bromoform	ND		1.0	0.26	ug/L			09/13/17 11:41	1
Bromomethane	ND		2.0	0.69	ug/L			09/13/17 11:41	1
Carbon disulfide	0.214	J	10	0.19	ug/L			09/13/17 11:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/17 11:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/17 11:41	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/13/17 11:41	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/13/17 11:41	1
Chloroethane	ND		2.0	0.32	ug/L			09/13/17 11:41	1
Chloroform	ND		1.0	0.34	ug/L			09/13/17 11:41	1
Chloromethane	ND		2.0	0.35	ug/L			09/13/17 11:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/17 11:41	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/13/17 11:41	1
Dibromomethane	ND		1.0	0.41	ug/L			09/13/17 11:41	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/13/17 11:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/17 11:41	1
Ethyl ether	ND		1.0	0.72	ug/L			09/13/17 11:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/17 11:41	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/13/17 11:41	1

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

Lab Sample ID: MB 480-376485/7
Matrix: Water
Analysis Batch: 376485

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/13/17 11:41	1
Isopropyl ether	ND		10	0.59	ug/L			09/13/17 11:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/17 11:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/17 11:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/17 11:41	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/13/17 11:41	1
Naphthalene	ND		5.0	0.43	ug/L			09/13/17 11:41	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/17 11:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/17 11:41	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/17 11:41	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/17 11:41	1
Styrene	ND		1.0	0.73	ug/L			09/13/17 11:41	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/13/17 11:41	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/13/17 11:41	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/17 11:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/13/17 11:41	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/13/17 11:41	1
Toluene	ND		1.0	0.51	ug/L			09/13/17 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/17 11:41	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/13/17 11:41	1
Trichloroethene	ND		1.0	0.46	ug/L			09/13/17 11:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/17 11:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/17 11:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/13/17 11:41*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/13/17 11:41*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/13/17 11:41*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/13/17 11:41*	*1*

Lab Sample ID: LCS 480-376485/5
Matrix: Water
Analysis Batch: 376485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		104	70 - 130
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.5		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	26.1		ug/L		104	70 - 130
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 130
1,1-Dichloroethene	25.0	22.5		ug/L		90	70 - 130
1,1-Dichloropropene	25.0	25.8		ug/L		103	70 - 130
1,2,3-Trichlorobenzene	25.0	26.5		ug/L		106	70 - 130
1,2,3-Trichloropropane	25.0	26.3		ug/L		105	70 - 130
1,2,4-Trichlorobenzene	25.0	25.6		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	70 - 130
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130

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

Lab Sample ID: LCS 480-376485/5
Matrix: Water
Analysis Batch: 376485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	24.5		ug/L		98	70 - 130
1,2-Dichloropropane	25.0	25.0		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 130
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130
1,3-Dichloropropane	25.0	25.9		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130
1,4-Dioxane	500	508		ug/L		102	70 - 130
2,2-Dichloropropane	25.0	25.0		ug/L		100	70 - 130
2-Butanone (MEK)	125	251	*	ug/L		200	70 - 130
2-Chlorotoluene	25.0	25.9		ug/L		104	70 - 130
2-Hexanone	125	214	*	ug/L		172	70 - 130
4-Chlorotoluene	25.0	27.3		ug/L		109	70 - 130
4-Isopropyltoluene	25.0	27.2		ug/L		109	70 - 130
4-Methyl-2-pentanone (MIBK)	125	139		ug/L		111	70 - 130
Acetone	125	144		ug/L		116	70 - 130
Benzene	25.0	24.9		ug/L		100	70 - 130
Bromobenzene	25.0	25.5		ug/L		102	70 - 130
Bromoform	25.0	26.9		ug/L		108	70 - 130
Bromomethane	25.0	22.7		ug/L		91	70 - 130
Carbon disulfide	25.0	24.1		ug/L		96	70 - 130
Carbon tetrachloride	25.0	25.5		ug/L		102	70 - 130
Chlorobenzene	25.0	26.2		ug/L		105	70 - 130
Chlorobromomethane	25.0	25.0		ug/L		100	70 - 130
Chlorodibromomethane	25.0	24.3		ug/L		97	70 - 130
Chloroethane	25.0	24.0		ug/L		96	70 - 130
Chloroform	25.0	24.4		ug/L		98	70 - 130
Chloromethane	25.0	21.6		ug/L		86	70 - 130
cis-1,2-Dichloroethene	25.0	24.1		ug/L		97	70 - 130
cis-1,3-Dichloropropene	25.0	26.6		ug/L		107	70 - 130
Dibromomethane	25.0	25.4		ug/L		102	70 - 130
Dichlorobromomethane	25.0	25.9		ug/L		104	70 - 130
Dichlorodifluoromethane	25.0	19.5		ug/L		78	70 - 130
Ethyl ether	25.0	25.8		ug/L		103	70 - 130
Ethylbenzene	25.0	26.3		ug/L		105	70 - 130
Ethylene Dibromide	25.0	26.6		ug/L		107	70 - 130
Hexachlorobutadiene	25.0	26.3		ug/L		105	70 - 130
Isopropyl ether	25.0	27.6		ug/L		110	70 - 130
Isopropylbenzene	25.0	26.2		ug/L		105	70 - 130
Methyl tert-butyl ether	25.0	25.0		ug/L		100	70 - 130
Methylene Chloride	25.0	22.9		ug/L		91	70 - 130
m-Xylene & p-Xylene	25.0	26.5		ug/L		106	70 - 130
Naphthalene	25.0	27.2		ug/L		109	70 - 130
n-Butylbenzene	25.0	26.3		ug/L		105	70 - 130
N-Propylbenzene	25.0	26.2		ug/L		105	70 - 130
o-Xylene	25.0	26.7		ug/L		107	70 - 130
sec-Butylbenzene	25.0	26.5		ug/L		106	70 - 130
Styrene	25.0	26.7		ug/L		107	70 - 130
Tert-amyl methyl ether	25.0	27.8		ug/L		111	70 - 130

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

Lab Sample ID: LCS 480-376485/5
Matrix: Water
Analysis Batch: 376485

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	27.0		ug/L		108	70 - 130
tert-Butylbenzene	25.0	25.3		ug/L		101	70 - 130
Tetrachloroethene	25.0	30.5		ug/L		122	70 - 130
Tetrahydrofuran	50.0	52.1		ug/L		104	70 - 130
Toluene	25.0	26.3		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	23.0		ug/L		92	70 - 130
trans-1,3-Dichloropropene	25.0	27.1		ug/L		109	70 - 130
Trichloroethene	25.0	25.8		ug/L		103	70 - 130
Trichlorofluoromethane	25.0	23.7		ug/L		95	70 - 130
Vinyl chloride	25.0	22.2		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 480-376485/28
Matrix: Water
Analysis Batch: 376485

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.9		ug/L		108	70 - 130	4	20
1,1,1-Trichloroethane	25.0	26.7		ug/L		107	70 - 130	5	20
1,1,2,2-Tetrachloroethane	25.0	27.4		ug/L		110	70 - 130	3	20
1,1,2-Trichloroethane	25.0	26.4		ug/L		106	70 - 130	1	20
1,1-Dichloroethane	25.0	26.7		ug/L		107	70 - 130	5	20
1,1-Dichloroethene	25.0	24.5		ug/L		98	70 - 130	9	20
1,1-Dichloropropene	25.0	27.2		ug/L		109	70 - 130	6	20
1,2,3-Trichlorobenzene	25.0	27.4		ug/L		109	70 - 130	3	20
1,2,3-Trichloropropane	25.0	27.2		ug/L		109	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	28.1		ug/L		112	70 - 130	7	20
1,2-Dibromo-3-Chloropropane	25.0	26.8		ug/L		107	70 - 130	6	20
1,2-Dichlorobenzene	25.0	26.6		ug/L		107	70 - 130	4	20
1,2-Dichloroethane	25.0	25.1		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	25.0	26.1		ug/L		105	70 - 130	5	20
1,3,5-Trimethylbenzene	25.0	27.9		ug/L		112	70 - 130	6	20
1,3-Dichlorobenzene	25.0	26.8		ug/L		107	70 - 130	6	20
1,3-Dichloropropane	25.0	26.4		ug/L		105	70 - 130	2	20
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130	5	20
1,4-Dioxane	500	519		ug/L		104	70 - 130	2	20
2,2-Dichloropropane	25.0	26.1		ug/L		104	70 - 130	4	20
2-Butanone (MEK)	125	253	*	ug/L		202	70 - 130	1	20
2-Chlorotoluene	25.0	27.5		ug/L		110	70 - 130	6	20
2-Hexanone	125	216	*	ug/L		172	70 - 130	1	20
4-Chlorotoluene	25.0	28.5		ug/L		114	70 - 130	4	20
4-Isopropyltoluene	25.0	28.9		ug/L		116	70 - 130	6	20

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

Lab Sample ID: LCSD 480-376485/28
Matrix: Water
Analysis Batch: 376485

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	125	140		ug/L		112	70 - 130	1	20
Acetone	125	138		ug/L		111	70 - 130	4	20
Benzene	25.0	26.1		ug/L		104	70 - 130	4	20
Bromobenzene	25.0	27.0		ug/L		108	70 - 130	6	20
Bromoform	25.0	27.2		ug/L		109	70 - 130	1	20
Bromomethane	25.0	24.4		ug/L		98	70 - 130	7	20
Carbon disulfide	25.0	25.6		ug/L		102	70 - 130	6	20
Carbon tetrachloride	25.0	27.1		ug/L		109	70 - 130	6	20
Chlorobenzene	25.0	26.9		ug/L		107	70 - 130	3	20
Chlorobromomethane	25.0	25.8		ug/L		103	70 - 130	3	20
Chlorodibromomethane	25.0	24.7		ug/L		99	70 - 130	2	20
Chloroethane	25.0	24.9		ug/L		100	70 - 130	4	20
Chloroform	25.0	25.4		ug/L		101	70 - 130	4	20
Chloromethane	25.0	22.8		ug/L		91	70 - 130	6	20
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	27.9		ug/L		112	70 - 130	5	20
Dibromomethane	25.0	25.9		ug/L		103	70 - 130	2	20
Dichlorobromomethane	25.0	27.0		ug/L		108	70 - 130	4	20
Dichlorodifluoromethane	25.0	21.0		ug/L		84	70 - 130	7	20
Ethyl ether	25.0	26.4		ug/L		106	70 - 130	2	20
Ethylbenzene	25.0	27.4		ug/L		110	70 - 130	4	20
Ethylene Dibromide	25.0	27.5		ug/L		110	70 - 130	3	20
Hexachlorobutadiene	25.0	28.7		ug/L		115	70 - 130	9	20
Isopropyl ether	25.0	28.4		ug/L		114	70 - 130	3	20
Isopropylbenzene	25.0	28.1		ug/L		112	70 - 130	7	20
Methyl tert-butyl ether	25.0	25.7		ug/L		103	70 - 130	2	20
Methylene Chloride	25.0	23.6		ug/L		94	70 - 130	3	20
m-Xylene & p-Xylene	25.0	27.6		ug/L		110	70 - 130	4	20
Naphthalene	25.0	28.1		ug/L		112	70 - 130	3	20
n-Butylbenzene	25.0	27.9		ug/L		112	70 - 130	6	20
N-Propylbenzene	25.0	28.0		ug/L		112	70 - 130	7	20
o-Xylene	25.0	27.8		ug/L		111	70 - 130	4	20
sec-Butylbenzene	25.0	28.5		ug/L		114	70 - 130	7	20
Styrene	25.0	27.7		ug/L		111	70 - 130	4	20
Tert-amyl methyl ether	25.0	28.7		ug/L		115	70 - 130	3	20
Tert-butyl ethyl ether	25.0	28.0		ug/L		112	70 - 130	4	20
tert-Butylbenzene	25.0	27.3		ug/L		109	70 - 130	8	20
Tetrachloroethene	25.0	32.9	*	ug/L		132	70 - 130	8	20
Tetrahydrofuran	50.0	52.0		ug/L		104	70 - 130	0	20
Toluene	25.0	27.4		ug/L		109	70 - 130	4	20
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 130	8	20
trans-1,3-Dichloropropene	25.0	27.3		ug/L		109	70 - 130	1	20
Trichloroethene	25.0	27.4		ug/L		110	70 - 130	6	20
Trichlorofluoromethane	25.0	25.4		ug/L		102	70 - 130	7	20
Vinyl chloride	25.0	24.0		ug/L		96	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: LCSD 480-376485/28
Matrix: Water
Analysis Batch: 376485

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
Toluene-d8 (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	93		70 - 130

Lab Sample ID: 480-124040-10 MS
Matrix: Water
Analysis Batch: 376485

Client Sample ID: C091217-OSW7MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		250	238		ug/L		95	70 - 130
1,1,1-Trichloroethane	ND		250	196		ug/L		79	70 - 130
1,1,2,2-Tetrachloroethane	ND		250	250		ug/L		100	70 - 130
1,1,2-Trichloroethane	ND		250	239		ug/L		95	70 - 130
1,1-Dichloroethane	ND		250	201		ug/L		81	70 - 130
1,1-Dichloroethene	ND		250	177		ug/L		71	70 - 130
1,1-Dichloropropene	ND		250	199		ug/L		80	70 - 130
1,2,3-Trichlorobenzene	ND		250	240		ug/L		96	70 - 130
1,2,3-Trichloropropane	ND		250	248		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	ND		250	230		ug/L		92	70 - 130
1,2,4-Trimethylbenzene	ND		250	237		ug/L		95	70 - 130
1,2-Dibromo-3-Chloropropane	ND		250	228		ug/L		91	70 - 130
1,2-Dichlorobenzene	ND		250	236		ug/L		94	70 - 130
1,2-Dichloroethane	ND		250	197		ug/L		79	70 - 130
1,2-Dichloropropane	ND		250	199		ug/L		80	70 - 130
1,3,5-Trimethylbenzene	ND		250	237		ug/L		95	70 - 130
1,3-Dichlorobenzene	ND		250	233		ug/L		93	70 - 130
1,3-Dichloropropane	ND		250	237		ug/L		95	70 - 130
1,4-Dichlorobenzene	ND		250	228		ug/L		91	70 - 130
1,4-Dioxane	ND		5000	4900		ug/L		98	70 - 130
2,2-Dichloropropane	ND		250	179		ug/L		71	70 - 130
2-Butanone (MEK)	ND	F1 *	1250	1990	F1	ug/L		159	70 - 130
2-Chlorotoluene	ND		250	246		ug/L		99	70 - 130
2-Hexanone	ND	F1 *	1250	1920	F1	ug/L		153	70 - 130
4-Chlorotoluene	ND		250	244		ug/L		98	70 - 130
4-Isopropyltoluene	ND		250	243		ug/L		97	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		1250	1260		ug/L		101	70 - 130
Acetone	ND		1250	978		ug/L		78	70 - 130
Benzene	ND		250	194		ug/L		78	70 - 130
Bromobenzene	ND		250	239		ug/L		96	70 - 130
Bromoform	ND		250	252		ug/L		101	70 - 130
Bromomethane	ND		250	184		ug/L		74	70 - 130
Carbon disulfide	ND		250	182		ug/L		73	70 - 130
Carbon tetrachloride	ND		250	199		ug/L		79	70 - 130
Chlorobenzene	ND		250	236		ug/L		95	70 - 130
Chlorobromomethane	ND		250	200		ug/L		80	70 - 130
Chlorodibromomethane	ND		250	220		ug/L		88	70 - 130
Chloroethane	ND		250	195		ug/L		78	70 - 130
Chloroform	ND		250	194		ug/L		78	70 - 130

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

Lab Sample ID: 480-124040-10 MS
Matrix: Water
Analysis Batch: 376485

Client Sample ID: C091217-OSW7MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		250	175		ug/L		70	70 - 130
cis-1,2-Dichloroethene	34		250	210		ug/L		70	70 - 130
cis-1,3-Dichloropropene	ND		250	212		ug/L		85	70 - 130
Dibromomethane	ND		250	201		ug/L		80	70 - 130
Dichlorobromomethane	ND		250	209		ug/L		84	70 - 130
Dichlorodifluoromethane	ND	F1 F2	250	144	F1	ug/L		58	70 - 130
Ethyl ether	ND		250	211		ug/L		85	70 - 130
Ethylbenzene	ND		250	230		ug/L		92	70 - 130
Ethylene Dibromide	ND		250	248		ug/L		99	70 - 130
Hexachlorobutadiene	ND		250	235		ug/L		94	70 - 130
Isopropyl ether	ND		250	234		ug/L		93	70 - 130
Isopropylbenzene	ND		250	236		ug/L		94	70 - 130
Methyl tert-butyl ether	ND		250	200		ug/L		80	70 - 130
Methylene Chloride	ND		250	190		ug/L		76	70 - 130
m-Xylene & p-Xylene	ND		250	237		ug/L		95	70 - 130
Naphthalene	ND		250	248		ug/L		99	70 - 130
n-Butylbenzene	ND		250	230		ug/L		92	70 - 130
N-Propylbenzene	ND		250	234		ug/L		94	70 - 130
o-Xylene	ND		250	239		ug/L		95	70 - 130
sec-Butylbenzene	ND		250	237		ug/L		95	70 - 130
Styrene	ND		250	238		ug/L		95	70 - 130
Tert-amyl methyl ether	ND		250	235		ug/L		94	70 - 130
Tert-butyl ethyl ether	ND		250	229		ug/L		92	70 - 130
tert-Butylbenzene	ND		250	232		ug/L		93	70 - 130
Tetrachloroethene	ND	*	250	235		ug/L		94	70 - 130
Tetrahydrofuran	ND		500	420		ug/L		84	70 - 130
Toluene	ND		250	235		ug/L		94	70 - 130
trans-1,2-Dichloroethene	ND		250	180		ug/L		72	70 - 130
trans-1,3-Dichloropropene	ND		250	244		ug/L		97	70 - 130
Trichloroethene	240	F1	250	367	F1	ug/L		52	70 - 130
Trichlorofluoromethane	ND		250	182		ug/L		73	70 - 130
Vinyl chloride	ND	F1	250	171	F1	ug/L		69	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*83*		*70 - 130*

Lab Sample ID: 480-124040-10 MSD
Matrix: Water
Analysis Batch: 376485

Client Sample ID: C091217-OSW7MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		250	259		ug/L		103	70 - 130	8	20
1,1,1-Trichloroethane	ND		250	218		ug/L		87	70 - 130	11	20
1,1,2,2-Tetrachloroethane	ND		250	271		ug/L		108	70 - 130	8	20
1,1,2-Trichloroethane	ND		250	260		ug/L		104	70 - 130	8	20

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

Lab Sample ID: 480-124040-10 MSD
Matrix: Water
Analysis Batch: 376485

Client Sample ID: C091217-OSW7MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		250	221		ug/L		88	70 - 130	9	20
1,1-Dichloroethene	ND		250	197		ug/L		79	70 - 130	10	20
1,1-Dichloropropene	ND		250	224		ug/L		89	70 - 130	12	20
1,2,3-Trichlorobenzene	ND		250	263		ug/L		105	70 - 130	9	20
1,2,3-Trichloropropane	ND		250	265		ug/L		106	70 - 130	7	20
1,2,4-Trichlorobenzene	ND		250	252		ug/L		101	70 - 130	9	20
1,2,4-Trimethylbenzene	ND		250	263		ug/L		105	70 - 130	10	20
1,2-Dibromo-3-Chloropropane	ND		250	259		ug/L		104	70 - 130	13	20
1,2-Dichlorobenzene	ND		250	257		ug/L		103	70 - 130	9	20
1,2-Dichloroethane	ND		250	216		ug/L		86	70 - 130	9	20
1,2-Dichloropropane	ND		250	217		ug/L		87	70 - 130	8	20
1,3,5-Trimethylbenzene	ND		250	261		ug/L		105	70 - 130	10	20
1,3-Dichlorobenzene	ND		250	255		ug/L		102	70 - 130	9	20
1,3-Dichloropropane	ND		250	259		ug/L		103	70 - 130	9	20
1,4-Dichlorobenzene	ND		250	249		ug/L		100	70 - 130	9	20
1,4-Dioxane	ND		5000	5720		ug/L		114	70 - 130	15	20
2,2-Dichloropropane	ND		250	196		ug/L		78	70 - 130	9	20
2-Butanone (MEK)	ND	F1 *	1250	2050	F1	ug/L		164	70 - 130	3	20
2-Chlorotoluene	ND		250	272		ug/L		109	70 - 130	10	20
2-Hexanone	ND	F1 *	1250	2000	F1	ug/L		160	70 - 130	4	20
4-Chlorotoluene	ND		250	264		ug/L		105	70 - 130	8	20
4-Isopropyltoluene	ND		250	265		ug/L		106	70 - 130	9	20
4-Methyl-2-pentanone (MIBK)	ND		1250	1380		ug/L		110	70 - 130	9	20
Acetone	ND		1250	1060		ug/L		85	70 - 130	8	20
Benzene	ND		250	217		ug/L		87	70 - 130	11	20
Bromobenzene	ND		250	258		ug/L		103	70 - 130	8	20
Bromoform	ND		250	270		ug/L		108	70 - 130	7	20
Bromomethane	ND		250	208		ug/L		83	70 - 130	12	20
Carbon disulfide	ND		250	205		ug/L		82	70 - 130	12	20
Carbon tetrachloride	ND		250	220		ug/L		88	70 - 130	10	20
Chlorobenzene	ND		250	258		ug/L		103	70 - 130	9	20
Chlorobromomethane	ND		250	217		ug/L		87	70 - 130	8	20
Chlorodibromomethane	ND		250	241		ug/L		97	70 - 130	9	20
Chloroethane	ND		250	221		ug/L		88	70 - 130	12	20
Chloroform	ND		250	210		ug/L		84	70 - 130	8	20
Chloromethane	ND		250	197		ug/L		79	70 - 130	12	20
cis-1,2-Dichloroethene	34		250	232		ug/L		79	70 - 130	10	20
cis-1,3-Dichloropropene	ND		250	229		ug/L		92	70 - 130	8	20
Dibromomethane	ND		250	218		ug/L		87	70 - 130	8	20
Dichlorobromomethane	ND		250	225		ug/L		90	70 - 130	7	20
Dichlorodifluoromethane	ND	F1 F2	250	179	F2	ug/L		72	70 - 130	21	20
Ethyl ether	ND		250	225		ug/L		90	70 - 130	6	20
Ethylbenzene	ND		250	257		ug/L		103	70 - 130	11	20
Ethylene Dibromide	ND		250	266		ug/L		106	70 - 130	7	20
Hexachlorobutadiene	ND		250	261		ug/L		104	70 - 130	10	20
Isopropyl ether	ND		250	226		ug/L		91	70 - 130	3	20
Isopropylbenzene	ND		250	264		ug/L		106	70 - 130	11	20
Methyl tert-butyl ether	ND		250	220		ug/L		88	70 - 130	9	20

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

Lab Sample ID: 480-124040-10 MSD
Matrix: Water
Analysis Batch: 376485

Client Sample ID: C091217-OSW7MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	ND		250	212		ug/L		85	70 - 130	11	20
m-Xylene & p-Xylene	ND		250	260		ug/L		104	70 - 130	9	20
Naphthalene	ND		250	274		ug/L		109	70 - 130	10	20
n-Butylbenzene	ND		250	250		ug/L		100	70 - 130	8	20
N-Propylbenzene	ND		250	259		ug/L		104	70 - 130	10	20
o-Xylene	ND		250	266		ug/L		106	70 - 130	11	20
sec-Butylbenzene	ND		250	262		ug/L		105	70 - 130	10	20
Styrene	ND		250	262		ug/L		105	70 - 130	9	20
Tert-amyl methyl ether	ND		250	232		ug/L		93	70 - 130	2	20
Tert-butyl ethyl ether	ND		250	226		ug/L		90	70 - 130	1	20
tert-Butylbenzene	ND		250	257		ug/L		103	70 - 130	10	20
Tetrachloroethene	ND	*	250	263		ug/L		105	70 - 130	12	20
Tetrahydrofuran	ND		500	444		ug/L		89	70 - 130	6	20
Toluene	ND		250	260		ug/L		104	70 - 130	10	20
trans-1,2-Dichloroethene	ND		250	200		ug/L		80	70 - 130	10	20
trans-1,3-Dichloropropene	ND		250	264		ug/L		106	70 - 130	8	20
Trichloroethene	240	F1	250	391	F1	ug/L		61	70 - 130	6	20
Trichlorofluoromethane	ND		250	219		ug/L		88	70 - 130	19	20
Vinyl chloride	ND	F1	250	206		ug/L		82	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*82*		*70 - 130*

Lab Sample ID: MB 480-376934/8
Matrix: Water
Analysis Batch: 376934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/14/17 22:40	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/17 22:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/14/17 22:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/17 22:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/17 22:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/17 22:40	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/14/17 22:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/17 22:40	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/14/17 22:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/17 22:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/14/17 22:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/14/17 22:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/17 22:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/17 22:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/17 22:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/14/17 22:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/17 22:40	1

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

Lab Sample ID: MB 480-376934/8
Matrix: Water
Analysis Batch: 376934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/14/17 22:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/17 22:40	1
1,4-Dioxane	ND		50	9.3	ug/L			09/14/17 22:40	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/14/17 22:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/14/17 22:40	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/14/17 22:40	1
2-Hexanone	ND		10	1.2	ug/L			09/14/17 22:40	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/14/17 22:40	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/14/17 22:40	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/14/17 22:40	1
Acetone	ND		50	3.0	ug/L			09/14/17 22:40	1
Benzene	ND		1.0	0.41	ug/L			09/14/17 22:40	1
Bromobenzene	ND		1.0	0.80	ug/L			09/14/17 22:40	1
Bromoform	ND		1.0	0.26	ug/L			09/14/17 22:40	1
Bromomethane	ND		2.0	0.69	ug/L			09/14/17 22:40	1
Carbon disulfide	ND		10	0.19	ug/L			09/14/17 22:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/17 22:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/17 22:40	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/14/17 22:40	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/14/17 22:40	1
Chloroethane	ND		2.0	0.32	ug/L			09/14/17 22:40	1
Chloroform	ND		1.0	0.34	ug/L			09/14/17 22:40	1
Chloromethane	ND		2.0	0.35	ug/L			09/14/17 22:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/14/17 22:40	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/14/17 22:40	1
Dibromomethane	ND		1.0	0.41	ug/L			09/14/17 22:40	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/14/17 22:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/14/17 22:40	1
Ethyl ether	ND		1.0	0.72	ug/L			09/14/17 22:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/17 22:40	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/14/17 22:40	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/14/17 22:40	1
Isopropyl ether	ND		10	0.59	ug/L			09/14/17 22:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/17 22:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/17 22:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/17 22:40	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/14/17 22:40	1
Naphthalene	ND		5.0	0.43	ug/L			09/14/17 22:40	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/14/17 22:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/17 22:40	1
o-Xylene	ND		1.0	0.76	ug/L			09/14/17 22:40	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/14/17 22:40	1
Styrene	ND		1.0	0.73	ug/L			09/14/17 22:40	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/14/17 22:40	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/14/17 22:40	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/14/17 22:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/17 22:40	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/14/17 22:40	1

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

Lab Sample ID: MB 480-376934/8
Matrix: Water
Analysis Batch: 376934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.51	ug/L			09/14/17 22:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/14/17 22:40	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/14/17 22:40	1
Trichloroethene	ND		1.0	0.46	ug/L			09/14/17 22:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/17 22:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/14/17 22:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/14/17 22:40*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/14/17 22:40*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/14/17 22:40*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*09/14/17 22:40*	*1*

Lab Sample ID: LCS 480-376934/5
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.7		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.6		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	26.1		ug/L		105	70 - 130
1,1-Dichloroethene	25.0	21.0		ug/L		84	70 - 130
1,1-Dichloropropene	25.0	26.2		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	25.0	26.9		ug/L		107	70 - 130
1,2,3-Trichloropropane	25.0	25.6		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	25.0	27.5		ug/L		110	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		108	70 - 130
1,2-Dichlorobenzene	25.0	26.4		ug/L		105	70 - 130
1,2-Dichloroethane	25.0	24.7		ug/L		99	70 - 130
1,2-Dichloropropane	25.0	26.6		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	25.0	27.6		ug/L		110	70 - 130
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	70 - 130
1,4-Dioxane	500	558		ug/L		112	70 - 130
2,2-Dichloropropane	25.0	25.3		ug/L		101	70 - 130
2-Butanone (MEK)	125	246	*	ug/L		196	70 - 130
2-Chlorotoluene	25.0	28.5		ug/L		114	70 - 130
2-Hexanone	125	211	*	ug/L		169	70 - 130
4-Chlorotoluene	25.0	27.6		ug/L		110	70 - 130
4-Isopropyltoluene	25.0	28.2		ug/L		113	70 - 130
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	70 - 130
Acetone	125	152		ug/L		121	70 - 130
Benzene	25.0	25.4		ug/L		101	70 - 130
Bromobenzene	25.0	26.4		ug/L		106	70 - 130

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

Lab Sample ID: LCS 480-376934/5
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	25.0	27.1		ug/L		108	70 - 130
Bromomethane	25.0	24.3		ug/L		97	70 - 130
Carbon disulfide	25.0	21.6		ug/L		87	70 - 130
Carbon tetrachloride	25.0	26.0		ug/L		104	70 - 130
Chlorobenzene	25.0	26.6		ug/L		106	70 - 130
Chlorobromomethane	25.0	25.4		ug/L		102	70 - 130
Chlorodibromomethane	25.0	24.2		ug/L		97	70 - 130
Chloroethane	25.0	25.6		ug/L		102	70 - 130
Chloroform	25.0	24.9		ug/L		100	70 - 130
Chloromethane	25.0	22.2		ug/L		89	70 - 130
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
cis-1,3-Dichloropropene	25.0	27.5		ug/L		110	70 - 130
Dibromomethane	25.0	24.9		ug/L		100	70 - 130
Dichlorobromomethane	25.0	26.6		ug/L		106	70 - 130
Dichlorodifluoromethane	25.0	17.3	*	ug/L		69	70 - 130
Ethyl ether	25.0	25.1		ug/L		100	70 - 130
Ethylbenzene	25.0	26.5		ug/L		106	70 - 130
Ethylene Dibromide	25.0	26.1		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	27.5		ug/L		110	70 - 130
Isopropyl ether	25.0	27.8		ug/L		111	70 - 130
Isopropylbenzene	25.0	27.5		ug/L		110	70 - 130
Methyl tert-butyl ether	25.0	24.3		ug/L		97	70 - 130
Methylene Chloride	25.0	22.8		ug/L		91	70 - 130
m-Xylene & p-Xylene	25.0	27.2		ug/L		109	70 - 130
Naphthalene	25.0	27.0		ug/L		108	70 - 130
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 130
N-Propylbenzene	25.0	27.4		ug/L		110	70 - 130
o-Xylene	25.0	27.1		ug/L		108	70 - 130
sec-Butylbenzene	25.0	27.7		ug/L		111	70 - 130
Styrene	25.0	27.0		ug/L		108	70 - 130
Tert-amyl methyl ether	25.0	27.6		ug/L		110	70 - 130
Tert-butyl ethyl ether	25.0	26.8		ug/L		107	70 - 130
tert-Butylbenzene	25.0	26.9		ug/L		107	70 - 130
Tetrachloroethene	25.0	29.4		ug/L		118	70 - 130
Tetrahydrofuran	50.0	50.5		ug/L		101	70 - 130
Toluene	25.0	26.7		ug/L		107	70 - 130
trans-1,2-Dichloroethene	25.0	23.3		ug/L		93	70 - 130
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	70 - 130
Trichloroethene	25.0	26.6		ug/L		106	70 - 130
Trichlorofluoromethane	25.0	24.6		ug/L		98	70 - 130
Vinyl chloride	25.0	22.4		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

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

Lab Sample ID: LCSD 480-376934/6
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.9		ug/L		108	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.4		ug/L		98	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	27.1		ug/L		109	70 - 130	2	20
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	70 - 130	4	20
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 130	3	20
1,1-Dichloroethene	25.0	20.3		ug/L		81	70 - 130	4	20
1,1-Dichloropropene	25.0	25.0		ug/L		100	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	26.8		ug/L		107	70 - 130	0	20
1,2,3-Trichloropropane	25.0	27.1		ug/L		108	70 - 130	6	20
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	28.2		ug/L		113	70 - 130	5	20
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	3	20
1,2-Dichloroethane	25.0	24.8		ug/L		99	70 - 130	0	20
1,2-Dichloropropane	25.0	25.6		ug/L		103	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	70 - 130	5	20
1,3-Dichlorobenzene	25.0	25.6		ug/L		102	70 - 130	3	20
1,3-Dichloropropane	25.0	26.6		ug/L		106	70 - 130	2	20
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130	4	20
1,4-Dioxane	500	599		ug/L		120	70 - 130	7	20
2,2-Dichloropropane	25.0	24.3		ug/L		97	70 - 130	4	20
2-Butanone (MEK)	125	258	*	ug/L		207	70 - 130	5	20
2-Chlorotoluene	25.0	27.3		ug/L		109	70 - 130	4	20
2-Hexanone	125	227	*	ug/L		181	70 - 130	7	20
4-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130	2	20
4-Isopropyltoluene	25.0	26.9		ug/L		108	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	125	146		ug/L		117	70 - 130	8	20
Acetone	125	158		ug/L		127	70 - 130	4	20
Benzene	25.0	24.5		ug/L		98	70 - 130	3	20
Bromobenzene	25.0	26.0		ug/L		104	70 - 130	1	20
Bromoform	25.0	28.1		ug/L		112	70 - 130	4	20
Bromomethane	25.0	23.3		ug/L		93	70 - 130	4	20
Carbon disulfide	25.0	20.7		ug/L		83	70 - 130	4	20
Carbon tetrachloride	25.0	24.7		ug/L		99	70 - 130	5	20
Chlorobenzene	25.0	26.7		ug/L		107	70 - 130	1	20
Chlorobromomethane	25.0	25.1		ug/L		100	70 - 130	1	20
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 130	3	20
Chloroethane	25.0	24.7		ug/L		99	70 - 130	4	20
Chloroform	25.0	24.2		ug/L		97	70 - 130	3	20
Chloromethane	25.0	21.2		ug/L		85	70 - 130	5	20
cis-1,2-Dichloroethene	25.0	23.6		ug/L		94	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	27.4		ug/L		110	70 - 130	0	20
Dibromomethane	25.0	25.4		ug/L		101	70 - 130	2	20
Dichlorobromomethane	25.0	26.4		ug/L		106	70 - 130	1	20
Dichlorodifluoromethane	25.0	15.5	*	ug/L		62	70 - 130	11	20
Ethyl ether	25.0	25.4		ug/L		102	70 - 130	1	20
Ethylbenzene	25.0	26.6		ug/L		106	70 - 130	0	20
Ethylene Dibromide	25.0	26.9		ug/L		108	70 - 130	3	20

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

Lab Sample ID: LCSD 480-376934/6
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachlorobutadiene	25.0	26.5		ug/L		106	70 - 130	3	20
Isopropyl ether	25.0	27.4		ug/L		110	70 - 130	1	20
Isopropylbenzene	25.0	26.2		ug/L		105	70 - 130	5	20
Methyl tert-butyl ether	25.0	24.8		ug/L		99	70 - 130	2	20
Methylene Chloride	25.0	22.9		ug/L		92	70 - 130	0	20
m-Xylene & p-Xylene	25.0	26.9		ug/L		107	70 - 130	1	20
Naphthalene	25.0	28.0		ug/L		112	70 - 130	4	20
n-Butylbenzene	25.0	26.0		ug/L		104	70 - 130	4	20
N-Propylbenzene	25.0	26.1		ug/L		105	70 - 130	5	20
o-Xylene	25.0	26.9		ug/L		107	70 - 130	1	20
sec-Butylbenzene	25.0	26.4		ug/L		106	70 - 130	5	20
Styrene	25.0	27.3		ug/L		109	70 - 130	1	20
Tert-amyl methyl ether	25.0	27.8		ug/L		111	70 - 130	1	20
Tert-butyl ethyl ether	25.0	26.9		ug/L		108	70 - 130	0	20
tert-Butylbenzene	25.0	25.5		ug/L		102	70 - 130	5	20
Tetrachloroethene	25.0	29.3		ug/L		117	70 - 130	1	20
Tetrahydrofuran	50.0	53.1		ug/L		106	70 - 130	5	20
Toluene	25.0	26.6		ug/L		106	70 - 130	0	20
trans-1,2-Dichloroethene	25.0	22.1		ug/L		88	70 - 130	6	20
trans-1,3-Dichloropropene	25.0	27.7		ug/L		111	70 - 130	3	20
Trichloroethene	25.0	25.9		ug/L		104	70 - 130	3	20
Trichlorofluoromethane	25.0	23.6		ug/L		95	70 - 130	4	20
Vinyl chloride	25.0	21.7		ug/L		87	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-376724/1-A
Matrix: Water
Analysis Batch: 377351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/14/17 08:55	09/14/17 14:25	1

Lab Sample ID: LCS 480-376724/2-A
Matrix: Water
Analysis Batch: 377351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	199		ug/L		100	80 - 120

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-376724/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377351 — **Prep Batch: 376724**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium			200	196		ug/L		98	80 - 120	1	20

Lab Sample ID: 480-124040-10 MS — **Client Sample ID: C091217-OSW7MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377351 — **Prep Batch: 376724**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	560		200	773		ug/L		105	75 - 125		

Lab Sample ID: 480-124040-10 MSD — **Client Sample ID: C091217-OSW7MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377351 — **Prep Batch: 376724**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	560		200	765		ug/L		101	75 - 125	1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-376589/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/13/17 08:12	1

Lab Sample ID: MB 480-376589/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/13/17 08:12	1

Lab Sample ID: LCS 480-376589/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			0.200	0.200		mg/L		100	80 - 120		

Lab Sample ID: LCS 480-376589/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			0.200	0.207		mg/L		104	80 - 120		

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSD 480-376589/31 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent			0.200	0.198		mg/L		99	80 - 120	1	20

Lab Sample ID: LCSD 480-376589/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent			0.200	0.209		mg/L		105	80 - 120	1	20

Lab Sample ID: 480-124040-5 MS — **Client Sample ID: C091217-CLW20**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent	ND		0.200	0.204		mg/L		102	75 - 125		

Lab Sample ID: 480-124040-10 MS — **Client Sample ID: C091217-OSW7MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent	0.66		1.00	1.60		mg/L		94	75 - 125		

Lab Sample ID: 480-124040-10 MSD — **Client Sample ID: C091217-OSW7MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.66		1.00	1.63		mg/L		96	75 - 125	1	20

Lab Sample ID: 480-124040-4 DU — **Client Sample ID: C091217-CLW19B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376589

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	0.016			0.0176		mg/L				11	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

GC/MS VOA

Analysis Batch: 376485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124040-1	C091217-DMWA	Total/NA	Water	8260C	
480-124040-3	C091217-CLW19	Total/NA	Water	8260C	
480-124040-4	C091217-CLW19B	Total/NA	Water	8260C	
480-124040-5	C091217-CLW20	Total/NA	Water	8260C	
480-124040-6	C091217-CLW20B	Total/NA	Water	8260C	
480-124040-7	C091217-CLW22	Total/NA	Water	8260C	
480-124040-8	C091217-CLW8A	Total/NA	Water	8260C	
480-124040-9	C091217-OSW4I	Total/NA	Water	8260C	
480-124040-10	C091217-OSW7	Total/NA	Water	8260C	
480-124040-11	C091217-OSW7DUP	Total/NA	Water	8260C	
MB 480-376485/7	Method Blank	Total/NA	Water	8260C	
LCS 480-376485/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-376485/28	Lab Control Sample Dup	Total/NA	Water	8260C	
480-124040-10 MS	C091217-OSW7MS	Total/NA	Water	8260C	
480-124040-10 MSD	C091217-OSW7MSD	Total/NA	Water	8260C	

Analysis Batch: 376934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124040-2	C091217-DMWB	Total/NA	Water	8260C	
MB 480-376934/8	Method Blank	Total/NA	Water	8260C	
LCS 480-376934/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-376934/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 376724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124040-1	C091217-DMWA	Total/NA	Water	3005A	
480-124040-2	C091217-DMWB	Total/NA	Water	3005A	
480-124040-3	C091217-CLW19	Total/NA	Water	3005A	
480-124040-4	C091217-CLW19B	Total/NA	Water	3005A	
480-124040-5	C091217-CLW20	Total/NA	Water	3005A	
480-124040-6	C091217-CLW20B	Total/NA	Water	3005A	
480-124040-7	C091217-CLW22	Total/NA	Water	3005A	
480-124040-8	C091217-CLW8A	Total/NA	Water	3005A	
480-124040-9	C091217-OSW4I	Total/NA	Water	3005A	
480-124040-10	C091217-OSW7	Total/NA	Water	3005A	
480-124040-11	C091217-OSW7DUP	Total/NA	Water	3005A	
MB 480-376724/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-376724/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-376724/24-A	Lab Control Sample Dup	Total/NA	Water	3005A	
480-124040-10 MS	C091217-OSW7MS	Total/NA	Water	3005A	
480-124040-10 MSD	C091217-OSW7MSD	Total/NA	Water	3005A	

Analysis Batch: 377351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124040-1	C091217-DMWA	Total/NA	Water	6010	376724
480-124040-2	C091217-DMWB	Total/NA	Water	6010	376724
480-124040-3	C091217-CLW19	Total/NA	Water	6010	376724
480-124040-4	C091217-CLW19B	Total/NA	Water	6010	376724

Metals (Continued)

Analysis Batch: 377351 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124040-5	C091217-CLW20	Total/NA	Water	6010	376724
480-124040-6	C091217-CLW20B	Total/NA	Water	6010	376724
480-124040-7	C091217-CLW22	Total/NA	Water	6010	376724
480-124040-8	C091217-CLW8A	Total/NA	Water	6010	376724
480-124040-9	C091217-OSW4I	Total/NA	Water	6010	376724
480-124040-10	C091217-OSW7	Total/NA	Water	6010	376724
480-124040-11	C091217-OSW7DUP	Total/NA	Water	6010	376724
MB 480-376724/1-A	Method Blank	Total/NA	Water	6010	376724
LCS 480-376724/2-A	Lab Control Sample	Total/NA	Water	6010	376724
LCSD 480-376724/24-A	Lab Control Sample Dup	Total/NA	Water	6010	376724
480-124040-10 MS	C091217-OSW7MS	Total/NA	Water	6010	376724
480-124040-10 MSD	C091217-OSW7MSD	Total/NA	Water	6010	376724

General Chemistry

Analysis Batch: 376589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124040-1	C091217-DMWA	Total/NA	Water	7196A	
480-124040-2	C091217-DMWB	Total/NA	Water	7196A	
480-124040-3	C091217-CLW19	Total/NA	Water	7196A	
480-124040-4	C091217-CLW19B	Total/NA	Water	7196A	
480-124040-5	C091217-CLW20	Total/NA	Water	7196A	
480-124040-6	C091217-CLW20B	Total/NA	Water	7196A	
480-124040-7	C091217-CLW22	Total/NA	Water	7196A	
480-124040-8	C091217-CLW8A	Total/NA	Water	7196A	
480-124040-9	C091217-OSW4I	Total/NA	Water	7196A	
480-124040-10	C091217-OSW7	Total/NA	Water	7196A	
480-124040-11	C091217-OSW7DUP	Total/NA	Water	7196A	
MB 480-376589/27	Method Blank	Total/NA	Water	7196A	
MB 480-376589/3	Method Blank	Total/NA	Water	7196A	
LCS 480-376589/28	Lab Control Sample	Total/NA	Water	7196A	
LCS 480-376589/4	Lab Control Sample	Total/NA	Water	7196A	
LCSD 480-376589/31	Lab Control Sample Dup	Total/NA	Water	7196A	
LCSD 480-376589/5	Lab Control Sample Dup	Total/NA	Water	7196A	
480-124040-5 MS	C091217-CLW20	Total/NA	Water	7196A	
480-124040-10 MS	C091217-OSW7MS	Total/NA	Water	7196A	
480-124040-10 MSD	C091217-OSW7MSD	Total/NA	Water	7196A	
480-124040-4 DU	C091217-CLW19B	Total/NA	Water	7196A	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Client Sample ID: C091217-DMWA — Lab Sample ID: 480-124040-1

Date Collected: 09/12/17 10:10 — **Matrix: Water**
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 13:48	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 14:32	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-DMWB — Lab Sample ID: 480-124040-2

Date Collected: 09/12/17 11:15 — **Matrix: Water**
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376934	09/14/17 23:23	RRS	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 14:35	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-CLW19 — Lab Sample ID: 480-124040-3

Date Collected: 09/12/17 12:45 — **Matrix: Water**
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 14:38	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 14:39	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-CLW19B — Lab Sample ID: 480-124040-4

Date Collected: 09/12/17 13:50 — **Matrix: Water**
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 15:03	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 14:42	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-CLW20 — Lab Sample ID: 480-124040-5

Date Collected: 09/12/17 09:50 — **Matrix: Water**
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 15:28	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Client Sample ID: C091217-CLW20

Lab Sample ID: 480-124040-5
Date Collected: 09/12/17 09:50
Matrix: Water
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010		1	377351	09/14/17 14:46	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-CLW20B

Lab Sample ID: 480-124040-6
Date Collected: 09/12/17 11:15
Matrix: Water
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 15:53	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 14:49	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-CLW22

Lab Sample ID: 480-124040-7
Date Collected: 09/12/17 15:15
Matrix: Water
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 16:19	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 14:53	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-CLW8A

Lab Sample ID: 480-124040-8
Date Collected: 09/12/17 12:10
Matrix: Water
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376485	09/13/17 16:44	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 15:07	LMH	TAL BUF
Total/NA	Analysis	7196A		25	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-OSW4I

Lab Sample ID: 480-124040-9
Date Collected: 09/12/17 12:55
Matrix: Water
Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	376485	09/13/17 17:10	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 15:11	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376589	09/13/17 08:12	EKB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Client Sample ID: C091217-OSW7

Lab Sample ID: 480-124040-10

Date Collected: 09/12/17 14:15

Matrix: Water

Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	376485	09/13/17 17:35	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 15:14	LMH	TAL BUF
Total/NA	Analysis	7196A		5	376589	09/13/17 08:12	EKB	TAL BUF

Client Sample ID: C091217-OSW7DUP

Lab Sample ID: 480-124040-11

Date Collected: 09/12/17 14:15

Matrix: Water

Date Received: 09/13/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	376485	09/13/17 18:00	KMN	TAL BUF
Total/NA	Prep	3005A			376724	09/14/17 08:55	EMB	TAL BUF
Total/NA	Analysis	6010		1	377351	09/14/17 15:31	LMH	TAL BUF
Total/NA	Analysis	7196A		10	376589	09/13/17 08:12	EKB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Chromium
7196A		Water	Chromium, hexavalent
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride

Method Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124040-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-124040-1	C091217-DMWA	Water	09/12/17 10:10	09/13/17 02:15
480-124040-2	C091217-DMWB	Water	09/12/17 11:15	09/13/17 02:15
480-124040-3	C091217-CLW19	Water	09/12/17 12:45	09/13/17 02:15
480-124040-4	C091217-CLW19B	Water	09/12/17 13:50	09/13/17 02:15
480-124040-5	C091217-CLW20	Water	09/12/17 09:50	09/13/17 02:15
480-124040-6	C091217-CLW20B	Water	09/12/17 11:15	09/13/17 02:15
480-124040-7	C091217-CLW22	Water	09/12/17 15:15	09/13/17 02:15
480-124040-8	C091217-CLW8A	Water	09/12/17 12:10	09/13/17 02:15
480-124040-9	C091217-OSW4I	Water	09/12/17 12:55	09/13/17 02:15
480-124040-10	C091217-OSW7	Water	09/12/17 14:15	09/13/17 02:15
480-124040-11	C091217-OSW7DUP	Water	09/12/17 14:15	09/13/17 02:15

360325-Boston

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 38450.55525
COC # :
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential: N
EDD To: Mark.Maggiore @amec.com
Site Name: Conductorlab: April 2017 Semiannual Groundwater Sampling
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #

Analysis Turnaround Time:	10
Standard -	Y
Rush Charges Authorized for -	
2 weeks -	Y
1 week -	N
Next Day -	N

PAGE 1 of 1
Job No.

480-124040 COC

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3.7) 02-01-05
renesurgi@aol.com

Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds (Preservative 1)	7196A Hexavalent Chromium (Preservative 0)	SW846/6010B Total Chromium (Preservative 2)	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
DMW-A			C091217-DMWA	9-12-17	10:10	water	GW	Reg	5	G	N	X	X	X	
DMW-B			C091217-DMWB	9-12-17	11:15	water	GW	Reg	5	G	N	X	X	X	
CLW-8A			C091217-CLW8A	9-12-17	1210	water	GW	Reg	5	G	N	X	X	X	
OSW-4I			C091217-OSW4I	9-12-17	1255	water	GW	Reg	5	G	N	X	X	X	
OSW-7			C091217-OSW7	9-12-17	1415	water	GW	Reg	5	G	N	X	X	X	
OSW-7			C091217-OSW7DUP	9-12-17	1415	water	GW	FD	5	G	N	X	X	X	
OSW-7			C091217-OSW7MS	9-12-17	1415	water	GW	MS	5	G	N	X	X	X	
OSW-7			C091217-OSW7MSD	9-12-17	1415	water	GW	MSD	5	G	N	X	X	X	
CLW-20			C091217-CLW20	9-12-17	950	water	GW	Reg	5	G	N	X	X	X	
CLW-20B			C091217-CLW20B	9-12-17	11:15	water	GW	Reg	5	G	N	X	X	X	
CLW-19			C091217-CLW19	9-12-17	1245	water	GW	Reg	5	G	N	X	X	X	
CLW-19B			C091217-CLW19B	9-12-17	1350	water	GW	Reg	5	G	N	X	X	X	
CLW-22			C091217-CLW22	9-12-17	1515	water	GW	Reg	5	G	N	X	X	X	

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab.

Relinquished by:	Company: AmecFW	Received by:	Company:	Condition:	Custody Seals Intact:
	Date/Time: 9-12-17 15:30		Date/Time: 9/13/17 13:40	Cooler Temp.	
Relinquished by:	Company:	Received by:	Company: TAS	Condition:	Custody Seals Intact:
	Date/Time: 9/13/17 16:40		Date/Time: 9-13-17 0215	Cooler Temp.	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

2.4 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-124040-1

Login Number: 124040

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-124118-1
Client Project/Site: September 2017 Semi Annual Ground Water
Sampling Event: Semi Annual Ground Water

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Authorized for release by:
9/20/2017 5:54:07 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

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

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

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Qualifiers

GC/MS VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-124118-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-124118-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2017 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

GC/MS VOA
Method(s) 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for Carbon disulfide, Isopropyl ether, Naphthalene, tert-Butyl ethyl ether, tert-Amyl methyl Ether, & Tetrahydrofuran

Method(s) 8260C: The continuing calibration verification (CCV) for Acetone, Dichlorodifluoromethane, and 1,1-Dichloroethene associated with batch 480-376934 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : C091317-PP2 (480-124118-1), C091317-OSW2B (480-124118-2), C091317-CLW22B (480-124118-4), C091317-CLW17 (480-124118-5), C091317-CLW17B (480-124118-6) and C091317-PP3 (480-124118-7).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-376934 exceeded control limits for the following analytes: 2-Butanone and 2-Hexanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and n-butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C091317-PP2 (480-124118-1), C091317-OSW2B (480-124118-2), C091317-CLW22B (480-124118-4), C091317-CLW17 (480-124118-5), C091317-CLW17B (480-124118-6) and C091317-PP3 (480-124118-7).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-376934 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected: C091317-PP2 (480-124118-1), C091317-OSW2B (480-124118-2), C091317-CLW22B (480-124118-4), C091317-CLW17 (480-124118-5), C091317-CLW17B (480-124118-6) and C091317-PP3 (480-124118-7).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: C091317-PP2 (480-124118-1), C091317-OSW2B (480-124118-2), C091317-CLW17B (480-124118-6) and C091317-PP3 (480-124118-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377264 exceeded control limits for the following analyte: 2-Butanone , 2-Hexanone, Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate, n-butyl Acetate, Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample was affected : C091317-OSW3A (480-124118-3).

Method(s) 8260C: The laboratory control sample (LCS) for batch 480-377264 exceeded control limits for the following analyte: Tetrachloroethene. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected: C091317-OSW3A (480-124118-3).

Method(s) 8260C: The continuing calibration verification (CCV) for Dichlorodifluoromethane associated with batch 480-377264 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following sample was affected : C091317-OSW3A (480-124118-3).

Job ID: 480-124118-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8260, 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: C091317-PP3 (480-124118-7). Elevated reporting limits (RLs) are provided.

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

Metals
Method(s) 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

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

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-124118-1**

Project Location: **Groton** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-124118-1(1-7)

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Management Assistant

Printed Name: Rebecca Jones Date: 9/20/17 16:38

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-PP2 — Lab Sample ID: 480-124118-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	8.8	J	10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	210		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	360		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	31		10	9.0	ug/L	10		8260C	Total/NA
Chromium	11		5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C091317-OSW2B — Lab Sample ID: 480-124118-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	100		40	32	ug/L	40		8260C	Total/NA
trans-1,2-Dichloroethene	280		40	36	ug/L	40		8260C	Total/NA
Trichloroethene	1200		40	18	ug/L	40		8260C	Total/NA
Chromium	1600		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	2.4		0.50	0.25	mg/L	50		7196A	Total/NA

Client Sample ID: C091317-OSW3A — Lab Sample ID: 480-124118-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.8		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	29		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	3.5	J	5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C091317-CLW22B — Lab Sample ID: 480-124118-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.6		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	17		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	15		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.031		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091317-CLW17 — Lab Sample ID: 480-124118-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.7		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	11		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	56		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.072		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091317-CLW17B — Lab Sample ID: 480-124118-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	20		2.0	1.6	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	5.7		2.0	1.8	ug/L	2		8260C	Total/NA
Trichloroethene	100		2.0	0.92	ug/L	2		8260C	Total/NA
Chromium	9.1		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.013		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091317-PP3 — Lab Sample ID: 480-124118-7

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-PP3 (Continued) — Lab Sample ID: 480-124118-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.9	J	10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	920		10	8.1	ug/L	10		8260C	Total/NA
Tetrachloroethene	5.5	J	10	3.6	ug/L	10		8260C	Total/NA
Vinyl chloride	230		10	9.0	ug/L	10		8260C	Total/NA
Trichloroethene - DL	5500		100	46	ug/L	100		8260C	Total/NA
Chromium	800		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	1.5		0.50	0.25	mg/L	50		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-PP2

Date Collected: 09/13/17 09:05
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	3.5	ug/L			09/14/17 23:49	10
1,1,1-Trichloroethane	ND		10	8.2	ug/L			09/14/17 23:49	10
1,1,2,2-Tetrachloroethane	ND		5.0	2.1	ug/L			09/14/17 23:49	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/14/17 23:49	10
1,1-Dichloroethane	ND		10	3.8	ug/L			09/14/17 23:49	10
1,1-Dichloroethene	**8.8**	**J**	10	2.9	ug/L			09/14/17 23:49	10
1,1-Dichloropropene	ND		10	7.2	ug/L			09/14/17 23:49	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/14/17 23:49	10
1,2,3-Trichloropropane	ND		10	8.9	ug/L			09/14/17 23:49	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/14/17 23:49	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			09/14/17 23:49	10
1,2-Dibromo-3-Chloropropane	ND		50	3.9	ug/L			09/14/17 23:49	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/14/17 23:49	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/14/17 23:49	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/14/17 23:49	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			09/14/17 23:49	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/14/17 23:49	10
1,3-Dichloropropane	ND		10	7.5	ug/L			09/14/17 23:49	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/14/17 23:49	10
1,4-Dioxane	ND		500	93	ug/L			09/14/17 23:49	10
2,2-Dichloropropane	ND		10	4.0	ug/L			09/14/17 23:49	10
2-Butanone (MEK)	ND	*	100	13	ug/L			09/14/17 23:49	10
2-Chlorotoluene	ND		10	8.6	ug/L			09/14/17 23:49	10
2-Hexanone	ND	*	100	12	ug/L			09/14/17 23:49	10
4-Chlorotoluene	ND		10	8.4	ug/L			09/14/17 23:49	10
4-Isopropyltoluene	ND		10	3.1	ug/L			09/14/17 23:49	10
4-Methyl-2-pentanone (MIBK)	ND		100	21	ug/L			09/14/17 23:49	10
Acetone	ND		500	30	ug/L			09/14/17 23:49	10
Benzene	ND		10	4.1	ug/L			09/14/17 23:49	10
Bromobenzene	ND		10	8.0	ug/L			09/14/17 23:49	10
Bromoform	ND		10	2.6	ug/L			09/14/17 23:49	10
Bromomethane	ND		20	6.9	ug/L			09/14/17 23:49	10
Carbon disulfide	ND		100	1.9	ug/L			09/14/17 23:49	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/14/17 23:49	10
Chlorobenzene	ND		10	7.5	ug/L			09/14/17 23:49	10
Chlorobromomethane	ND		10	8.7	ug/L			09/14/17 23:49	10
Chlorodibromomethane	ND		5.0	3.2	ug/L			09/14/17 23:49	10
Chloroethane	ND		20	3.2	ug/L			09/14/17 23:49	10
Chloroform	ND		10	3.4	ug/L			09/14/17 23:49	10
Chloromethane	ND		20	3.5	ug/L			09/14/17 23:49	10
cis-1,2-Dichloroethene	**210**		10	8.1	ug/L			09/14/17 23:49	10
cis-1,3-Dichloropropene	ND		4.0	3.6	ug/L			09/14/17 23:49	10
Dibromomethane	ND		10	4.1	ug/L			09/14/17 23:49	10
Dichlorobromomethane	ND		5.0	3.9	ug/L			09/14/17 23:49	10
Dichlorodifluoromethane	ND	*	10	6.8	ug/L			09/14/17 23:49	10
Ethyl ether	ND		10	7.2	ug/L			09/14/17 23:49	10
Ethylbenzene	ND		10	7.4	ug/L			09/14/17 23:49	10
Ethylene Dibromide	ND		10	7.3	ug/L			09/14/17 23:49	10
Hexachlorobutadiene	ND		4.0	2.8	ug/L			09/14/17 23:49	10

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-PP2

Date Collected: 09/13/17 09:05
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		100	5.9	ug/L			09/14/17 23:49	10
Isopropylbenzene	ND		10	7.9	ug/L			09/14/17 23:49	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/14/17 23:49	10
Methylene Chloride	ND		10	4.4	ug/L			09/14/17 23:49	10
m-Xylene & p-Xylene	ND		20	6.6	ug/L			09/14/17 23:49	10
Naphthalene	ND		50	4.3	ug/L			09/14/17 23:49	10
n-Butylbenzene	ND		10	6.4	ug/L			09/14/17 23:49	10
N-Propylbenzene	ND		10	6.9	ug/L			09/14/17 23:49	10
o-Xylene	ND		10	7.6	ug/L			09/14/17 23:49	10
sec-Butylbenzene	ND		10	7.5	ug/L			09/14/17 23:49	10
Styrene	ND		10	7.3	ug/L			09/14/17 23:49	10
Tert-amyl methyl ether	ND		50	2.7	ug/L			09/14/17 23:49	10
Tert-butyl ethyl ether	ND		50	2.9	ug/L			09/14/17 23:49	10
tert-Butylbenzene	ND		10	8.1	ug/L			09/14/17 23:49	10
Tetrachloroethene	ND		10	3.6	ug/L			09/14/17 23:49	10
Tetrahydrofuran	ND		100	13	ug/L			09/14/17 23:49	10
Toluene	ND		10	5.1	ug/L			09/14/17 23:49	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/14/17 23:49	10
trans-1,3-Dichloropropene	ND		4.0	3.7	ug/L			09/14/17 23:49	10
Trichloroethene	**360**		10	4.6	ug/L			09/14/17 23:49	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/14/17 23:49	10
Vinyl chloride	**31**		10	9.0	ug/L			09/14/17 23:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/14/17 23:49*	*10*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/14/17 23:49*	*10*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/14/17 23:49*	*10*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*09/14/17 23:49*	*10*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**11**		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 18:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/14/17 04:34	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-OSW2B

Date Collected: 09/13/17 11:20
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40	14	ug/L			09/15/17 00:14	40
1,1,1-Trichloroethane	ND		40	33	ug/L			09/15/17 00:14	40
1,1,2,2-Tetrachloroethane	ND		20	8.4	ug/L			09/15/17 00:14	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			09/15/17 00:14	40
1,1-Dichloroethane	ND		40	15	ug/L			09/15/17 00:14	40
1,1-Dichloroethene	ND		40	12	ug/L			09/15/17 00:14	40
1,1-Dichloropropene	ND		40	29	ug/L			09/15/17 00:14	40
1,2,3-Trichlorobenzene	ND		40	16	ug/L			09/15/17 00:14	40
1,2,3-Trichloropropane	ND		40	36	ug/L			09/15/17 00:14	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			09/15/17 00:14	40
1,2,4-Trimethylbenzene	ND		40	30	ug/L			09/15/17 00:14	40
1,2-Dibromo-3-Chloropropane	ND		200	16	ug/L			09/15/17 00:14	40
1,2-Dichlorobenzene	ND		40	32	ug/L			09/15/17 00:14	40
1,2-Dichloroethane	ND		40	8.4	ug/L			09/15/17 00:14	40
1,2-Dichloropropane	ND		40	29	ug/L			09/15/17 00:14	40
1,3,5-Trimethylbenzene	ND		40	31	ug/L			09/15/17 00:14	40
1,3-Dichlorobenzene	ND		40	31	ug/L			09/15/17 00:14	40
1,3-Dichloropropane	ND		40	30	ug/L			09/15/17 00:14	40
1,4-Dichlorobenzene	ND		40	34	ug/L			09/15/17 00:14	40
1,4-Dioxane	ND		2000	370	ug/L			09/15/17 00:14	40
2,2-Dichloropropane	ND		40	16	ug/L			09/15/17 00:14	40
2-Butanone (MEK)	ND	*	400	53	ug/L			09/15/17 00:14	40
2-Chlorotoluene	ND		40	34	ug/L			09/15/17 00:14	40
2-Hexanone	ND	*	400	50	ug/L			09/15/17 00:14	40
4-Chlorotoluene	ND		40	34	ug/L			09/15/17 00:14	40
4-Isopropyltoluene	ND		40	12	ug/L			09/15/17 00:14	40
4-Methyl-2-pentanone (MIBK)	ND		400	84	ug/L			09/15/17 00:14	40
Acetone	ND		2000	120	ug/L			09/15/17 00:14	40
Benzene	ND		40	16	ug/L			09/15/17 00:14	40
Bromobenzene	ND		40	32	ug/L			09/15/17 00:14	40
Bromoform	ND		40	10	ug/L			09/15/17 00:14	40
Bromomethane	ND		80	28	ug/L			09/15/17 00:14	40
Carbon disulfide	ND		400	7.6	ug/L			09/15/17 00:14	40
Carbon tetrachloride	ND		40	11	ug/L			09/15/17 00:14	40
Chlorobenzene	ND		40	30	ug/L			09/15/17 00:14	40
Chlorobromomethane	ND		40	35	ug/L			09/15/17 00:14	40
Chlorodibromomethane	ND		20	13	ug/L			09/15/17 00:14	40
Chloroethane	ND		80	13	ug/L			09/15/17 00:14	40
Chloroform	ND		40	14	ug/L			09/15/17 00:14	40
Chloromethane	ND		80	14	ug/L			09/15/17 00:14	40
cis-1,2-Dichloroethene	**100**		40	32	ug/L			09/15/17 00:14	40
cis-1,3-Dichloropropene	ND		16	14	ug/L			09/15/17 00:14	40
Dibromomethane	ND		40	16	ug/L			09/15/17 00:14	40
Dichlorobromomethane	ND		20	16	ug/L			09/15/17 00:14	40
Dichlorodifluoromethane	ND	*	40	27	ug/L			09/15/17 00:14	40
Ethyl ether	ND		40	29	ug/L			09/15/17 00:14	40
Ethylbenzene	ND		40	30	ug/L			09/15/17 00:14	40
Ethylene Dibromide	ND		40	29	ug/L			09/15/17 00:14	40
Hexachlorobutadiene	ND		16	11	ug/L			09/15/17 00:14	40

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-OSW2B

Lab Sample ID: 480-124118-2

Date Collected: 09/13/17 11:20

Matrix: Water

Date Received: 09/14/17 02:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		400	24	ug/L			09/15/17 00:14	40
Isopropylbenzene	ND		40	32	ug/L			09/15/17 00:14	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			09/15/17 00:14	40
Methylene Chloride	ND		40	18	ug/L			09/15/17 00:14	40
m-Xylene & p-Xylene	ND		80	26	ug/L			09/15/17 00:14	40
Naphthalene	ND		200	17	ug/L			09/15/17 00:14	40
n-Butylbenzene	ND		40	26	ug/L			09/15/17 00:14	40
N-Propylbenzene	ND		40	28	ug/L			09/15/17 00:14	40
o-Xylene	ND		40	30	ug/L			09/15/17 00:14	40
sec-Butylbenzene	ND		40	30	ug/L			09/15/17 00:14	40
Styrene	ND		40	29	ug/L			09/15/17 00:14	40
Tert-amyl methyl ether	ND		200	11	ug/L			09/15/17 00:14	40
Tert-butyl ethyl ether	ND		200	12	ug/L			09/15/17 00:14	40
tert-Butylbenzene	ND		40	32	ug/L			09/15/17 00:14	40
Tetrachloroethene	ND		40	14	ug/L			09/15/17 00:14	40
Tetrahydrofuran	ND		400	50	ug/L			09/15/17 00:14	40
Toluene	ND		40	20	ug/L			09/15/17 00:14	40
trans-1,2-Dichloroethene	**280**		40	36	ug/L			09/15/17 00:14	40
trans-1,3-Dichloropropene	ND		16	15	ug/L			09/15/17 00:14	40
Trichloroethene	**1200**		40	18	ug/L			09/15/17 00:14	40
Trichlorofluoromethane	ND		40	35	ug/L			09/15/17 00:14	40
Vinyl chloride	ND		40	36	ug/L			09/15/17 00:14	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/15/17 00:14*	*40*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/15/17 00:14*	*40*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/15/17 00:14*	*40*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/15/17 00:14*	*40*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**1600**		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 18:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**2.4**		0.50	0.25	mg/L			09/14/17 04:34	50

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-OSW3A

Date Collected: 09/13/17 13:30
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/18/17 14:52	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/18/17 14:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/18/17 14:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/18/17 14:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/18/17 14:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/18/17 14:52	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/18/17 14:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 14:52	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/18/17 14:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 14:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/18/17 14:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/18/17 14:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/18/17 14:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/18/17 14:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/18/17 14:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/18/17 14:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/18/17 14:52	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/18/17 14:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/18/17 14:52	1
1,4-Dioxane	ND		50	9.3	ug/L			09/18/17 14:52	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/18/17 14:52	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/18/17 14:52	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/18/17 14:52	1
2-Hexanone	ND	*	10	1.2	ug/L			09/18/17 14:52	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/18/17 14:52	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/18/17 14:52	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/18/17 14:52	1
Acetone	ND		50	3.0	ug/L			09/18/17 14:52	1
Benzene	ND		1.0	0.41	ug/L			09/18/17 14:52	1
Bromobenzene	ND		1.0	0.80	ug/L			09/18/17 14:52	1
Bromoform	ND		1.0	0.26	ug/L			09/18/17 14:52	1
Bromomethane	ND		2.0	0.69	ug/L			09/18/17 14:52	1
Carbon disulfide	ND		10	0.19	ug/L			09/18/17 14:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/18/17 14:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/18/17 14:52	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/18/17 14:52	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/18/17 14:52	1
Chloroethane	ND		2.0	0.32	ug/L			09/18/17 14:52	1
Chloroform	ND		1.0	0.34	ug/L			09/18/17 14:52	1
Chloromethane	ND		2.0	0.35	ug/L			09/18/17 14:52	1
cis-1,2-Dichloroethene	**1.8**		1.0	0.81	ug/L			09/18/17 14:52	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/18/17 14:52	1
Dibromomethane	ND		1.0	0.41	ug/L			09/18/17 14:52	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/18/17 14:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/18/17 14:52	1
Ethyl ether	ND		1.0	0.72	ug/L			09/18/17 14:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/17 14:52	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/18/17 14:52	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/18/17 14:52	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-OSW3A

Date Collected: 09/13/17 13:30
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/18/17 14:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/18/17 14:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/18/17 14:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/18/17 14:52	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/17 14:52	1
Naphthalene	ND		5.0	0.43	ug/L			09/18/17 14:52	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/18/17 14:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/18/17 14:52	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/17 14:52	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/18/17 14:52	1
Styrene	ND		1.0	0.73	ug/L			09/18/17 14:52	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/18/17 14:52	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/18/17 14:52	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/18/17 14:52	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			09/18/17 14:52	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/18/17 14:52	1
Toluene	ND		1.0	0.51	ug/L			09/18/17 14:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/18/17 14:52	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/18/17 14:52	1
Trichloroethene	**29**		1.0	0.46	ug/L			09/18/17 14:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/18/17 14:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/18/17 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/18/17 14:52*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/18/17 14:52*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/18/17 14:52*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/18/17 14:52*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**3.5**	**J**	5.0	1.0	ug/L		09/15/17 08:35	09/15/17 19:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/14/17 04:34	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW22B

Date Collected: 09/13/17 09:25
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/15/17 01:04	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/17 01:04	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/15/17 01:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/17 01:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/17 01:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/17 01:04	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/15/17 01:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/17 01:04	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/15/17 01:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/17 01:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/15/17 01:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/15/17 01:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/17 01:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/17 01:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/17 01:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/15/17 01:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/17 01:04	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/15/17 01:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/17 01:04	1
1,4-Dioxane	ND		50	9.3	ug/L			09/15/17 01:04	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/15/17 01:04	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/15/17 01:04	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/15/17 01:04	1
2-Hexanone	ND	*	10	1.2	ug/L			09/15/17 01:04	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/15/17 01:04	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/15/17 01:04	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/15/17 01:04	1
Acetone	ND		50	3.0	ug/L			09/15/17 01:04	1
Benzene	ND		1.0	0.41	ug/L			09/15/17 01:04	1
Bromobenzene	ND		1.0	0.80	ug/L			09/15/17 01:04	1
Bromoform	ND		1.0	0.26	ug/L			09/15/17 01:04	1
Bromomethane	ND		2.0	0.69	ug/L			09/15/17 01:04	1
Carbon disulfide	ND		10	0.19	ug/L			09/15/17 01:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/17 01:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/17 01:04	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/15/17 01:04	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/15/17 01:04	1
Chloroethane	ND		2.0	0.32	ug/L			09/15/17 01:04	1
Chloroform	ND		1.0	0.34	ug/L			09/15/17 01:04	1
Chloromethane	ND		2.0	0.35	ug/L			09/15/17 01:04	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.81	ug/L			09/15/17 01:04	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/15/17 01:04	1
Dibromomethane	ND		1.0	0.41	ug/L			09/15/17 01:04	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/15/17 01:04	1
Dichlorodifluoromethane	ND	*	1.0	0.68	ug/L			09/15/17 01:04	1
Ethyl ether	ND		1.0	0.72	ug/L			09/15/17 01:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/17 01:04	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/15/17 01:04	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/15/17 01:04	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW22B

Lab Sample ID: 480-124118-4
Date Collected: 09/13/17 09:25
Matrix: Water
Date Received: 09/14/17 02:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/15/17 01:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/17 01:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/17 01:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/17 01:04	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/15/17 01:04	1
Naphthalene	ND		5.0	0.43	ug/L			09/15/17 01:04	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/15/17 01:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/17 01:04	1
o-Xylene	ND		1.0	0.76	ug/L			09/15/17 01:04	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/15/17 01:04	1
Styrene	ND		1.0	0.73	ug/L			09/15/17 01:04	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/15/17 01:04	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/15/17 01:04	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/15/17 01:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/17 01:04	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/15/17 01:04	1
Toluene	ND		1.0	0.51	ug/L			09/15/17 01:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/17 01:04	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/15/17 01:04	1
Trichloroethene	**17**		1.0	0.46	ug/L			09/15/17 01:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/17 01:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/17 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*09/15/17 01:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/15/17 01:04*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/15/17 01:04*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/15/17 01:04*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**15**		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 19:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.031**		0.010	0.0050	mg/L			09/14/17 04:34	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW17

Date Collected: 09/13/17 11:25
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/15/17 01:29	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/17 01:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/15/17 01:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/17 01:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/17 01:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/17 01:29	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/15/17 01:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/17 01:29	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/15/17 01:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/17 01:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/15/17 01:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/15/17 01:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/17 01:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/17 01:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/17 01:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/15/17 01:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/17 01:29	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/15/17 01:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/17 01:29	1
1,4-Dioxane	ND		50	9.3	ug/L			09/15/17 01:29	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/15/17 01:29	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/15/17 01:29	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/15/17 01:29	1
2-Hexanone	ND	*	10	1.2	ug/L			09/15/17 01:29	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/15/17 01:29	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/15/17 01:29	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/15/17 01:29	1
Acetone	ND		50	3.0	ug/L			09/15/17 01:29	1
Benzene	ND		1.0	0.41	ug/L			09/15/17 01:29	1
Bromobenzene	ND		1.0	0.80	ug/L			09/15/17 01:29	1
Bromoform	ND		1.0	0.26	ug/L			09/15/17 01:29	1
Bromomethane	ND		2.0	0.69	ug/L			09/15/17 01:29	1
Carbon disulfide	ND		10	0.19	ug/L			09/15/17 01:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/17 01:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/17 01:29	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/15/17 01:29	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/15/17 01:29	1
Chloroethane	ND		2.0	0.32	ug/L			09/15/17 01:29	1
Chloroform	ND		1.0	0.34	ug/L			09/15/17 01:29	1
Chloromethane	ND		2.0	0.35	ug/L			09/15/17 01:29	1
cis-1,2-Dichloroethene	**2.7**		1.0	0.81	ug/L			09/15/17 01:29	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/15/17 01:29	1
Dibromomethane	ND		1.0	0.41	ug/L			09/15/17 01:29	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/15/17 01:29	1
Dichlorodifluoromethane	ND	*	1.0	0.68	ug/L			09/15/17 01:29	1
Ethyl ether	ND		1.0	0.72	ug/L			09/15/17 01:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/17 01:29	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/15/17 01:29	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/15/17 01:29	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW17

Lab Sample ID: 480-124118-5

Date Collected: 09/13/17 11:25
Matrix: Water
Date Received: 09/14/17 02:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/15/17 01:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/17 01:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/17 01:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/17 01:29	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/15/17 01:29	1
Naphthalene	ND		5.0	0.43	ug/L			09/15/17 01:29	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/15/17 01:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/17 01:29	1
o-Xylene	ND		1.0	0.76	ug/L			09/15/17 01:29	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/15/17 01:29	1
Styrene	ND		1.0	0.73	ug/L			09/15/17 01:29	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/15/17 01:29	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/15/17 01:29	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/15/17 01:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/17 01:29	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/15/17 01:29	1
Toluene	ND		1.0	0.51	ug/L			09/15/17 01:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/17 01:29	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/15/17 01:29	1
Trichloroethene	**11**		1.0	0.46	ug/L			09/15/17 01:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/17 01:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/17 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/15/17 01:29*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/15/17 01:29*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/15/17 01:29*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/15/17 01:29*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**56**		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 19:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.072**		0.010	0.0050	mg/L			09/14/17 04:34	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW17B

Date Collected: 09/13/17 13:05
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.70	ug/L			09/15/17 01:54	2
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			09/15/17 01:54	2
1,1,2,2-Tetrachloroethane	ND		1.0	0.42	ug/L			09/15/17 01:54	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/15/17 01:54	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			09/15/17 01:54	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			09/15/17 01:54	2
1,1-Dichloropropene	ND		2.0	1.4	ug/L			09/15/17 01:54	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/15/17 01:54	2
1,2,3-Trichloropropane	ND		2.0	1.8	ug/L			09/15/17 01:54	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/15/17 01:54	2
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
1,2-Dibromo-3-Chloropropane	ND		10	0.78	ug/L			09/15/17 01:54	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/15/17 01:54	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/15/17 01:54	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/15/17 01:54	2
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/15/17 01:54	2
1,3-Dichloropropane	ND		2.0	1.5	ug/L			09/15/17 01:54	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/15/17 01:54	2
1,4-Dioxane	ND		100	19	ug/L			09/15/17 01:54	2
2,2-Dichloropropane	ND		2.0	0.80	ug/L			09/15/17 01:54	2
2-Butanone (MEK)	ND	*	20	2.6	ug/L			09/15/17 01:54	2
2-Chlorotoluene	ND		2.0	1.7	ug/L			09/15/17 01:54	2
2-Hexanone	ND	*	20	2.5	ug/L			09/15/17 01:54	2
4-Chlorotoluene	ND		2.0	1.7	ug/L			09/15/17 01:54	2
4-Isopropyltoluene	ND		2.0	0.62	ug/L			09/15/17 01:54	2
4-Methyl-2-pentanone (MIBK)	ND		20	4.2	ug/L			09/15/17 01:54	2
Acetone	ND		100	6.0	ug/L			09/15/17 01:54	2
Benzene	ND		2.0	0.82	ug/L			09/15/17 01:54	2
Bromobenzene	ND		2.0	1.6	ug/L			09/15/17 01:54	2
Bromoform	ND		2.0	0.52	ug/L			09/15/17 01:54	2
Bromomethane	ND		4.0	1.4	ug/L			09/15/17 01:54	2
Carbon disulfide	ND		20	0.38	ug/L			09/15/17 01:54	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/15/17 01:54	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
Chlorobromomethane	ND		2.0	1.7	ug/L			09/15/17 01:54	2
Chlorodibromomethane	ND		1.0	0.64	ug/L			09/15/17 01:54	2
Chloroethane	ND		4.0	0.64	ug/L			09/15/17 01:54	2
Chloroform	ND		2.0	0.68	ug/L			09/15/17 01:54	2
Chloromethane	ND		4.0	0.70	ug/L			09/15/17 01:54	2
cis-1,2-Dichloroethene	**20**		2.0	1.6	ug/L			09/15/17 01:54	2
cis-1,3-Dichloropropene	ND		0.80	0.72	ug/L			09/15/17 01:54	2
Dibromomethane	ND		2.0	0.82	ug/L			09/15/17 01:54	2
Dichlorobromomethane	ND		1.0	0.78	ug/L			09/15/17 01:54	2
Dichlorodifluoromethane	ND	*	2.0	1.4	ug/L			09/15/17 01:54	2
Ethyl ether	ND		2.0	1.4	ug/L			09/15/17 01:54	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
Ethylene Dibromide	ND		2.0	1.5	ug/L			09/15/17 01:54	2
Hexachlorobutadiene	ND		0.80	0.56	ug/L			09/15/17 01:54	2

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW17B

Lab Sample ID: 480-124118-6

Date Collected: 09/13/17 13:05
Matrix: Water
Date Received: 09/14/17 02:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		20	1.2	ug/L			09/15/17 01:54	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/15/17 01:54	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/15/17 01:54	2
Methylene Chloride	ND		2.0	0.88	ug/L			09/15/17 01:54	2
m-Xylene & p-Xylene	ND		4.0	1.3	ug/L			09/15/17 01:54	2
Naphthalene	ND		10	0.86	ug/L			09/15/17 01:54	2
n-Butylbenzene	ND		2.0	1.3	ug/L			09/15/17 01:54	2
N-Propylbenzene	ND		2.0	1.4	ug/L			09/15/17 01:54	2
o-Xylene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
sec-Butylbenzene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
Styrene	ND		2.0	1.5	ug/L			09/15/17 01:54	2
Tert-amyl methyl ether	ND		10	0.54	ug/L			09/15/17 01:54	2
Tert-butyl ethyl ether	ND		10	0.59	ug/L			09/15/17 01:54	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			09/15/17 01:54	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/15/17 01:54	2
Tetrahydrofuran	ND		20	2.5	ug/L			09/15/17 01:54	2
Toluene	ND		2.0	1.0	ug/L			09/15/17 01:54	2
trans-1,2-Dichloroethene	**5.7**		2.0	1.8	ug/L			09/15/17 01:54	2
trans-1,3-Dichloropropene	ND		0.80	0.74	ug/L			09/15/17 01:54	2
Trichloroethene	**100**		2.0	0.92	ug/L			09/15/17 01:54	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/15/17 01:54	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/15/17 01:54	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*09/15/17 01:54*	*2*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/15/17 01:54*	*2*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/15/17 01:54*	*2*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*09/15/17 01:54*	*2*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**9.1**		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 19:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.013**		0.010	0.0050	mg/L			09/14/17 04:34	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-PP3

Date Collected: 09/13/17 15:15
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	3.5	ug/L			09/15/17 02:19	10
1,1,1-Trichloroethane	ND		10	8.2	ug/L			09/15/17 02:19	10
1,1,2,2-Tetrachloroethane	ND		5.0	2.1	ug/L			09/15/17 02:19	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/15/17 02:19	10
1,1-Dichloroethane	ND		10	3.8	ug/L			09/15/17 02:19	10
1,1-Dichloroethene	**3.9**	**J**	10	2.9	ug/L			09/15/17 02:19	10
1,1-Dichloropropene	ND		10	7.2	ug/L			09/15/17 02:19	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/15/17 02:19	10
1,2,3-Trichloropropane	ND		10	8.9	ug/L			09/15/17 02:19	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/15/17 02:19	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			09/15/17 02:19	10
1,2-Dibromo-3-Chloropropane	ND		50	3.9	ug/L			09/15/17 02:19	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/15/17 02:19	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/15/17 02:19	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/15/17 02:19	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			09/15/17 02:19	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/15/17 02:19	10
1,3-Dichloropropane	ND		10	7.5	ug/L			09/15/17 02:19	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/15/17 02:19	10
1,4-Dioxane	ND		500	93	ug/L			09/15/17 02:19	10
2,2-Dichloropropane	ND		10	4.0	ug/L			09/15/17 02:19	10
2-Butanone (MEK)	ND	*	100	13	ug/L			09/15/17 02:19	10
2-Chlorotoluene	ND		10	8.6	ug/L			09/15/17 02:19	10
2-Hexanone	ND	*	100	12	ug/L			09/15/17 02:19	10
4-Chlorotoluene	ND		10	8.4	ug/L			09/15/17 02:19	10
4-Isopropyltoluene	ND		10	3.1	ug/L			09/15/17 02:19	10
4-Methyl-2-pentanone (MIBK)	ND		100	21	ug/L			09/15/17 02:19	10
Acetone	ND		500	30	ug/L			09/15/17 02:19	10
Benzene	ND		10	4.1	ug/L			09/15/17 02:19	10
Bromobenzene	ND		10	8.0	ug/L			09/15/17 02:19	10
Bromoform	ND		10	2.6	ug/L			09/15/17 02:19	10
Bromomethane	ND		20	6.9	ug/L			09/15/17 02:19	10
Carbon disulfide	ND		100	1.9	ug/L			09/15/17 02:19	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/15/17 02:19	10
Chlorobenzene	ND		10	7.5	ug/L			09/15/17 02:19	10
Chlorobromomethane	ND		10	8.7	ug/L			09/15/17 02:19	10
Chlorodibromomethane	ND		5.0	3.2	ug/L			09/15/17 02:19	10
Chloroethane	ND		20	3.2	ug/L			09/15/17 02:19	10
Chloroform	ND		10	3.4	ug/L			09/15/17 02:19	10
Chloromethane	ND		20	3.5	ug/L			09/15/17 02:19	10
cis-1,2-Dichloroethene	**920**		10	8.1	ug/L			09/15/17 02:19	10
cis-1,3-Dichloropropene	ND		4.0	3.6	ug/L			09/15/17 02:19	10
Dibromomethane	ND		10	4.1	ug/L			09/15/17 02:19	10
Dichlorobromomethane	ND		5.0	3.9	ug/L			09/15/17 02:19	10
Dichlorodifluoromethane	ND	*	10	6.8	ug/L			09/15/17 02:19	10
Ethyl ether	ND		10	7.2	ug/L			09/15/17 02:19	10
Ethylbenzene	ND		10	7.4	ug/L			09/15/17 02:19	10
Ethylene Dibromide	ND		10	7.3	ug/L			09/15/17 02:19	10
Hexachlorobutadiene	ND		4.0	2.8	ug/L			09/15/17 02:19	10

Client Sample ID: C091317-PP3

Date Collected: 09/13/17 15:15
Date Received: 09/14/17 02:00

Lab Sample ID: 480-124118-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		100	5.9	ug/L			09/15/17 02:19	10
Isopropylbenzene	ND		10	7.9	ug/L			09/15/17 02:19	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/15/17 02:19	10
Methylene Chloride	ND		10	4.4	ug/L			09/15/17 02:19	10
m-Xylene & p-Xylene	ND		20	6.6	ug/L			09/15/17 02:19	10
Naphthalene	ND		50	4.3	ug/L			09/15/17 02:19	10
n-Butylbenzene	ND		10	6.4	ug/L			09/15/17 02:19	10
N-Propylbenzene	ND		10	6.9	ug/L			09/15/17 02:19	10
o-Xylene	ND		10	7.6	ug/L			09/15/17 02:19	10
sec-Butylbenzene	ND		10	7.5	ug/L			09/15/17 02:19	10
Styrene	ND		10	7.3	ug/L			09/15/17 02:19	10
Tert-amyl methyl ether	ND		50	2.7	ug/L			09/15/17 02:19	10
Tert-butyl ethyl ether	ND		50	2.9	ug/L			09/15/17 02:19	10
tert-Butylbenzene	ND		10	8.1	ug/L			09/15/17 02:19	10
Tetrachloroethene	**5.5**	**J**	10	3.6	ug/L			09/15/17 02:19	10
Tetrahydrofuran	ND		100	13	ug/L			09/15/17 02:19	10
Toluene	ND		10	5.1	ug/L			09/15/17 02:19	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/15/17 02:19	10
trans-1,3-Dichloropropene	ND		4.0	3.7	ug/L			09/15/17 02:19	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/15/17 02:19	10
Vinyl chloride	**230**		10	9.0	ug/L			09/15/17 02:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/15/17 02:19*	*10*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/15/17 02:19*	*10*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/15/17 02:19*	*10*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*09/15/17 02:19*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**5500**		100	46	ug/L			09/18/17 15:17	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/18/17 15:17*	*100*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/18/17 15:17*	*100*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/18/17 15:17*	*100*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/18/17 15:17*	*100*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**800**		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 19:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**1.5**		0.50	0.25	mg/L			09/14/17 04:34	50

Surrogate Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-124118-1	C091317-PP2	103	99	101	103
480-124118-2	C091317-OSW2B	106	100	101	106
480-124118-3	C091317-OSW3A	99	98	98	96
480-124118-4	C091317-CLW22B	105	100	101	106
480-124118-5	C091317-CLW17	102	101	102	101
480-124118-6	C091317-CLW17B	107	97	101	107
480-124118-7	C091317-PP3	103	99	101	104
480-124118-7 - DL	C091317-PP3	99	100	99	98
LCS 480-376934/5	Lab Control Sample	106	98	99	99
LCS 480-377264/5	Lab Control Sample	105	97	97	97
LCSD 480-376934/6	Lab Control Sample Dup	104	104	102	99
LCSD 480-377264/10	Lab Control Sample Dup	104	99	98	96
MB 480-376934/8	Method Blank	103	103	103	104
MB 480-377264/8	Method Blank	97	99	100	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 480-376934/8
Matrix: Water
Analysis Batch: 376934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/14/17 22:40	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/17 22:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/14/17 22:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/17 22:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/17 22:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/17 22:40	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/14/17 22:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/17 22:40	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/14/17 22:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/17 22:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/14/17 22:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/14/17 22:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/17 22:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/17 22:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/17 22:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/14/17 22:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/17 22:40	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/14/17 22:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/17 22:40	1
1,4-Dioxane	ND		50	9.3	ug/L			09/14/17 22:40	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/14/17 22:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/14/17 22:40	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/14/17 22:40	1
2-Hexanone	ND		10	1.2	ug/L			09/14/17 22:40	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/14/17 22:40	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/14/17 22:40	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/14/17 22:40	1
Acetone	ND		50	3.0	ug/L			09/14/17 22:40	1
Benzene	ND		1.0	0.41	ug/L			09/14/17 22:40	1
Bromobenzene	ND		1.0	0.80	ug/L			09/14/17 22:40	1
Bromoform	ND		1.0	0.26	ug/L			09/14/17 22:40	1
Bromomethane	ND		2.0	0.69	ug/L			09/14/17 22:40	1
Carbon disulfide	ND		10	0.19	ug/L			09/14/17 22:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/17 22:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/17 22:40	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/14/17 22:40	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/14/17 22:40	1
Chloroethane	ND		2.0	0.32	ug/L			09/14/17 22:40	1
Chloroform	ND		1.0	0.34	ug/L			09/14/17 22:40	1
Chloromethane	ND		2.0	0.35	ug/L			09/14/17 22:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/14/17 22:40	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/14/17 22:40	1
Dibromomethane	ND		1.0	0.41	ug/L			09/14/17 22:40	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/14/17 22:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/14/17 22:40	1
Ethyl ether	ND		1.0	0.72	ug/L			09/14/17 22:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/17 22:40	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/14/17 22:40	1

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

Lab Sample ID: MB 480-376934/8
Matrix: Water
Analysis Batch: 376934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/14/17 22:40	1
Isopropyl ether	ND		10	0.59	ug/L			09/14/17 22:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/17 22:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/17 22:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/17 22:40	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/14/17 22:40	1
Naphthalene	ND		5.0	0.43	ug/L			09/14/17 22:40	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/14/17 22:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/14/17 22:40	1
o-Xylene	ND		1.0	0.76	ug/L			09/14/17 22:40	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/14/17 22:40	1
Styrene	ND		1.0	0.73	ug/L			09/14/17 22:40	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/14/17 22:40	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/14/17 22:40	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/14/17 22:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/17 22:40	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/14/17 22:40	1
Toluene	ND		1.0	0.51	ug/L			09/14/17 22:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/14/17 22:40	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/14/17 22:40	1
Trichloroethene	ND		1.0	0.46	ug/L			09/14/17 22:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/17 22:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/14/17 22:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/14/17 22:40*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/14/17 22:40*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/14/17 22:40*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*09/14/17 22:40*	*1*

Lab Sample ID: LCS 480-376934/5
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.7		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.6		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	26.1		ug/L		105	70 - 130
1,1-Dichloroethene	25.0	21.0		ug/L		84	70 - 130
1,1-Dichloropropene	25.0	26.2		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	25.0	26.9		ug/L		107	70 - 130
1,2,3-Trichloropropane	25.0	25.6		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	25.0	27.5		ug/L		110	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		108	70 - 130
1,2-Dichlorobenzene	25.0	26.4		ug/L		105	70 - 130

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

Lab Sample ID: LCS 480-376934/5
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	24.7		ug/L		99	70 - 130
1,2-Dichloropropane	25.0	26.6		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	25.0	27.6		ug/L		110	70 - 130
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	70 - 130
1,4-Dioxane	500	558		ug/L		112	70 - 130
2,2-Dichloropropane	25.0	25.3		ug/L		101	70 - 130
2-Butanone (MEK)	125	246	*	ug/L		196	70 - 130
2-Chlorotoluene	25.0	28.5		ug/L		114	70 - 130
2-Hexanone	125	211	*	ug/L		169	70 - 130
4-Chlorotoluene	25.0	27.6		ug/L		110	70 - 130
4-Isopropyltoluene	25.0	28.2		ug/L		113	70 - 130
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	70 - 130
Acetone	125	152		ug/L		121	70 - 130
Benzene	25.0	25.4		ug/L		101	70 - 130
Bromobenzene	25.0	26.4		ug/L		106	70 - 130
Bromoform	25.0	27.1		ug/L		108	70 - 130
Bromomethane	25.0	24.3		ug/L		97	70 - 130
Carbon disulfide	25.0	21.6		ug/L		87	70 - 130
Carbon tetrachloride	25.0	26.0		ug/L		104	70 - 130
Chlorobenzene	25.0	26.6		ug/L		106	70 - 130
Chlorobromomethane	25.0	25.4		ug/L		102	70 - 130
Chlorodibromomethane	25.0	24.2		ug/L		97	70 - 130
Chloroethane	25.0	25.6		ug/L		102	70 - 130
Chloroform	25.0	24.9		ug/L		100	70 - 130
Chloromethane	25.0	22.2		ug/L		89	70 - 130
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
cis-1,3-Dichloropropene	25.0	27.5		ug/L		110	70 - 130
Dibromomethane	25.0	24.9		ug/L		100	70 - 130
Dichlorobromomethane	25.0	26.6		ug/L		106	70 - 130
Dichlorodifluoromethane	25.0	17.3	*	ug/L		69	70 - 130
Ethyl ether	25.0	25.1		ug/L		100	70 - 130
Ethylbenzene	25.0	26.5		ug/L		106	70 - 130
Ethylene Dibromide	25.0	26.1		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	27.5		ug/L		110	70 - 130
Isopropyl ether	25.0	27.8		ug/L		111	70 - 130
Isopropylbenzene	25.0	27.5		ug/L		110	70 - 130
Methyl tert-butyl ether	25.0	24.3		ug/L		97	70 - 130
Methylene Chloride	25.0	22.8		ug/L		91	70 - 130
m-Xylene & p-Xylene	25.0	27.2		ug/L		109	70 - 130
Naphthalene	25.0	27.0		ug/L		108	70 - 130
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 130
N-Propylbenzene	25.0	27.4		ug/L		110	70 - 130
o-Xylene	25.0	27.1		ug/L		108	70 - 130
sec-Butylbenzene	25.0	27.7		ug/L		111	70 - 130
Styrene	25.0	27.0		ug/L		108	70 - 130
Tert-amyl methyl ether	25.0	27.6		ug/L		110	70 - 130

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

Lab Sample ID: LCS 480-376934/5
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	26.8		ug/L		107	70 - 130
tert-Butylbenzene	25.0	26.9		ug/L		107	70 - 130
Tetrachloroethene	25.0	29.4		ug/L		118	70 - 130
Tetrahydrofuran	50.0	50.5		ug/L		101	70 - 130
Toluene	25.0	26.7		ug/L		107	70 - 130
trans-1,2-Dichloroethene	25.0	23.3		ug/L		93	70 - 130
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	70 - 130
Trichloroethene	25.0	26.6		ug/L		106	70 - 130
Trichlorofluoromethane	25.0	24.6		ug/L		98	70 - 130
Vinyl chloride	25.0	22.4		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 480-376934/6
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.9		ug/L		108	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.4		ug/L		98	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	27.1		ug/L		109	70 - 130	2	20
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	70 - 130	4	20
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 130	3	20
1,1-Dichloroethene	25.0	20.3		ug/L		81	70 - 130	4	20
1,1-Dichloropropene	25.0	25.0		ug/L		100	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	26.8		ug/L		107	70 - 130	0	20
1,2,3-Trichloropropane	25.0	27.1		ug/L		108	70 - 130	6	20
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	28.2		ug/L		113	70 - 130	5	20
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	3	20
1,2-Dichloroethane	25.0	24.8		ug/L		99	70 - 130	0	20
1,2-Dichloropropane	25.0	25.6		ug/L		103	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	70 - 130	5	20
1,3-Dichlorobenzene	25.0	25.6		ug/L		102	70 - 130	3	20
1,3-Dichloropropane	25.0	26.6		ug/L		106	70 - 130	2	20
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130	4	20
1,4-Dioxane	500	599		ug/L		120	70 - 130	7	20
2,2-Dichloropropane	25.0	24.3		ug/L		97	70 - 130	4	20
2-Butanone (MEK)	125	258	*	ug/L		207	70 - 130	5	20
2-Chlorotoluene	25.0	27.3		ug/L		109	70 - 130	4	20
2-Hexanone	125	227	*	ug/L		181	70 - 130	7	20
4-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130	2	20
4-Isopropyltoluene	25.0	26.9		ug/L		108	70 - 130	5	20

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

Lab Sample ID: LCSD 480-376934/6
Matrix: Water
Analysis Batch: 376934

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	125	146		ug/L		117	70 - 130	8	20
Acetone	125	158		ug/L		127	70 - 130	4	20
Benzene	25.0	24.5		ug/L		98	70 - 130	3	20
Bromobenzene	25.0	26.0		ug/L		104	70 - 130	1	20
Bromoform	25.0	28.1		ug/L		112	70 - 130	4	20
Bromomethane	25.0	23.3		ug/L		93	70 - 130	4	20
Carbon disulfide	25.0	20.7		ug/L		83	70 - 130	4	20
Carbon tetrachloride	25.0	24.7		ug/L		99	70 - 130	5	20
Chlorobenzene	25.0	26.7		ug/L		107	70 - 130	1	20
Chlorobromomethane	25.0	25.1		ug/L		100	70 - 130	1	20
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 130	3	20
Chloroethane	25.0	24.7		ug/L		99	70 - 130	4	20
Chloroform	25.0	24.2		ug/L		97	70 - 130	3	20
Chloromethane	25.0	21.2		ug/L		85	70 - 130	5	20
cis-1,2-Dichloroethene	25.0	23.6		ug/L		94	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	27.4		ug/L		110	70 - 130	0	20
Dibromomethane	25.0	25.4		ug/L		101	70 - 130	2	20
Dichlorobromomethane	25.0	26.4		ug/L		106	70 - 130	1	20
Dichlorodifluoromethane	25.0	15.5	*	ug/L		62	70 - 130	11	20
Ethyl ether	25.0	25.4		ug/L		102	70 - 130	1	20
Ethylbenzene	25.0	26.6		ug/L		106	70 - 130	0	20
Ethylene Dibromide	25.0	26.9		ug/L		108	70 - 130	3	20
Hexachlorobutadiene	25.0	26.5		ug/L		106	70 - 130	3	20
Isopropyl ether	25.0	27.4		ug/L		110	70 - 130	1	20
Isopropylbenzene	25.0	26.2		ug/L		105	70 - 130	5	20
Methyl tert-butyl ether	25.0	24.8		ug/L		99	70 - 130	2	20
Methylene Chloride	25.0	22.9		ug/L		92	70 - 130	0	20
m-Xylene & p-Xylene	25.0	26.9		ug/L		107	70 - 130	1	20
Naphthalene	25.0	28.0		ug/L		112	70 - 130	4	20
n-Butylbenzene	25.0	26.0		ug/L		104	70 - 130	4	20
N-Propylbenzene	25.0	26.1		ug/L		105	70 - 130	5	20
o-Xylene	25.0	26.9		ug/L		107	70 - 130	1	20
sec-Butylbenzene	25.0	26.4		ug/L		106	70 - 130	5	20
Styrene	25.0	27.3		ug/L		109	70 - 130	1	20
Tert-amyl methyl ether	25.0	27.8		ug/L		111	70 - 130	1	20
Tert-butyl ethyl ether	25.0	26.9		ug/L		108	70 - 130	0	20
tert-Butylbenzene	25.0	25.5		ug/L		102	70 - 130	5	20
Tetrachloroethene	25.0	29.3		ug/L		117	70 - 130	1	20
Tetrahydrofuran	50.0	53.1		ug/L		106	70 - 130	5	20
Toluene	25.0	26.6		ug/L		106	70 - 130	0	20
trans-1,2-Dichloroethene	25.0	22.1		ug/L		88	70 - 130	6	20
trans-1,3-Dichloropropene	25.0	27.7		ug/L		111	70 - 130	3	20
Trichloroethene	25.0	25.9		ug/L		104	70 - 130	3	20
Trichlorofluoromethane	25.0	23.6		ug/L		95	70 - 130	4	20
Vinyl chloride	25.0	21.7		ug/L		87	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: LCSD 480-376934/6
Matrix: Water
Analysis Batch: 376934

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 480-377264/8
Matrix: Water
Analysis Batch: 377264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/18/17 11:56	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/18/17 11:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/18/17 11:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/18/17 11:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/18/17 11:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/18/17 11:56	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/18/17 11:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 11:56	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/18/17 11:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 11:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/18/17 11:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/18/17 11:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/18/17 11:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/18/17 11:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/18/17 11:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/18/17 11:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/18/17 11:56	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/18/17 11:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/18/17 11:56	1
1,4-Dioxane	ND		50	9.3	ug/L			09/18/17 11:56	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/18/17 11:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/18/17 11:56	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/18/17 11:56	1
2-Hexanone	ND		10	1.2	ug/L			09/18/17 11:56	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/18/17 11:56	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/18/17 11:56	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/18/17 11:56	1
Acetone	ND		50	3.0	ug/L			09/18/17 11:56	1
Benzene	ND		1.0	0.41	ug/L			09/18/17 11:56	1
Bromobenzene	ND		1.0	0.80	ug/L			09/18/17 11:56	1
Bromoform	ND		1.0	0.26	ug/L			09/18/17 11:56	1
Bromomethane	ND		2.0	0.69	ug/L			09/18/17 11:56	1
Carbon disulfide	0.192	J	10	0.19	ug/L			09/18/17 11:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/18/17 11:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/18/17 11:56	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/18/17 11:56	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/18/17 11:56	1
Chloroethane	ND		2.0	0.32	ug/L			09/18/17 11:56	1
Chloroform	ND		1.0	0.34	ug/L			09/18/17 11:56	1

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

Lab Sample ID: MB 480-377264/8
Matrix: Water
Analysis Batch: 377264

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0	0.35	ug/L			09/18/17 11:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/18/17 11:56	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/18/17 11:56	1
Dibromomethane	ND		1.0	0.41	ug/L			09/18/17 11:56	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/18/17 11:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/18/17 11:56	1
Ethyl ether	ND		1.0	0.72	ug/L			09/18/17 11:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/17 11:56	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/18/17 11:56	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/18/17 11:56	1
Isopropyl ether	ND		10	0.59	ug/L			09/18/17 11:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/18/17 11:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/18/17 11:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/18/17 11:56	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/17 11:56	1
Naphthalene	ND		5.0	0.43	ug/L			09/18/17 11:56	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/18/17 11:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/18/17 11:56	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/17 11:56	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/18/17 11:56	1
Styrene	ND		1.0	0.73	ug/L			09/18/17 11:56	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/18/17 11:56	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/18/17 11:56	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/18/17 11:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/18/17 11:56	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/18/17 11:56	1
Toluene	ND		1.0	0.51	ug/L			09/18/17 11:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/18/17 11:56	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/18/17 11:56	1
Trichloroethene	ND		1.0	0.46	ug/L			09/18/17 11:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/18/17 11:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/18/17 11:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/18/17 11:56*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/18/17 11:56*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/18/17 11:56*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/18/17 11:56*	*1*

Lab Sample ID: LCS 480-377264/5
Matrix: Water
Analysis Batch: 377264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	27.7		ug/L		111	70 - 130
1,1,1-Trichloroethane	25.0	29.3		ug/L		117	70 - 130
1,1,2,2-Tetrachloroethane	25.0	29.1		ug/L		117	70 - 130
1,1,2-Trichloroethane	25.0	27.7		ug/L		111	70 - 130

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

Lab Sample ID: LCS 480-377264/5
Matrix: Water
Analysis Batch: 377264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	29.0		ug/L		116	70 - 130
1,1-Dichloroethene	25.0	27.3		ug/L		109	70 - 130
1,1-Dichloropropene	25.0	30.0		ug/L		120	70 - 130
1,2,3-Trichlorobenzene	25.0	29.2		ug/L		117	70 - 130
1,2,3-Trichloropropane	25.0	28.3		ug/L		113	70 - 130
1,2,4-Trichlorobenzene	25.0	28.2		ug/L		113	70 - 130
1,2,4-Trimethylbenzene	25.0	29.9		ug/L		120	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	28.3		ug/L		113	70 - 130
1,2-Dichlorobenzene	25.0	28.2		ug/L		113	70 - 130
1,2-Dichloroethane	25.0	27.2		ug/L		109	70 - 130
1,2-Dichloropropane	25.0	28.1		ug/L		112	70 - 130
1,3,5-Trimethylbenzene	25.0	30.1		ug/L		120	70 - 130
1,3-Dichlorobenzene	25.0	28.9		ug/L		116	70 - 130
1,3-Dichloropropane	25.0	27.7		ug/L		111	70 - 130
1,4-Dichlorobenzene	25.0	27.8		ug/L		111	70 - 130
1,4-Dioxane	500	497		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	29.1		ug/L		116	70 - 130
2-Butanone (MEK)	125	260	*	ug/L		208	70 - 130
2-Chlorotoluene	25.0	29.0		ug/L		116	70 - 130
2-Hexanone	125	226	*	ug/L		181	70 - 130
4-Chlorotoluene	25.0	30.2		ug/L		121	70 - 130
4-Isopropyltoluene	25.0	31.3		ug/L		125	70 - 130
4-Methyl-2-pentanone (MIBK)	125	150		ug/L		120	70 - 130
Acetone	125	153		ug/L		122	70 - 130
Benzene	25.0	28.3		ug/L		113	70 - 130
Bromobenzene	25.0	28.7		ug/L		115	70 - 130
Bromoform	25.0	28.2		ug/L		113	70 - 130
Bromomethane	25.0	24.2		ug/L		97	70 - 130
Carbon disulfide	25.0	29.2		ug/L		117	70 - 130
Carbon tetrachloride	25.0	29.9		ug/L		120	70 - 130
Chlorobenzene	25.0	28.2		ug/L		113	70 - 130
Chlorobromomethane	25.0	27.6		ug/L		110	70 - 130
Chlorodibromomethane	25.0	25.8		ug/L		103	70 - 130
Chloroethane	25.0	27.6		ug/L		110	70 - 130
Chloroform	25.0	27.2		ug/L		109	70 - 130
Chloromethane	25.0	28.2		ug/L		113	70 - 130
cis-1,2-Dichloroethene	25.0	26.8		ug/L		107	70 - 130
cis-1,3-Dichloropropene	25.0	29.5		ug/L		118	70 - 130
Dibromomethane	25.0	27.3		ug/L		109	70 - 130
Dichlorobromomethane	25.0	28.9		ug/L		116	70 - 130
Dichlorodifluoromethane	25.0	29.4		ug/L		118	70 - 130
Ethyl ether	25.0	29.0		ug/L		116	70 - 130
Ethylbenzene	25.0	28.9		ug/L		116	70 - 130
Ethylene Dibromide	25.0	28.4		ug/L		114	70 - 130
Hexachlorobutadiene	25.0	31.3		ug/L		125	70 - 130
Isopropyl ether	25.0	26.7		ug/L		107	70 - 130
Isopropylbenzene	25.0	30.2		ug/L		121	70 - 130
Methyl tert-butyl ether	25.0	27.5		ug/L		110	70 - 130

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

Lab Sample ID: LCS 480-377264/5
Matrix: Water
Analysis Batch: 377264

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	25.2		ug/L		101	70 - 130
m-Xylene & p-Xylene	25.0	29.0		ug/L		116	70 - 130
Naphthalene	25.0	30.0		ug/L		120	70 - 130
n-Butylbenzene	25.0	30.6		ug/L		122	70 - 130
N-Propylbenzene	25.0	30.5		ug/L		122	70 - 130
o-Xylene	25.0	28.8		ug/L		115	70 - 130
sec-Butylbenzene	25.0	31.1		ug/L		124	70 - 130
Styrene	25.0	28.7		ug/L		115	70 - 130
Tert-amyl methyl ether	25.0	26.3		ug/L		105	70 - 130
Tert-butyl ethyl ether	25.0	25.5		ug/L		102	70 - 130
tert-Butylbenzene	25.0	28.9		ug/L		116	70 - 130
Tetrachloroethene	25.0	32.8	*	ug/L		131	70 - 130
Tetrahydrofuran	50.0	57.4		ug/L		115	70 - 130
Toluene	25.0	28.8		ug/L		115	70 - 130
trans-1,2-Dichloroethene	25.0	26.8		ug/L		107	70 - 130
trans-1,3-Dichloropropene	25.0	28.9		ug/L		116	70 - 130
Trichloroethene	25.0	29.6		ug/L		118	70 - 130
Trichlorofluoromethane	25.0	28.1		ug/L		112	70 - 130
Vinyl chloride	25.0	28.2		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-377264/10
Matrix: Water
Analysis Batch: 377264

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.3		ug/L		109	70 - 130	2	20
1,1,1-Trichloroethane	25.0	27.0		ug/L		108	70 - 130	8	20
1,1,2,2-Tetrachloroethane	25.0	28.9		ug/L		116	70 - 130	1	20
1,1,2-Trichloroethane	25.0	27.4		ug/L		110	70 - 130	1	20
1,1-Dichloroethane	25.0	27.0		ug/L		108	70 - 130	7	20
1,1-Dichloroethene	25.0	25.1		ug/L		100	70 - 130	8	20
1,1-Dichloropropene	25.0	27.9		ug/L		112	70 - 130	7	20
1,2,3-Trichlorobenzene	25.0	28.5		ug/L		114	70 - 130	3	20
1,2,3-Trichloropropane	25.0	28.1		ug/L		112	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	27.2		ug/L		109	70 - 130	4	20
1,2,4-Trimethylbenzene	25.0	28.7		ug/L		115	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	28.1		ug/L		112	70 - 130	1	20
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	70 - 130	2	20
1,2-Dichloroethane	25.0	26.0		ug/L		104	70 - 130	4	20
1,2-Dichloropropane	25.0	26.7		ug/L		107	70 - 130	5	20
1,3,5-Trimethylbenzene	25.0	28.8		ug/L		115	70 - 130	4	20
1,3-Dichlorobenzene	25.0	27.5		ug/L		110	70 - 130	5	20

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

Lab Sample ID: LCSD 480-377264/10
Matrix: Water
Analysis Batch: 377264

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	25.0	27.1		ug/L		109	70 - 130	2	20
1,4-Dichlorobenzene	25.0	27.0		ug/L		108	70 - 130	3	20
1,4-Dioxane	500	519		ug/L		104	70 - 130	4	20
2,2-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	8	20
2-Butanone (MEK)	125	252	*	ug/L		202	70 - 130	3	20
2-Chlorotoluene	25.0	28.0		ug/L		112	70 - 130	4	20
2-Hexanone	125	224	*	ug/L		179	70 - 130	1	20
4-Chlorotoluene	25.0	28.7		ug/L		115	70 - 130	5	20
4-Isopropyltoluene	25.0	29.6		ug/L		118	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)	125	149		ug/L		119	70 - 130	1	20
Acetone	125	148		ug/L		119	70 - 130	3	20
Benzene	25.0	26.6		ug/L		106	70 - 130	6	20
Bromobenzene	25.0	27.4		ug/L		110	70 - 130	5	20
Bromoform	25.0	27.5		ug/L		110	70 - 130	3	20
Bromomethane	25.0	22.9		ug/L		91	70 - 130	6	20
Carbon disulfide	25.0	26.7		ug/L		107	70 - 130	9	20
Carbon tetrachloride	25.0	27.7		ug/L		111	70 - 130	8	20
Chlorobenzene	25.0	27.1		ug/L		108	70 - 130	4	20
Chlorobromomethane	25.0	26.2		ug/L		105	70 - 130	5	20
Chlorodibromomethane	25.0	25.4		ug/L		102	70 - 130	1	20
Chloroethane	25.0	25.3		ug/L		101	70 - 130	9	20
Chloroform	25.0	25.7		ug/L		103	70 - 130	6	20
Chloromethane	25.0	25.8		ug/L		103	70 - 130	9	20
cis-1,2-Dichloroethene	25.0	25.6		ug/L		103	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	28.2		ug/L		113	70 - 130	5	20
Dibromomethane	25.0	26.5		ug/L		106	70 - 130	3	20
Dichlorobromomethane	25.0	27.7		ug/L		111	70 - 130	4	20
Dichlorodifluoromethane	25.0	26.6		ug/L		106	70 - 130	10	20
Ethyl ether	25.0	28.1		ug/L		112	70 - 130	3	20
Ethylbenzene	25.0	27.7		ug/L		111	70 - 130	4	20
Ethylene Dibromide	25.0	27.9		ug/L		111	70 - 130	2	20
Hexachlorobutadiene	25.0	29.2		ug/L		117	70 - 130	7	20
Isopropyl ether	25.0	25.5		ug/L		102	70 - 130	4	20
Isopropylbenzene	25.0	28.7		ug/L		115	70 - 130	5	20
Methyl tert-butyl ether	25.0	26.3		ug/L		105	70 - 130	5	20
Methylene Chloride	25.0	23.7		ug/L		95	70 - 130	6	20
m-Xylene & p-Xylene	25.0	27.7		ug/L		111	70 - 130	5	20
Naphthalene	25.0	29.5		ug/L		118	70 - 130	2	20
n-Butylbenzene	25.0	28.9		ug/L		116	70 - 130	6	20
N-Propylbenzene	25.0	28.8		ug/L		115	70 - 130	6	20
o-Xylene	25.0	28.0		ug/L		112	70 - 130	3	20
sec-Butylbenzene	25.0	29.4		ug/L		117	70 - 130	6	20
Styrene	25.0	27.7		ug/L		111	70 - 130	4	20
Tert-amyl methyl ether	25.0	25.5		ug/L		102	70 - 130	3	20
Tert-butyl ethyl ether	25.0	24.7		ug/L		99	70 - 130	3	20
tert-Butylbenzene	25.0	27.9		ug/L		112	70 - 130	3	20
Tetrachloroethene	25.0	31.8		ug/L		127	70 - 130	3	20
Tetrahydrofuran	50.0	55.6		ug/L		111	70 - 130	3	20

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

Lab Sample ID: LCSD 480-377264/10 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377264

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			25.0	27.5		ug/L		110	70 - 130	4	20
trans-1,2-Dichloroethene			25.0	24.8		ug/L		99	70 - 130	8	20
trans-1,3-Dichloropropene			25.0	28.5		ug/L		114	70 - 130	1	20
Trichloroethene			25.0	27.7		ug/L		111	70 - 130	7	20
Trichlorofluoromethane			25.0	25.5		ug/L		102	70 - 130	10	20
Vinyl chloride			25.0	25.7		ug/L		103	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-376867/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377304 — **Prep Batch: 376867**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/15/17 08:35	09/15/17 18:45	1

Lab Sample ID: LCS 480-376867/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377304 — **Prep Batch: 376867**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			200	195		ug/L		98	80 - 120		

Lab Sample ID: LCSD 480-376867/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377304 — **Prep Batch: 376867**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium			200	202		ug/L		101	80 - 120	4	20

Lab Sample ID: 480-124118-3 MS — **Client Sample ID: C091317-OSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377304 — **Prep Batch: 376867**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	3.5	J	200	201		ug/L		99	75 - 125		

Lab Sample ID: 480-124118-3 MSD — **Client Sample ID: C091317-OSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377304 — **Prep Batch: 376867**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	3.5	J	200	197		ug/L		97	75 - 125	2	20

QC Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-376728/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/14/17 04:34	1

Lab Sample ID: LCS 480-376728/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.177		mg/L		89	80 - 120

Lab Sample ID: LCSD 480-376728/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376728

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.200	0.178		mg/L		89	80 - 120	1	20

Lab Sample ID: 480-124118-3 MS — **Client Sample ID: C091317-OSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376728

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	ND		0.200	0.210		mg/L		105	75 - 125

Lab Sample ID: 480-124118-2 DU — **Client Sample ID: C091317-OSW2B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376728

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	2.4		2.34		mg/L		2	20

Lab Sample ID: 480-124118-7 DU — **Client Sample ID: C091317-PP3**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 376728

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	1.5		1.66		mg/L		9	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

GC/MS VOA

Analysis Batch: 376934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124118-1	C091317-PP2	Total/NA	Water	8260C	
480-124118-2	C091317-OSW2B	Total/NA	Water	8260C	
480-124118-4	C091317-CLW22B	Total/NA	Water	8260C	
480-124118-5	C091317-CLW17	Total/NA	Water	8260C	
480-124118-6	C091317-CLW17B	Total/NA	Water	8260C	
480-124118-7	C091317-PP3	Total/NA	Water	8260C	
MB 480-376934/8	Method Blank	Total/NA	Water	8260C	
LCS 480-376934/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-376934/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 377264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124118-3	C091317-OSW3A	Total/NA	Water	8260C	
480-124118-7 - DL	C091317-PP3	Total/NA	Water	8260C	
MB 480-377264/8	Method Blank	Total/NA	Water	8260C	
LCS 480-377264/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377264/10	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 376867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124118-1	C091317-PP2	Total/NA	Water	3005A	
480-124118-2	C091317-OSW2B	Total/NA	Water	3005A	
480-124118-3	C091317-OSW3A	Total/NA	Water	3005A	
480-124118-4	C091317-CLW22B	Total/NA	Water	3005A	
480-124118-5	C091317-CLW17	Total/NA	Water	3005A	
480-124118-6	C091317-CLW17B	Total/NA	Water	3005A	
480-124118-7	C091317-PP3	Total/NA	Water	3005A	
MB 480-376867/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-376867/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-376867/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	
480-124118-3 MS	C091317-OSW3A	Total/NA	Water	3005A	
480-124118-3 MSD	C091317-OSW3A	Total/NA	Water	3005A	

Analysis Batch: 377304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124118-1	C091317-PP2	Total/NA	Water	6010	376867
480-124118-2	C091317-OSW2B	Total/NA	Water	6010	376867
480-124118-3	C091317-OSW3A	Total/NA	Water	6010	376867
480-124118-4	C091317-CLW22B	Total/NA	Water	6010	376867
480-124118-5	C091317-CLW17	Total/NA	Water	6010	376867
480-124118-6	C091317-CLW17B	Total/NA	Water	6010	376867
480-124118-7	C091317-PP3	Total/NA	Water	6010	376867
MB 480-376867/1-A	Method Blank	Total/NA	Water	6010	376867
LCS 480-376867/2-A	Lab Control Sample	Total/NA	Water	6010	376867
LCSD 480-376867/3-A	Lab Control Sample Dup	Total/NA	Water	6010	376867
480-124118-3 MS	C091317-OSW3A	Total/NA	Water	6010	376867
480-124118-3 MSD	C091317-OSW3A	Total/NA	Water	6010	376867

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

General Chemistry

Analysis Batch: 376728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124118-1	C091317-PP2	Total/NA	Water	7196A	
480-124118-2	C091317-OSW2B	Total/NA	Water	7196A	
480-124118-3	C091317-OSW3A	Total/NA	Water	7196A	
480-124118-4	C091317-CLW22B	Total/NA	Water	7196A	
480-124118-5	C091317-CLW17	Total/NA	Water	7196A	
480-124118-6	C091317-CLW17B	Total/NA	Water	7196A	
480-124118-7	C091317-PP3	Total/NA	Water	7196A	
MB 480-376728/3	Method Blank	Total/NA	Water	7196A	
LCS 480-376728/4	Lab Control Sample	Total/NA	Water	7196A	
LCSD 480-376728/5	Lab Control Sample Dup	Total/NA	Water	7196A	
480-124118-3 MS	C091317-OSW3A	Total/NA	Water	7196A	
480-124118-2 DU	C091317-OSW2B	Total/NA	Water	7196A	
480-124118-7 DU	C091317-PP3	Total/NA	Water	7196A	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-PP2 — Lab Sample ID: 480-124118-1

Date Collected: 09/13/17 09:05
Date Received: 09/14/17 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	376934	09/14/17 23:49	RRS	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF
Total/NA	Analysis	6010		1	377304	09/15/17 18:56	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376728	09/14/17 04:34	KMB	TAL BUF

Client Sample ID: C091317-OSW2B — Lab Sample ID: 480-124118-2

Date Collected: 09/13/17 11:20
Date Received: 09/14/17 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	376934	09/15/17 00:14	RRS	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF
Total/NA	Analysis	6010		1	377304	09/15/17 18:59	LMH	TAL BUF
Total/NA	Analysis	7196A		50	376728	09/14/17 04:34	KMB	TAL BUF

Client Sample ID: C091317-OSW3A — Lab Sample ID: 480-124118-3

Date Collected: 09/13/17 13:30
Date Received: 09/14/17 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377264	09/18/17 14:52	KMN	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF
Total/NA	Analysis	6010		1	377304	09/15/17 19:03	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376728	09/14/17 04:34	KMB	TAL BUF

Client Sample ID: C091317-CLW22B — Lab Sample ID: 480-124118-4

Date Collected: 09/13/17 09:25
Date Received: 09/14/17 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376934	09/15/17 01:04	RRS	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF
Total/NA	Analysis	6010		1	377304	09/15/17 19:31	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376728	09/14/17 04:34	KMB	TAL BUF

Client Sample ID: C091317-CLW17 — Lab Sample ID: 480-124118-5

Date Collected: 09/13/17 11:25
Date Received: 09/14/17 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	376934	09/15/17 01:29	RRS	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Client Sample ID: C091317-CLW17

Lab Sample ID: 480-124118-5
Date Collected: 09/13/17 11:25
Matrix: Water
Date Received: 09/14/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010		1	377304	09/15/17 19:35	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376728	09/14/17 04:34	KMB	TAL BUF

Client Sample ID: C091317-CLW17B

Lab Sample ID: 480-124118-6
Date Collected: 09/13/17 13:05
Matrix: Water
Date Received: 09/14/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	376934	09/15/17 01:54	RRS	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF
Total/NA	Analysis	6010		1	377304	09/15/17 19:38	LMH	TAL BUF
Total/NA	Analysis	7196A		1	376728	09/14/17 04:34	KMB	TAL BUF

Client Sample ID: C091317-PP3

Lab Sample ID: 480-124118-7
Date Collected: 09/13/17 15:15
Matrix: Water
Date Received: 09/14/17 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	376934	09/15/17 02:19	RRS	TAL BUF
Total/NA	Analysis	8260C	DL	100	377264	09/18/17 15:17	KMN	TAL BUF
Total/NA	Prep	3005A			376867	09/15/17 08:35	EMB	TAL BUF
Total/NA	Analysis	6010		1	377304	09/15/17 19:42	LMH	TAL BUF
Total/NA	Analysis	7196A		50	376728	09/14/17 04:34	KMB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Chromium
7196A		Water	Chromium, hexavalent
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride

Method Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124118-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-124118-1	C091317-PP2	Water	09/13/17 09:05	09/14/17 02:00
480-124118-2	C091317-OSW2B	Water	09/13/17 11:20	09/14/17 02:00
480-124118-3	C091317-OSW3A	Water	09/13/17 13:30	09/14/17 02:00
480-124118-4	C091317-CLW22B	Water	09/13/17 09:25	09/14/17 02:00
480-124118-5	C091317-CLW17	Water	09/13/17 11:25	09/14/17 02:00
480-124118-6	C091317-CLW17B	Water	09/13/17 13:05	09/14/17 02:00
480-124118-7	C091317-PP3	Water	09/13/17 15:15	09/14/17 02:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 38450.55525
COC # : 091317-G1
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential: N
Site Name: Conductorlab: April 2017 Semiannual Groundwater Sampling
EDD To: Mark.Maggiore @amec.com
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #

Analysis Turnaround Time:	10
Standard -	Y
Rush Charges Authorized for -	
2 weeks -	Y
1 week -	N
Next Day -	N

480-124118 COC

PAGE 1 of 1 — 1
Job No.

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3_7) 02-01-05 renesurgi@aol.com

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds	7196A Hexavalent Chromium	SW846/6010B Total Chromium	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
PP-2			C091317-PP2	9-13-17	905	water	Gw	Reg	5	G	N	X	X	X	
OSW-2B			C091317-OSW2B	9-13-17	1120	water	Gw	Reg	5	G	N	X	X	X	
OSW-3A			C091317-OSW3A	9-13-17	1330	water	Gw	Reg	5	G	N	X	X	X	
CCW-22B			C091317-CCW-22B	9-13-17	925	water	Gw	Reg	5	G	N	X	X	X	
CCW-17			C091317-CCW17	9-13-17	1125	water	Gw	Reg	5	G	N	X	X	X	
CCW-17B			C091317-CCW17B	9-13-17	1305	water	Gw	Reg	5	G	N	X	X	X	
PP-3			C091317-PP3	9-13-17	1515	water	Gw	Reg	5	G	N	X	X	X	

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab.

Relinquished by:	Company: AmecFW	Received by:	Company: TA		Condition		Custody Seals Intact	
	Date/Time: 9-13-17 15:3		Date/Time: 9-13-17 1554		Cooler Temp.			
Relinquished by:	Company: TA	Received by:	Company: TAS		Condition		Custody Seals Intact	
	Date/Time: 9-13-17 1500		Date/Time: 9-14-17	0200	Cooler Temp.			

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

2.2 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-124118-1

Login Number: 124118
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-124202-1
Client Project/Site: September 2017 Semi Annual Ground Water
Sampling Event: Semi Annual Ground Water

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Melissa Deyo

Authorized for release by:
9/22/2017 3:42:14 PM
Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Qualifiers

GC/MS VOA

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

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-124202-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-124202-1

Receipt
The samples were received on 9/15/2017 2:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) for Acetone and Trichlorofluoromethane associated with batch 480-377443 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : C091417-CLW5A (480-124202-1), C091417-CLW5B (480-124202-2), C091417-OSW1A (480-124202-3), C091417-OSW1B (480-124202-4), C091417-OSW3B (480-124202-5) and C091417-CLW16B (480-124202-6).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-377443 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C091417-CLW5A (480-124202-1), C091417-CLW5B (480-124202-2), C091417-OSW1A (480-124202-3), C091417-OSW1B (480-124202-4), C091417-OSW3B (480-124202-5) and C091417-CLW16B (480-124202-6).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: C091417-CLW5B (480-124202-2), C091417-OSW1B (480-124202-4), C091417-OSW3B (480-124202-5) and C091417-CLW16B (480-124202-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: C091417-CLW5A (480-124202-1) and C091417-CLW16B (480-124202-6). Elevated reporting limits (RLs) are provided.

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

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

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

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-CLW5A — Lab Sample ID: 480-124202-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	4.9		1.0	0.29	ug/L	1		8260C	Total/NA
Chloroethane	1.4	J	2.0	0.32	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	3.7		1.0	0.90	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	550		20	16	ug/L	20		8260C	Total/NA
Trichloroethene - DL	1300		20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride - DL	130		20	18	ug/L	20		8260C	Total/NA
Chromium	82		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.053		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091417-CLW5B — Lab Sample ID: 480-124202-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.9	J	2.0	0.58	ug/L	2		8260C	Total/NA
Chloroethane	6.9		4.0	0.64	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	110		2.0	1.6	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	7.5		2.0	1.8	ug/L	2		8260C	Total/NA
Trichloroethene	140		2.0	0.92	ug/L	2		8260C	Total/NA
Vinyl chloride	28		2.0	1.8	ug/L	2		8260C	Total/NA
Chromium	7.0		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.014		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091417-OSW1A — Lab Sample ID: 480-124202-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6.3		1.0	0.46	ug/L	1		8260C	Total/NA
Chromium	220		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.19		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091417-OSW1B — Lab Sample ID: 480-124202-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	490		50	41	ug/L	50		8260C	Total/NA
Trichloroethene	3300		50	23	ug/L	50		8260C	Total/NA
Vinyl chloride	47	J	50	45	ug/L	50		8260C	Total/NA
Chromium	1.1	J	5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C091417-OSW3B — Lab Sample ID: 480-124202-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	130		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	270		10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	12		10	9.0	ug/L	10		8260C	Total/NA
Chromium	3.5	J	5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C091417-CLW16B — Lab Sample ID: 480-124202-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3000		100	81	ug/L	100		8260C	Total/NA
trans-1,2-Dichloroethene	350		100	90	ug/L	100		8260C	Total/NA
Vinyl chloride	1200		100	90	ug/L	100		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-CLW16B (Continued)

Lab Sample ID: 480-124202-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene - DL	12000		400	180	ug/L	400		8260C	Total/NA
Chromium	40		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.0068	J	0.010	0.0050	mg/L	1		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-CLW5A

Date Collected: 09/14/17 09:30
Date Received: 09/15/17 02:15

Lab Sample ID: 480-124202-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/18/17 23:39	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/18/17 23:39	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/18/17 23:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/18/17 23:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/18/17 23:39	1
1,1-Dichloroethene	**4.9**		1.0	0.29	ug/L			09/18/17 23:39	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/18/17 23:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 23:39	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/18/17 23:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 23:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/18/17 23:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/18/17 23:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/18/17 23:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/18/17 23:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/18/17 23:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/18/17 23:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/18/17 23:39	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/18/17 23:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/18/17 23:39	1
1,4-Dioxane	ND		50	9.3	ug/L			09/18/17 23:39	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/18/17 23:39	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/18/17 23:39	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/18/17 23:39	1
2-Hexanone	ND		10	1.2	ug/L			09/18/17 23:39	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/18/17 23:39	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/18/17 23:39	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/18/17 23:39	1
Acetone	ND		50	3.0	ug/L			09/18/17 23:39	1
Benzene	ND		1.0	0.41	ug/L			09/18/17 23:39	1
Bromobenzene	ND		1.0	0.80	ug/L			09/18/17 23:39	1
Bromoform	ND		1.0	0.26	ug/L			09/18/17 23:39	1
Bromomethane	ND		2.0	0.69	ug/L			09/18/17 23:39	1
Carbon disulfide	ND		10	0.19	ug/L			09/18/17 23:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/18/17 23:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/18/17 23:39	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/18/17 23:39	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/18/17 23:39	1
Chloroethane	**1.4**	**J**	2.0	0.32	ug/L			09/18/17 23:39	1
Chloroform	ND		1.0	0.34	ug/L			09/18/17 23:39	1
Chloromethane	ND		2.0	0.35	ug/L			09/18/17 23:39	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/18/17 23:39	1
Dibromomethane	ND		1.0	0.41	ug/L			09/18/17 23:39	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/18/17 23:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/18/17 23:39	1
Ethyl ether	ND		1.0	0.72	ug/L			09/18/17 23:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/17 23:39	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/18/17 23:39	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/18/17 23:39	1
Isopropyl ether	ND		10	0.59	ug/L			09/18/17 23:39	1

Client Sample ID: C091417-CLW5A

Lab Sample ID: 480-124202-1

Date Collected: 09/14/17 09:30

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.79	ug/L			09/18/17 23:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/18/17 23:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/18/17 23:39	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/17 23:39	1
Naphthalene	ND		5.0	0.43	ug/L			09/18/17 23:39	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/18/17 23:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/18/17 23:39	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/17 23:39	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/18/17 23:39	1
Styrene	ND		1.0	0.73	ug/L			09/18/17 23:39	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/18/17 23:39	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/18/17 23:39	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/18/17 23:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/18/17 23:39	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/18/17 23:39	1
Toluene	ND		1.0	0.51	ug/L			09/18/17 23:39	1
trans-1,2-Dichloroethene	**3.7**		1.0	0.90	ug/L			09/18/17 23:39	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/18/17 23:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/18/17 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/18/17 23:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*09/18/17 23:39*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/18/17 23:39*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/18/17 23:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**550**		20	16	ug/L			09/19/17 10:56	20
Trichloroethene	**1300**		20	9.2	ug/L			09/19/17 10:56	20
Vinyl chloride	**130**		20	18	ug/L			09/19/17 10:56	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/19/17 10:56*	*20*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/19/17 10:56*	*20*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/19/17 10:56*	*20*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*09/19/17 10:56*	*20*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**82**		5.0	1.0	ug/L		09/18/17 08:58	09/18/17 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.053**		0.010	0.0050	mg/L			09/15/17 06:40	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-CLW5B

Lab Sample ID: 480-124202-2

Date Collected: 09/14/17 10:10

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.70	ug/L			09/19/17 00:03	2
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			09/19/17 00:03	2
1,1,2,2-Tetrachloroethane	ND		1.0	0.42	ug/L			09/19/17 00:03	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/19/17 00:03	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			09/19/17 00:03	2
1,1-Dichloroethene	**1.9**	**J**	2.0	0.58	ug/L			09/19/17 00:03	2
1,1-Dichloropropene	ND		2.0	1.4	ug/L			09/19/17 00:03	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/19/17 00:03	2
1,2,3-Trichloropropane	ND		2.0	1.8	ug/L			09/19/17 00:03	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/19/17 00:03	2
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
1,2-Dibromo-3-Chloropropane	ND		10	0.78	ug/L			09/19/17 00:03	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/19/17 00:03	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/19/17 00:03	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/19/17 00:03	2
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/19/17 00:03	2
1,3-Dichloropropane	ND		2.0	1.5	ug/L			09/19/17 00:03	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/19/17 00:03	2
1,4-Dioxane	ND		100	19	ug/L			09/19/17 00:03	2
2,2-Dichloropropane	ND		2.0	0.80	ug/L			09/19/17 00:03	2
2-Butanone (MEK)	ND	*	20	2.6	ug/L			09/19/17 00:03	2
2-Chlorotoluene	ND		2.0	1.7	ug/L			09/19/17 00:03	2
2-Hexanone	ND		20	2.5	ug/L			09/19/17 00:03	2
4-Chlorotoluene	ND		2.0	1.7	ug/L			09/19/17 00:03	2
4-Isopropyltoluene	ND		2.0	0.62	ug/L			09/19/17 00:03	2
4-Methyl-2-pentanone (MIBK)	ND		20	4.2	ug/L			09/19/17 00:03	2
Acetone	ND		100	6.0	ug/L			09/19/17 00:03	2
Benzene	ND		2.0	0.82	ug/L			09/19/17 00:03	2
Bromobenzene	ND		2.0	1.6	ug/L			09/19/17 00:03	2
Bromoform	ND		2.0	0.52	ug/L			09/19/17 00:03	2
Bromomethane	ND		4.0	1.4	ug/L			09/19/17 00:03	2
Carbon disulfide	ND		20	0.38	ug/L			09/19/17 00:03	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/19/17 00:03	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
Chlorobromomethane	ND		2.0	1.7	ug/L			09/19/17 00:03	2
Chlorodibromomethane	ND		1.0	0.64	ug/L			09/19/17 00:03	2
Chloroethane	**6.9**		4.0	0.64	ug/L			09/19/17 00:03	2
Chloroform	ND		2.0	0.68	ug/L			09/19/17 00:03	2
Chloromethane	ND		4.0	0.70	ug/L			09/19/17 00:03	2
cis-1,2-Dichloroethene	**110**		2.0	1.6	ug/L			09/19/17 00:03	2
cis-1,3-Dichloropropene	ND		0.80	0.72	ug/L			09/19/17 00:03	2
Dibromomethane	ND		2.0	0.82	ug/L			09/19/17 00:03	2
Dichlorobromomethane	ND		1.0	0.78	ug/L			09/19/17 00:03	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/19/17 00:03	2
Ethyl ether	ND		2.0	1.4	ug/L			09/19/17 00:03	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
Ethylene Dibromide	ND		2.0	1.5	ug/L			09/19/17 00:03	2
Hexachlorobutadiene	ND		0.80	0.56	ug/L			09/19/17 00:03	2

Client Sample ID: C091417-CLW5B

Lab Sample ID: 480-124202-2

Date Collected: 09/14/17 10:10

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		20	1.2	ug/L			09/19/17 00:03	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/19/17 00:03	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/19/17 00:03	2
Methylene Chloride	ND		2.0	0.88	ug/L			09/19/17 00:03	2
m-Xylene & p-Xylene	ND		4.0	1.3	ug/L			09/19/17 00:03	2
Naphthalene	ND		10	0.86	ug/L			09/19/17 00:03	2
n-Butylbenzene	ND		2.0	1.3	ug/L			09/19/17 00:03	2
N-Propylbenzene	ND		2.0	1.4	ug/L			09/19/17 00:03	2
o-Xylene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
sec-Butylbenzene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
Styrene	ND		2.0	1.5	ug/L			09/19/17 00:03	2
Tert-amyl methyl ether	ND		10	0.54	ug/L			09/19/17 00:03	2
Tert-butyl ethyl ether	ND		10	0.59	ug/L			09/19/17 00:03	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			09/19/17 00:03	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/19/17 00:03	2
Tetrahydrofuran	ND		20	2.5	ug/L			09/19/17 00:03	2
Toluene	ND		2.0	1.0	ug/L			09/19/17 00:03	2
trans-1,2-Dichloroethene	**7.5**		2.0	1.8	ug/L			09/19/17 00:03	2
trans-1,3-Dichloropropene	ND		0.80	0.74	ug/L			09/19/17 00:03	2
Trichloroethene	**140**		2.0	0.92	ug/L			09/19/17 00:03	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/19/17 00:03	2
Vinyl chloride	**28**		2.0	1.8	ug/L			09/19/17 00:03	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/19/17 00:03*	*2*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/19/17 00:03*	*2*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 00:03*	*2*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/19/17 00:03*	*2*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**7.0**		5.0	1.0	ug/L		09/18/17 08:58	09/18/17 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.014**		0.010	0.0050	mg/L			09/15/17 06:40	1

Client Sample ID: C091417-OSW1A

Lab Sample ID: 480-124202-3

Date Collected: 09/14/17 11:00

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 00:27	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 00:27	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 00:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 00:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 00:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 00:27	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 00:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 00:27	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 00:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 00:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 00:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 00:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 00:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 00:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 00:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 00:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 00:27	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 00:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 00:27	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 00:27	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 00:27	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/19/17 00:27	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 00:27	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 00:27	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 00:27	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 00:27	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/19/17 00:27	1
Acetone	ND		50	3.0	ug/L			09/19/17 00:27	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 00:27	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 00:27	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 00:27	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 00:27	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 00:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 00:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 00:27	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 00:27	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 00:27	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 00:27	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 00:27	1
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 00:27	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 00:27	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 00:27	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 00:27	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 00:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 00:27	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 00:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 00:27	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 00:27	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 00:27	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-OSW1A

Lab Sample ID: 480-124202-3

Date Collected: 09/14/17 11:00
Matrix: Water
Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 00:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 00:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 00:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 00:27	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/19/17 00:27	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 00:27	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 00:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 00:27	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/17 00:27	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 00:27	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 00:27	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 00:27	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 00:27	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 00:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 00:27	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 00:27	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 00:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 00:27	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 00:27	1
Trichloroethene	**6.3**		1.0	0.46	ug/L			09/19/17 00:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 00:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/19/17 00:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/19/17 00:27*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/19/17 00:27*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/19/17 00:27*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**220**		5.0	1.0	ug/L		09/18/17 08:58	09/18/17 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.19**		0.010	0.0050	mg/L			09/15/17 06:40	1

Client Sample ID: C091417-OSW1B

Lab Sample ID: 480-124202-4

Date Collected: 09/14/17 13:10

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	18	ug/L			09/19/17 00:51	50
1,1,1-Trichloroethane	ND		50	41	ug/L			09/19/17 00:51	50
1,1,2,2-Tetrachloroethane	ND		25	11	ug/L			09/19/17 00:51	50
1,1,2-Trichloroethane	ND		50	12	ug/L			09/19/17 00:51	50
1,1-Dichloroethane	ND		50	19	ug/L			09/19/17 00:51	50
1,1-Dichloroethene	ND		50	15	ug/L			09/19/17 00:51	50
1,1-Dichloropropene	ND		50	36	ug/L			09/19/17 00:51	50
1,2,3-Trichlorobenzene	ND		50	21	ug/L			09/19/17 00:51	50
1,2,3-Trichloropropane	ND		50	45	ug/L			09/19/17 00:51	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			09/19/17 00:51	50
1,2,4-Trimethylbenzene	ND		50	38	ug/L			09/19/17 00:51	50
1,2-Dibromo-3-Chloropropane	ND		250	20	ug/L			09/19/17 00:51	50
1,2-Dichlorobenzene	ND		50	40	ug/L			09/19/17 00:51	50
1,2-Dichloroethane	ND		50	11	ug/L			09/19/17 00:51	50
1,2-Dichloropropane	ND		50	36	ug/L			09/19/17 00:51	50
1,3,5-Trimethylbenzene	ND		50	39	ug/L			09/19/17 00:51	50
1,3-Dichlorobenzene	ND		50	39	ug/L			09/19/17 00:51	50
1,3-Dichloropropane	ND		50	38	ug/L			09/19/17 00:51	50
1,4-Dichlorobenzene	ND		50	42	ug/L			09/19/17 00:51	50
1,4-Dioxane	ND		2500	470	ug/L			09/19/17 00:51	50
2,2-Dichloropropane	ND		50	20	ug/L			09/19/17 00:51	50
2-Butanone (MEK)	ND	*	500	66	ug/L			09/19/17 00:51	50
2-Chlorotoluene	ND		50	43	ug/L			09/19/17 00:51	50
2-Hexanone	ND		500	62	ug/L			09/19/17 00:51	50
4-Chlorotoluene	ND		50	42	ug/L			09/19/17 00:51	50
4-Isopropyltoluene	ND		50	16	ug/L			09/19/17 00:51	50
4-Methyl-2-pentanone (MIBK)	ND		500	110	ug/L			09/19/17 00:51	50
Acetone	ND		2500	150	ug/L			09/19/17 00:51	50
Benzene	ND		50	21	ug/L			09/19/17 00:51	50
Bromobenzene	ND		50	40	ug/L			09/19/17 00:51	50
Bromoform	ND		50	13	ug/L			09/19/17 00:51	50
Bromomethane	ND		100	35	ug/L			09/19/17 00:51	50
Carbon disulfide	ND		500	9.5	ug/L			09/19/17 00:51	50
Carbon tetrachloride	ND		50	14	ug/L			09/19/17 00:51	50
Chlorobenzene	ND		50	38	ug/L			09/19/17 00:51	50
Chlorobromomethane	ND		50	44	ug/L			09/19/17 00:51	50
Chlorodibromomethane	ND		25	16	ug/L			09/19/17 00:51	50
Chloroethane	ND		100	16	ug/L			09/19/17 00:51	50
Chloroform	ND		50	17	ug/L			09/19/17 00:51	50
Chloromethane	ND		100	18	ug/L			09/19/17 00:51	50
cis-1,2-Dichloroethene	**490**		50	41	ug/L			09/19/17 00:51	50
cis-1,3-Dichloropropene	ND		20	18	ug/L			09/19/17 00:51	50
Dibromomethane	ND		50	21	ug/L			09/19/17 00:51	50
Dichlorobromomethane	ND		25	20	ug/L			09/19/17 00:51	50
Dichlorodifluoromethane	ND		50	34	ug/L			09/19/17 00:51	50
Ethyl ether	ND		50	36	ug/L			09/19/17 00:51	50
Ethylbenzene	ND		50	37	ug/L			09/19/17 00:51	50
Ethylene Dibromide	ND		50	37	ug/L			09/19/17 00:51	50
Hexachlorobutadiene	ND		20	14	ug/L			09/19/17 00:51	50

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-OSW1B

Lab Sample ID: 480-124202-4

Date Collected: 09/14/17 13:10
Matrix: Water
Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		500	30	ug/L			09/19/17 00:51	50
Isopropylbenzene	ND		50	40	ug/L			09/19/17 00:51	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			09/19/17 00:51	50
Methylene Chloride	ND		50	22	ug/L			09/19/17 00:51	50
m-Xylene & p-Xylene	ND		100	33	ug/L			09/19/17 00:51	50
Naphthalene	ND		250	22	ug/L			09/19/17 00:51	50
n-Butylbenzene	ND		50	32	ug/L			09/19/17 00:51	50
N-Propylbenzene	ND		50	35	ug/L			09/19/17 00:51	50
o-Xylene	ND		50	38	ug/L			09/19/17 00:51	50
sec-Butylbenzene	ND		50	38	ug/L			09/19/17 00:51	50
Styrene	ND		50	37	ug/L			09/19/17 00:51	50
Tert-amyl methyl ether	ND		250	14	ug/L			09/19/17 00:51	50
Tert-butyl ethyl ether	ND		250	15	ug/L			09/19/17 00:51	50
tert-Butylbenzene	ND		50	41	ug/L			09/19/17 00:51	50
Tetrachloroethene	ND		50	18	ug/L			09/19/17 00:51	50
Tetrahydrofuran	ND		500	63	ug/L			09/19/17 00:51	50
Toluene	ND		50	26	ug/L			09/19/17 00:51	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			09/19/17 00:51	50
trans-1,3-Dichloropropene	ND		20	19	ug/L			09/19/17 00:51	50
Trichloroethene	**3300**		50	23	ug/L			09/19/17 00:51	50
Trichlorofluoromethane	ND		50	44	ug/L			09/19/17 00:51	50
Vinyl chloride	**47**	**J**	50	45	ug/L			09/19/17 00:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/19/17 00:51*	*50*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/19/17 00:51*	*50*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 00:51*	*50*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/19/17 00:51*	*50*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**1.1**	**J**	5.0	1.0	ug/L		09/18/17 08:58	09/18/17 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/15/17 06:40	1

Client Sample ID: C091417-OSW3B **Lab Sample ID: 480-124202-5**

Date Collected: 09/14/17 14:45 **Matrix: Water**

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	3.5	ug/L			09/19/17 01:14	10
1,1,1-Trichloroethane	ND		10	8.2	ug/L			09/19/17 01:14	10
1,1,2,2-Tetrachloroethane	ND		5.0	2.1	ug/L			09/19/17 01:14	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/19/17 01:14	10
1,1-Dichloroethane	ND		10	3.8	ug/L			09/19/17 01:14	10
1,1-Dichloroethene	ND		10	2.9	ug/L			09/19/17 01:14	10
1,1-Dichloropropene	ND		10	7.2	ug/L			09/19/17 01:14	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/19/17 01:14	10
1,2,3-Trichloropropane	ND		10	8.9	ug/L			09/19/17 01:14	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/19/17 01:14	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			09/19/17 01:14	10
1,2-Dibromo-3-Chloropropane	ND		50	3.9	ug/L			09/19/17 01:14	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/19/17 01:14	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/19/17 01:14	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/19/17 01:14	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			09/19/17 01:14	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/19/17 01:14	10
1,3-Dichloropropane	ND		10	7.5	ug/L			09/19/17 01:14	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/19/17 01:14	10
1,4-Dioxane	ND		500	93	ug/L			09/19/17 01:14	10
2,2-Dichloropropane	ND		10	4.0	ug/L			09/19/17 01:14	10
2-Butanone (MEK)	ND	*	100	13	ug/L			09/19/17 01:14	10
2-Chlorotoluene	ND		10	8.6	ug/L			09/19/17 01:14	10
2-Hexanone	ND		100	12	ug/L			09/19/17 01:14	10
4-Chlorotoluene	ND		10	8.4	ug/L			09/19/17 01:14	10
4-Isopropyltoluene	ND		10	3.1	ug/L			09/19/17 01:14	10
4-Methyl-2-pentanone (MIBK)	ND		100	21	ug/L			09/19/17 01:14	10
Acetone	ND		500	30	ug/L			09/19/17 01:14	10
Benzene	ND		10	4.1	ug/L			09/19/17 01:14	10
Bromobenzene	ND		10	8.0	ug/L			09/19/17 01:14	10
Bromoform	ND		10	2.6	ug/L			09/19/17 01:14	10
Bromomethane	ND		20	6.9	ug/L			09/19/17 01:14	10
Carbon disulfide	ND		100	1.9	ug/L			09/19/17 01:14	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/19/17 01:14	10
Chlorobenzene	ND		10	7.5	ug/L			09/19/17 01:14	10
Chlorobromomethane	ND		10	8.7	ug/L			09/19/17 01:14	10
Chlorodibromomethane	ND		5.0	3.2	ug/L			09/19/17 01:14	10
Chloroethane	ND		20	3.2	ug/L			09/19/17 01:14	10
Chloroform	ND		10	3.4	ug/L			09/19/17 01:14	10
Chloromethane	ND		20	3.5	ug/L			09/19/17 01:14	10
cis-1,2-Dichloroethene	**130**		10	8.1	ug/L			09/19/17 01:14	10
cis-1,3-Dichloropropene	ND		4.0	3.6	ug/L			09/19/17 01:14	10
Dibromomethane	ND		10	4.1	ug/L			09/19/17 01:14	10
Dichlorobromomethane	ND		5.0	3.9	ug/L			09/19/17 01:14	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/19/17 01:14	10
Ethyl ether	ND		10	7.2	ug/L			09/19/17 01:14	10
Ethylbenzene	ND		10	7.4	ug/L			09/19/17 01:14	10
Ethylene Dibromide	ND		10	7.3	ug/L			09/19/17 01:14	10
Hexachlorobutadiene	ND		4.0	2.8	ug/L			09/19/17 01:14	10

Client Sample ID: C091417-OSW3B

Lab Sample ID: 480-124202-5

Date Collected: 09/14/17 14:45

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		100	5.9	ug/L			09/19/17 01:14	10
Isopropylbenzene	ND		10	7.9	ug/L			09/19/17 01:14	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/19/17 01:14	10
Methylene Chloride	ND		10	4.4	ug/L			09/19/17 01:14	10
m-Xylene & p-Xylene	ND		20	6.6	ug/L			09/19/17 01:14	10
Naphthalene	ND		50	4.3	ug/L			09/19/17 01:14	10
n-Butylbenzene	ND		10	6.4	ug/L			09/19/17 01:14	10
N-Propylbenzene	ND		10	6.9	ug/L			09/19/17 01:14	10
o-Xylene	ND		10	7.6	ug/L			09/19/17 01:14	10
sec-Butylbenzene	ND		10	7.5	ug/L			09/19/17 01:14	10
Styrene	ND		10	7.3	ug/L			09/19/17 01:14	10
Tert-amyl methyl ether	ND		50	2.7	ug/L			09/19/17 01:14	10
Tert-butyl ethyl ether	ND		50	2.9	ug/L			09/19/17 01:14	10
tert-Butylbenzene	ND		10	8.1	ug/L			09/19/17 01:14	10
Tetrachloroethene	ND		10	3.6	ug/L			09/19/17 01:14	10
Tetrahydrofuran	ND		100	13	ug/L			09/19/17 01:14	10
Toluene	ND		10	5.1	ug/L			09/19/17 01:14	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/19/17 01:14	10
trans-1,3-Dichloropropene	ND		4.0	3.7	ug/L			09/19/17 01:14	10
Trichloroethene	**270**		10	4.6	ug/L			09/19/17 01:14	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/19/17 01:14	10
Vinyl chloride	**12**		10	9.0	ug/L			09/19/17 01:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/19/17 01:14*	*10*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/19/17 01:14*	*10*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 01:14*	*10*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/19/17 01:14*	*10*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**3.5**	**J**	5.0	1.0	ug/L		09/18/17 08:58	09/18/17 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/15/17 06:40	1

Client Sample ID: C091417-CLW16B

Lab Sample ID: 480-124202-6

Date Collected: 09/14/17 13:55

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100	35	ug/L			09/19/17 01:38	100
1,1,1-Trichloroethane	ND		100	82	ug/L			09/19/17 01:38	100
1,1,2,2-Tetrachloroethane	ND		50	21	ug/L			09/19/17 01:38	100
1,1,2-Trichloroethane	ND		100	23	ug/L			09/19/17 01:38	100
1,1-Dichloroethane	ND		100	38	ug/L			09/19/17 01:38	100
1,1-Dichloroethene	ND		100	29	ug/L			09/19/17 01:38	100
1,1-Dichloropropene	ND		100	72	ug/L			09/19/17 01:38	100
1,2,3-Trichlorobenzene	ND		100	41	ug/L			09/19/17 01:38	100
1,2,3-Trichloropropane	ND		100	89	ug/L			09/19/17 01:38	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			09/19/17 01:38	100
1,2,4-Trimethylbenzene	ND		100	75	ug/L			09/19/17 01:38	100
1,2-Dibromo-3-Chloropropane	ND		500	39	ug/L			09/19/17 01:38	100
1,2-Dichlorobenzene	ND		100	79	ug/L			09/19/17 01:38	100
1,2-Dichloroethane	ND		100	21	ug/L			09/19/17 01:38	100
1,2-Dichloropropane	ND		100	72	ug/L			09/19/17 01:38	100
1,3,5-Trimethylbenzene	ND		100	77	ug/L			09/19/17 01:38	100
1,3-Dichlorobenzene	ND		100	78	ug/L			09/19/17 01:38	100
1,3-Dichloropropane	ND		100	75	ug/L			09/19/17 01:38	100
1,4-Dichlorobenzene	ND		100	84	ug/L			09/19/17 01:38	100
1,4-Dioxane	ND		5000	930	ug/L			09/19/17 01:38	100
2,2-Dichloropropane	ND		100	40	ug/L			09/19/17 01:38	100
2-Butanone (MEK)	ND	*	1000	130	ug/L			09/19/17 01:38	100
2-Chlorotoluene	ND		100	86	ug/L			09/19/17 01:38	100
2-Hexanone	ND		1000	120	ug/L			09/19/17 01:38	100
4-Chlorotoluene	ND		100	84	ug/L			09/19/17 01:38	100
4-Isopropyltoluene	ND		100	31	ug/L			09/19/17 01:38	100
4-Methyl-2-pentanone (MIBK)	ND		1000	210	ug/L			09/19/17 01:38	100
Acetone	ND		5000	300	ug/L			09/19/17 01:38	100
Benzene	ND		100	41	ug/L			09/19/17 01:38	100
Bromobenzene	ND		100	80	ug/L			09/19/17 01:38	100
Bromoform	ND		100	26	ug/L			09/19/17 01:38	100
Bromomethane	ND		200	69	ug/L			09/19/17 01:38	100
Carbon disulfide	ND		1000	19	ug/L			09/19/17 01:38	100
Carbon tetrachloride	ND		100	27	ug/L			09/19/17 01:38	100
Chlorobenzene	ND		100	75	ug/L			09/19/17 01:38	100
Chlorobromomethane	ND		100	87	ug/L			09/19/17 01:38	100
Chlorodibromomethane	ND		50	32	ug/L			09/19/17 01:38	100
Chloroethane	ND		200	32	ug/L			09/19/17 01:38	100
Chloroform	ND		100	34	ug/L			09/19/17 01:38	100
Chloromethane	ND		200	35	ug/L			09/19/17 01:38	100
cis-1,2-Dichloroethene	**3000**		100	81	ug/L			09/19/17 01:38	100
cis-1,3-Dichloropropene	ND		40	36	ug/L			09/19/17 01:38	100
Dibromomethane	ND		100	41	ug/L			09/19/17 01:38	100
Dichlorobromomethane	ND		50	39	ug/L			09/19/17 01:38	100
Dichlorodifluoromethane	ND		100	68	ug/L			09/19/17 01:38	100
Ethyl ether	ND		100	72	ug/L			09/19/17 01:38	100
Ethylbenzene	ND		100	74	ug/L			09/19/17 01:38	100
Ethylene Dibromide	ND		100	73	ug/L			09/19/17 01:38	100
Hexachlorobutadiene	ND		40	28	ug/L			09/19/17 01:38	100

Client Sample ID: C091417-CLW16B

Lab Sample ID: 480-124202-6

Date Collected: 09/14/17 13:55

Matrix: Water

Date Received: 09/15/17 02:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		1000	59	ug/L			09/19/17 01:38	100
Isopropylbenzene	ND		100	79	ug/L			09/19/17 01:38	100
Methyl tert-butyl ether	ND		100	16	ug/L			09/19/17 01:38	100
Methylene Chloride	ND		100	44	ug/L			09/19/17 01:38	100
m-Xylene & p-Xylene	ND		200	66	ug/L			09/19/17 01:38	100
Naphthalene	ND		500	43	ug/L			09/19/17 01:38	100
n-Butylbenzene	ND		100	64	ug/L			09/19/17 01:38	100
N-Propylbenzene	ND		100	69	ug/L			09/19/17 01:38	100
o-Xylene	ND		100	76	ug/L			09/19/17 01:38	100
sec-Butylbenzene	ND		100	75	ug/L			09/19/17 01:38	100
Styrene	ND		100	73	ug/L			09/19/17 01:38	100
Tert-amyl methyl ether	ND		500	27	ug/L			09/19/17 01:38	100
Tert-butyl ethyl ether	ND		500	29	ug/L			09/19/17 01:38	100
tert-Butylbenzene	ND		100	81	ug/L			09/19/17 01:38	100
Tetrachloroethene	ND		100	36	ug/L			09/19/17 01:38	100
Tetrahydrofuran	ND		1000	130	ug/L			09/19/17 01:38	100
Toluene	ND		100	51	ug/L			09/19/17 01:38	100
trans-1,2-Dichloroethene	**350**		100	90	ug/L			09/19/17 01:38	100
trans-1,3-Dichloropropene	ND		40	37	ug/L			09/19/17 01:38	100
Trichlorofluoromethane	ND		100	88	ug/L			09/19/17 01:38	100
Vinyl chloride	**1200**		100	90	ug/L			09/19/17 01:38	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/19/17 01:38*	*100*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*09/19/17 01:38*	*100*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/19/17 01:38*	*100*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/19/17 01:38*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**12000**		400	180	ug/L			09/19/17 11:19	400

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/19/17 11:19*	*400*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/19/17 11:19*	*400*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/19/17 11:19*	*400*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/19/17 11:19*	*400*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**40**		5.0	1.0	ug/L		09/18/17 08:58	09/18/17 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.0068**	**J**	0.010	0.0050	mg/L			09/15/17 06:40	1

Surrogate Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-124202-1	C091417-CLW5A	97	93	101	95
480-124202-1 - DL	C091417-CLW5A	98	97	103	93
480-124202-2	C091417-CLW5B	100	94	102	92
480-124202-3	C091417-OSW1A	100	100	103	92
480-124202-4	C091417-OSW1B	99	95	102	98
480-124202-5	C091417-OSW3B	98	96	102	96
480-124202-6	C091417-CLW16B	99	100	101	100
480-124202-6 - DL	C091417-CLW16B	98	97	103	95
LCS 480-377443/5	Lab Control Sample	99	94	100	95
LCS 480-377484/6	Lab Control Sample	100	95	100	96
LCSD 480-377443/27	Lab Control Sample Dup	98	94	99	95
LCSD 480-377484/7	Lab Control Sample Dup	103	96	102	97
MB 480-377443/7	Method Blank	96	96	104	94
MB 480-377484/9	Method Blank	97	95	103	92

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 480-377443/7
Matrix: Water
Analysis Batch: 377443

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/18/17 22:45	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/18/17 22:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/18/17 22:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/18/17 22:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/18/17 22:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/18/17 22:45	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/18/17 22:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 22:45	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/18/17 22:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/18/17 22:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/18/17 22:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/18/17 22:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/18/17 22:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/18/17 22:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/18/17 22:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/18/17 22:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/18/17 22:45	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/18/17 22:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/18/17 22:45	1
1,4-Dioxane	ND		50	9.3	ug/L			09/18/17 22:45	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/18/17 22:45	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/18/17 22:45	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/18/17 22:45	1
2-Hexanone	ND		10	1.2	ug/L			09/18/17 22:45	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/18/17 22:45	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/18/17 22:45	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/18/17 22:45	1
Acetone	ND		50	3.0	ug/L			09/18/17 22:45	1
Benzene	ND		1.0	0.41	ug/L			09/18/17 22:45	1
Bromobenzene	ND		1.0	0.80	ug/L			09/18/17 22:45	1
Bromoform	ND		1.0	0.26	ug/L			09/18/17 22:45	1
Bromomethane	ND		2.0	0.69	ug/L			09/18/17 22:45	1
Carbon disulfide	ND		10	0.19	ug/L			09/18/17 22:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/18/17 22:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/18/17 22:45	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/18/17 22:45	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/18/17 22:45	1
Chloroethane	ND		2.0	0.32	ug/L			09/18/17 22:45	1
Chloroform	ND		1.0	0.34	ug/L			09/18/17 22:45	1
Chloromethane	ND		2.0	0.35	ug/L			09/18/17 22:45	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/18/17 22:45	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/18/17 22:45	1
Dibromomethane	ND		1.0	0.41	ug/L			09/18/17 22:45	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/18/17 22:45	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/18/17 22:45	1
Ethyl ether	ND		1.0	0.72	ug/L			09/18/17 22:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/18/17 22:45	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/18/17 22:45	1

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

Lab Sample ID: MB 480-377443/7
Matrix: Water
Analysis Batch: 377443

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/18/17 22:45	1
Isopropyl ether	ND		10	0.59	ug/L			09/18/17 22:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/18/17 22:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/18/17 22:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/18/17 22:45	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/18/17 22:45	1
Naphthalene	ND		5.0	0.43	ug/L			09/18/17 22:45	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/18/17 22:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/18/17 22:45	1
o-Xylene	ND		1.0	0.76	ug/L			09/18/17 22:45	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/18/17 22:45	1
Styrene	ND		1.0	0.73	ug/L			09/18/17 22:45	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/18/17 22:45	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/18/17 22:45	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/18/17 22:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/18/17 22:45	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/18/17 22:45	1
Toluene	ND		1.0	0.51	ug/L			09/18/17 22:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/18/17 22:45	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/18/17 22:45	1
Trichloroethene	ND		1.0	0.46	ug/L			09/18/17 22:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/18/17 22:45	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/18/17 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/18/17 22:45*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/18/17 22:45*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/18/17 22:45*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/18/17 22:45*	*1*

Lab Sample ID: LCS 480-377443/5
Matrix: Water
Analysis Batch: 377443

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	70 - 130
1,1-Dichloroethane	25.0	25.9		ug/L		104	70 - 130
1,1-Dichloroethene	25.0	24.5		ug/L		98	70 - 130
1,1-Dichloropropene	25.0	26.0		ug/L		104	70 - 130
1,2,3-Trichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	25.0	27.9		ug/L		112	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.1		ug/L		92	70 - 130
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	70 - 130

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

Lab Sample ID: LCS 480-377443/5
Matrix: Water
Analysis Batch: 377443

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	24.7		ug/L		99	70 - 130
1,2-Dichloropropane	25.0	25.0		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 130
1,3-Dichlorobenzene	25.0	26.5		ug/L		106	70 - 130
1,3-Dichloropropane	25.0	27.2		ug/L		109	70 - 130
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130
1,4-Dioxane	500	622		ug/L		124	70 - 130
2,2-Dichloropropane	25.0	26.6		ug/L		106	70 - 130
2-Butanone (MEK)	125	237	*	ug/L		189	70 - 130
2-Chlorotoluene	25.0	26.6		ug/L		106	70 - 130
2-Hexanone	125	141		ug/L		113	70 - 130
4-Chlorotoluene	25.0	26.8		ug/L		107	70 - 130
4-Isopropyltoluene	25.0	27.1		ug/L		109	70 - 130
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	70 - 130
Acetone	125	159		ug/L		128	70 - 130
Benzene	25.0	25.7		ug/L		103	70 - 130
Bromobenzene	25.0	24.4		ug/L		98	70 - 130
Bromoform	25.0	24.3		ug/L		97	70 - 130
Bromomethane	25.0	26.6		ug/L		106	70 - 130
Carbon disulfide	25.0	26.1		ug/L		104	70 - 130
Carbon tetrachloride	25.0	24.8		ug/L		99	70 - 130
Chlorobenzene	25.0	27.0		ug/L		108	70 - 130
Chlorobromomethane	25.0	24.0		ug/L		96	70 - 130
Chlorodibromomethane	25.0	25.3		ug/L		101	70 - 130
Chloroethane	25.0	27.3		ug/L		109	70 - 130
Chloroform	25.0	24.6		ug/L		98	70 - 130
Chloromethane	25.0	29.3		ug/L		117	70 - 130
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	25.0	24.9		ug/L		100	70 - 130
Dibromomethane	25.0	23.2		ug/L		93	70 - 130
Dichlorobromomethane	25.0	24.1		ug/L		97	70 - 130
Dichlorodifluoromethane	25.0	30.1		ug/L		120	70 - 130
Ethyl ether	25.0	24.3		ug/L		97	70 - 130
Ethylbenzene	25.0	27.3		ug/L		109	70 - 130
Ethylene Dibromide	25.0	25.4		ug/L		102	70 - 130
Hexachlorobutadiene	25.0	26.7		ug/L		107	70 - 130
Isopropyl ether	25.0	26.1		ug/L		105	70 - 130
Isopropylbenzene	25.0	28.0		ug/L		112	70 - 130
Methyl tert-butyl ether	25.0	24.8		ug/L		99	70 - 130
Methylene Chloride	25.0	22.4		ug/L		89	70 - 130
m-Xylene & p-Xylene	25.0	25.4		ug/L		102	70 - 130
Naphthalene	25.0	26.2		ug/L		105	70 - 130
n-Butylbenzene	25.0	27.3		ug/L		109	70 - 130
N-Propylbenzene	25.0	28.2		ug/L		113	70 - 130
o-Xylene	25.0	26.8		ug/L		107	70 - 130
sec-Butylbenzene	25.0	27.8		ug/L		111	70 - 130
Styrene	25.0	26.5		ug/L		106	70 - 130
Tert-amyl methyl ether	25.0	25.1		ug/L		101	70 - 130

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

Lab Sample ID: LCS 480-377443/5
Matrix: Water
Analysis Batch: 377443

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	25.4		ug/L		102	70 - 130
tert-Butylbenzene	25.0	25.9		ug/L		104	70 - 130
Tetrachloroethene	25.0	28.8		ug/L		115	70 - 130
Tetrahydrofuran	50.0	62.2		ug/L		124	70 - 130
Toluene	25.0	27.1		ug/L		109	70 - 130
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 130
trans-1,3-Dichloropropene	25.0	28.2		ug/L		113	70 - 130
Trichloroethene	25.0	24.6		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	26.6		ug/L		107	70 - 130
Vinyl chloride	25.0	27.6		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 480-377443/27
Matrix: Water
Analysis Batch: 377443

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.1		ug/L		100	70 - 130	2	20
1,1,1-Trichloroethane	25.0	24.2		ug/L		97	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		105	70 - 130	1	20
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	70 - 130	4	20
1,1-Dichloroethane	25.0	24.9		ug/L		100	70 - 130	4	20
1,1-Dichloroethene	25.0	24.1		ug/L		96	70 - 130	2	20
1,1-Dichloropropene	25.0	25.2		ug/L		101	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	22.8		ug/L		91	70 - 130	2	20
1,2,3-Trichloropropane	25.0	25.0		ug/L		100	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	22.3		ug/L		89	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		91	70 - 130	1	20
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	70 - 130	0	20
1,2-Dichloroethane	25.0	23.6		ug/L		94	70 - 130	5	20
1,2-Dichloropropane	25.0	23.6		ug/L		94	70 - 130	6	20
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	4	20
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	70 - 130	3	20
1,3-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	70 - 130	2	20
1,4-Dioxane	500	578		ug/L		116	70 - 130	7	20
2,2-Dichloropropane	25.0	25.2		ug/L		101	70 - 130	5	20
2-Butanone (MEK)	125	230	*	ug/L		184	70 - 130	3	20
2-Chlorotoluene	25.0	26.1		ug/L		104	70 - 130	2	20
2-Hexanone	125	134		ug/L		107	70 - 130	5	20
4-Chlorotoluene	25.0	26.9		ug/L		107	70 - 130	0	20
4-Isopropyltoluene	25.0	27.1		ug/L		108	70 - 130	0	20

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

Lab Sample ID: LCSD 480-377443/27
Matrix: Water
Analysis Batch: 377443

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	70 - 130	4	20
Acetone	125	151		ug/L		121	70 - 130	5	20
Benzene	25.0	24.8		ug/L		99	70 - 130	3	20
Bromobenzene	25.0	23.7		ug/L		95	70 - 130	3	20
Bromoform	25.0	24.5		ug/L		98	70 - 130	1	20
Bromomethane	25.0	25.4		ug/L		101	70 - 130	5	20
Carbon disulfide	25.0	24.6		ug/L		98	70 - 130	6	20
Carbon tetrachloride	25.0	23.2		ug/L		93	70 - 130	7	20
Chlorobenzene	25.0	25.3		ug/L		101	70 - 130	7	20
Chlorobromomethane	25.0	24.0		ug/L		96	70 - 130	0	20
Chlorodibromomethane	25.0	24.0		ug/L		96	70 - 130	5	20
Chloroethane	25.0	25.9		ug/L		103	70 - 130	5	20
Chloroform	25.0	23.3		ug/L		93	70 - 130	5	20
Chloromethane	25.0	27.7		ug/L		111	70 - 130	6	20
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	24.0		ug/L		96	70 - 130	4	20
Dibromomethane	25.0	22.7		ug/L		91	70 - 130	2	20
Dichlorobromomethane	25.0	23.6		ug/L		95	70 - 130	2	20
Dichlorodifluoromethane	25.0	31.4		ug/L		126	70 - 130	4	20
Ethyl ether	25.0	23.1		ug/L		93	70 - 130	5	20
Ethylbenzene	25.0	26.2		ug/L		105	70 - 130	4	20
Ethylene Dibromide	25.0	25.6		ug/L		102	70 - 130	0	20
Hexachlorobutadiene	25.0	25.0		ug/L		100	70 - 130	7	20
Isopropyl ether	25.0	25.9		ug/L		103	70 - 130	1	20
Isopropylbenzene	25.0	26.9		ug/L		108	70 - 130	4	20
Methyl tert-butyl ether	25.0	23.4		ug/L		94	70 - 130	6	20
Methylene Chloride	25.0	20.4		ug/L		82	70 - 130	9	20
m-Xylene & p-Xylene	25.0	24.5		ug/L		98	70 - 130	4	20
Naphthalene	25.0	25.4		ug/L		102	70 - 130	3	20
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 130	0	20
N-Propylbenzene	25.0	27.0		ug/L		108	70 - 130	4	20
o-Xylene	25.0	24.9		ug/L		100	70 - 130	7	20
sec-Butylbenzene	25.0	26.9		ug/L		107	70 - 130	4	20
Styrene	25.0	25.0		ug/L		100	70 - 130	6	20
Tert-amyl methyl ether	25.0	24.3		ug/L		97	70 - 130	3	20
Tert-butyl ethyl ether	25.0	25.4		ug/L		101	70 - 130	0	20
tert-Butylbenzene	25.0	26.8		ug/L		107	70 - 130	3	20
Tetrachloroethene	25.0	25.9		ug/L		104	70 - 130	10	20
Tetrahydrofuran	50.0	60.8		ug/L		122	70 - 130	2	20
Toluene	25.0	25.5		ug/L		102	70 - 130	6	20
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	70 - 130	2	20
trans-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 130	5	20
Trichloroethene	25.0	23.3		ug/L		93	70 - 130	6	20
Trichlorofluoromethane	25.0	25.0		ug/L		100	70 - 130	6	20
Vinyl chloride	25.0	25.9		ug/L		104	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: LCSD 480-377443/27
Matrix: Water
Analysis Batch: 377443

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 480-377484/9
Matrix: Water
Analysis Batch: 377484

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 10:25	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 10:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 10:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 10:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 10:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 10:25	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 10:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 10:25	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 10:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 10:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 10:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 10:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 10:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 10:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 10:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 10:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 10:25	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 10:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 10:25	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 10:25	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 10:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/17 10:25	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 10:25	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 10:25	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 10:25	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 10:25	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/19/17 10:25	1
Acetone	ND		50	3.0	ug/L			09/19/17 10:25	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 10:25	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 10:25	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 10:25	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 10:25	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 10:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 10:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 10:25	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 10:25	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 10:25	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 10:25	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 10:25	1

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

Lab Sample ID: MB 480-377484/9
Matrix: Water
Analysis Batch: 377484

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 10:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 10:25	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 10:25	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 10:25	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 10:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 10:25	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 10:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 10:25	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 10:25	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 10:25	1
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 10:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 10:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 10:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 10:25	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/19/17 10:25	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 10:25	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 10:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 10:25	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/17 10:25	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 10:25	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 10:25	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 10:25	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 10:25	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 10:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 10:25	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 10:25	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 10:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 10:25	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 10:25	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/17 10:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 10:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/19/17 10:25*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/19/17 10:25*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/19/17 10:25*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/19/17 10:25*	*1*

Lab Sample ID: LCS 480-377484/6
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.5		ug/L		94	70 - 130
1,1,1-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130

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

Lab Sample ID: LCS 480-377484/6
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.1		ug/L		96	70 - 130
1,1-Dichloroethene	25.0	22.0		ug/L		88	70 - 130
1,1-Dichloropropene	25.0	24.5		ug/L		98	70 - 130
1,2,3-Trichlorobenzene	25.0	21.3		ug/L		85	70 - 130
1,2,3-Trichloropropane	25.0	25.4		ug/L		101	70 - 130
1,2,4-Trichlorobenzene	25.0	21.4		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130
1,2-Dichloroethane	25.0	23.0		ug/L		92	70 - 130
1,2-Dichloropropane	25.0	23.6		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130
1,3-Dichloropropane	25.0	26.1		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130
1,4-Dioxane	500	440		ug/L		88	70 - 130
2,2-Dichloropropane	25.0	24.0		ug/L		96	70 - 130
2-Butanone (MEK)	125	236	*	ug/L		189	70 - 130
2-Chlorotoluene	25.0	24.5		ug/L		98	70 - 130
2-Hexanone	125	140		ug/L		112	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	25.9		ug/L		104	70 - 130
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	70 - 130
Acetone	125	174	*	ug/L		139	70 - 130
Benzene	25.0	23.6		ug/L		95	70 - 130
Bromobenzene	25.0	22.2		ug/L		89	70 - 130
Bromoform	25.0	24.0		ug/L		96	70 - 130
Bromomethane	25.0	21.6		ug/L		86	70 - 130
Carbon disulfide	25.0	23.1		ug/L		92	70 - 130
Carbon tetrachloride	25.0	21.9		ug/L		88	70 - 130
Chlorobenzene	25.0	24.6		ug/L		98	70 - 130
Chlorobromomethane	25.0	21.7		ug/L		87	70 - 130
Chlorodibromomethane	25.0	23.2		ug/L		93	70 - 130
Chloroethane	25.0	23.5		ug/L		94	70 - 130
Chloroform	25.0	22.1		ug/L		88	70 - 130
Chloromethane	25.0	23.1		ug/L		92	70 - 130
cis-1,2-Dichloroethene	25.0	22.4		ug/L		89	70 - 130
cis-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
Dibromomethane	25.0	21.5		ug/L		86	70 - 130
Dichlorobromomethane	25.0	23.1		ug/L		93	70 - 130
Dichlorodifluoromethane	25.0	22.3		ug/L		89	70 - 130
Ethyl ether	25.0	20.6		ug/L		82	70 - 130
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130
Ethylene Dibromide	25.0	24.6		ug/L		98	70 - 130
Hexachlorobutadiene	25.0	22.7		ug/L		91	70 - 130
Isopropyl ether	25.0	25.7		ug/L		103	70 - 130
Isopropylbenzene	25.0	25.5		ug/L		102	70 - 130
Methyl tert-butyl ether	25.0	23.6		ug/L		94	70 - 130

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

Lab Sample ID: LCS 480-377484/6
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	18.9		ug/L		76	70 - 130
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 130
Naphthalene	25.0	25.0		ug/L		100	70 - 130
n-Butylbenzene	25.0	26.5		ug/L		106	70 - 130
N-Propylbenzene	25.0	25.5		ug/L		102	70 - 130
o-Xylene	25.0	24.1		ug/L		97	70 - 130
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 130
Styrene	25.0	24.3		ug/L		97	70 - 130
Tert-amyl methyl ether	25.0	24.9		ug/L		100	70 - 130
Tert-butyl ethyl ether	25.0	25.6		ug/L		102	70 - 130
tert-Butylbenzene	25.0	24.4		ug/L		98	70 - 130
Tetrachloroethene	25.0	27.3		ug/L		109	70 - 130
Tetrahydrofuran	50.0	60.5		ug/L		121	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	70 - 130
trans-1,3-Dichloropropene	25.0	25.6		ug/L		102	70 - 130
Trichloroethene	25.0	23.3		ug/L		93	70 - 130
Trichlorofluoromethane	25.0	23.7		ug/L		95	70 - 130
Vinyl chloride	25.0	23.0		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 480-377484/7
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130	3	20
1,1,1-Trichloroethane	25.0	24.7		ug/L		99	70 - 130	6	20
1,1,2,2-Tetrachloroethane	25.0	25.4		ug/L		101	70 - 130	1	20
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130	7	20
1,1-Dichloroethane	25.0	26.6		ug/L		106	70 - 130	10	20
1,1-Dichloroethene	25.0	24.5		ug/L		98	70 - 130	11	20
1,1-Dichloropropene	25.0	26.7		ug/L		107	70 - 130	8	20
1,2,3-Trichlorobenzene	25.0	21.8		ug/L		87	70 - 130	3	20
1,2,3-Trichloropropane	25.0	23.3		ug/L		93	70 - 130	9	20
1,2,4-Trichlorobenzene	25.0	21.5		ug/L		86	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	70 - 130	6	20
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130	2	20
1,2-Dichloroethane	25.0	24.4		ug/L		98	70 - 130	6	20
1,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130	6	20
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	70 - 130	2	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	0	20

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

Lab Sample ID: LCSD 480-377484/7
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	3	20
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	2	20
1,4-Dioxane	500	508		ug/L		102	70 - 130	14	20
2,2-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	7	20
2-Butanone (MEK)	125	245	*	ug/L		196	70 - 130	4	20
2-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	2	20
2-Hexanone	125	139		ug/L		111	70 - 130	1	20
4-Chlorotoluene	25.0	25.8		ug/L		103	70 - 130	1	20
4-Isopropyltoluene	25.0	26.6		ug/L		106	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	70 - 130	3	20
Acetone	125	182	*	ug/L		146	70 - 130	4	20
Benzene	25.0	25.2		ug/L		101	70 - 130	6	20
Bromobenzene	25.0	22.7		ug/L		91	70 - 130	2	20
Bromoform	25.0	24.0		ug/L		96	70 - 130	0	20
Bromomethane	25.0	23.4		ug/L		93	70 - 130	8	20
Carbon disulfide	25.0	24.9		ug/L		100	70 - 130	8	20
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130	10	20
Chlorobenzene	25.0	25.4		ug/L		102	70 - 130	3	20
Chlorobromomethane	25.0	23.0		ug/L		92	70 - 130	6	20
Chlorodibromomethane	25.0	23.7		ug/L		95	70 - 130	2	20
Chloroethane	25.0	24.1		ug/L		96	70 - 130	2	20
Chloroform	25.0	23.7		ug/L		95	70 - 130	7	20
Chloromethane	25.0	24.4		ug/L		98	70 - 130	6	20
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	70 - 130	9	20
cis-1,3-Dichloropropene	25.0	24.6		ug/L		98	70 - 130	8	20
Dibromomethane	25.0	23.8		ug/L		95	70 - 130	10	20
Dichlorobromomethane	25.0	24.1		ug/L		97	70 - 130	4	20
Dichlorodifluoromethane	25.0	23.9		ug/L		96	70 - 130	7	20
Ethyl ether	25.0	23.0		ug/L		92	70 - 130	11	20
Ethylbenzene	25.0	26.0		ug/L		104	70 - 130	1	20
Ethylene Dibromide	25.0	24.9		ug/L		100	70 - 130	1	20
Hexachlorobutadiene	25.0	24.4		ug/L		98	70 - 130	7	20
Isopropyl ether	25.0	27.2		ug/L		109	70 - 130	5	20
Isopropylbenzene	25.0	26.9		ug/L		108	70 - 130	5	20
Methyl tert-butyl ether	25.0	24.2		ug/L		97	70 - 130	3	20
Methylene Chloride	25.0	20.0		ug/L		80	70 - 130	5	20
m-Xylene & p-Xylene	25.0	24.6		ug/L		98	70 - 130	5	20
Naphthalene	25.0	24.4		ug/L		98	70 - 130	2	20
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 130	3	20
N-Propylbenzene	25.0	26.8		ug/L		107	70 - 130	5	20
o-Xylene	25.0	25.1		ug/L		100	70 - 130	4	20
sec-Butylbenzene	25.0	27.2		ug/L		109	70 - 130	4	20
Styrene	25.0	25.6		ug/L		102	70 - 130	5	20
Tert-amyl methyl ether	25.0	25.5		ug/L		102	70 - 130	2	20
Tert-butyl ethyl ether	25.0	26.5		ug/L		106	70 - 130	4	20
tert-Butylbenzene	25.0	25.7		ug/L		103	70 - 130	5	20
Tetrachloroethene	25.0	29.0		ug/L		116	70 - 130	6	20
Tetrahydrofuran	50.0	62.3		ug/L		125	70 - 130	3	20

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

Lab Sample ID: LCSD 480-377484/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377484

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	25.0	25.6		ug/L		102	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 130	5	20
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	70 - 130	2	20
Trichloroethene	25.0	24.2		ug/L		97	70 - 130	4	20
Trichlorofluoromethane	25.0	26.8		ug/L		107	70 - 130	12	20
Vinyl chloride	25.0	25.7		ug/L		103	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-377258/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377514 — **Prep Batch: 377258**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/18/17 08:58	09/18/17 14:01	1

Lab Sample ID: LCS 480-377258/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377514 — **Prep Batch: 377258**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	200		ug/L		100	80 - 120

Lab Sample ID: LCSD 480-377258/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377514 — **Prep Batch: 377258**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	200	197		ug/L		99	80 - 120	1	20

Lab Sample ID: 480-124202-1 MS — **Client Sample ID: C091417-CLW5A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377514 — **Prep Batch: 377258**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	82		200	277		ug/L		98	75 - 125

Lab Sample ID: 480-124202-1 MSD — **Client Sample ID: C091417-CLW5A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377514 — **Prep Batch: 377258**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	82		200	282		ug/L		100	75 - 125	2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-377020/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/15/17 06:40	1

Lab Sample ID: MB 480-377020/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/15/17 06:40	1

Lab Sample ID: LCS 480-377020/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.0500	0.0481		mg/L		96	80 - 120

Lab Sample ID: LCS 480-377020/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.193		mg/L		96	80 - 120

Lab Sample ID: LCSD 480-377020/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.200	0.196		mg/L		98	80 - 120	1	20

Lab Sample ID: 480-124202-2 MS — **Client Sample ID: C091417-CLW5B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.014		0.200	0.210		mg/L		98	75 - 125

Lab Sample ID: 480-124202-1 DU — **Client Sample ID: C091417-CLW5A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377020

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	0.053		0.0481		mg/L		10	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

GC/MS VOA

Analysis Batch: 377443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124202-1	C091417-CLW5A	Total/NA	Water	8260C	
480-124202-2	C091417-CLW5B	Total/NA	Water	8260C	
480-124202-3	C091417-OSW1A	Total/NA	Water	8260C	
480-124202-4	C091417-OSW1B	Total/NA	Water	8260C	
480-124202-5	C091417-OSW3B	Total/NA	Water	8260C	
480-124202-6	C091417-CLW16B	Total/NA	Water	8260C	
MB 480-377443/7	Method Blank	Total/NA	Water	8260C	
LCS 480-377443/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377443/27	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 377484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124202-1 - DL	C091417-CLW5A	Total/NA	Water	8260C	
480-124202-6 - DL	C091417-CLW16B	Total/NA	Water	8260C	
MB 480-377484/9	Method Blank	Total/NA	Water	8260C	
LCS 480-377484/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377484/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 377258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124202-1	C091417-CLW5A	Total/NA	Water	3005A	
480-124202-2	C091417-CLW5B	Total/NA	Water	3005A	
480-124202-3	C091417-OSW1A	Total/NA	Water	3005A	
480-124202-4	C091417-OSW1B	Total/NA	Water	3005A	
480-124202-5	C091417-OSW3B	Total/NA	Water	3005A	
480-124202-6	C091417-CLW16B	Total/NA	Water	3005A	
MB 480-377258/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-377258/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-377258/24-A	Lab Control Sample Dup	Total/NA	Water	3005A	
480-124202-1 MS	C091417-CLW5A	Total/NA	Water	3005A	
480-124202-1 MSD	C091417-CLW5A	Total/NA	Water	3005A	

Analysis Batch: 377514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124202-1	C091417-CLW5A	Total/NA	Water	6010	377258
480-124202-2	C091417-CLW5B	Total/NA	Water	6010	377258
480-124202-3	C091417-OSW1A	Total/NA	Water	6010	377258
480-124202-4	C091417-OSW1B	Total/NA	Water	6010	377258
480-124202-5	C091417-OSW3B	Total/NA	Water	6010	377258
480-124202-6	C091417-CLW16B	Total/NA	Water	6010	377258
MB 480-377258/1-A	Method Blank	Total/NA	Water	6010	377258
LCS 480-377258/2-A	Lab Control Sample	Total/NA	Water	6010	377258
LCSD 480-377258/24-A	Lab Control Sample Dup	Total/NA	Water	6010	377258
480-124202-1 MS	C091417-CLW5A	Total/NA	Water	6010	377258
480-124202-1 MSD	C091417-CLW5A	Total/NA	Water	6010	377258

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

General Chemistry

Analysis Batch: 377020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124202-1	C091417-CLW5A	Total/NA	Water	7196A	
480-124202-2	C091417-CLW5B	Total/NA	Water	7196A	
480-124202-3	C091417-OSW1A	Total/NA	Water	7196A	
480-124202-4	C091417-OSW1B	Total/NA	Water	7196A	
480-124202-5	C091417-OSW3B	Total/NA	Water	7196A	
480-124202-6	C091417-CLW16B	Total/NA	Water	7196A	
MB 480-377020/27	Method Blank	Total/NA	Water	7196A	
MB 480-377020/3	Method Blank	Total/NA	Water	7196A	
LCS 480-377020/28	Lab Control Sample	Total/NA	Water	7196A	
LCS 480-377020/4	Lab Control Sample	Total/NA	Water	7196A	
LCSD 480-377020/5	Lab Control Sample Dup	Total/NA	Water	7196A	
480-124202-2 MS	C091417-CLW5B	Total/NA	Water	7196A	
480-124202-1 DU	C091417-CLW5A	Total/NA	Water	7196A	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Client Sample ID: C091417-CLW5A — Lab Sample ID: 480-124202-1

Date Collected: 09/14/17 09:30 — **Matrix: Water**
Date Received: 09/15/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377443	09/18/17 23:39	RRS	TAL BUF
Total/NA	Analysis	8260C	DL	20	377484	09/19/17 10:56	KMN	TAL BUF
Total/NA	Prep	3005A			377258	09/18/17 08:58	EMB	TAL BUF
Total/NA	Analysis	6010		1	377514	09/18/17 14:19	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377020	09/15/17 06:40	CLT	TAL BUF

Client Sample ID: C091417-CLW5B — Lab Sample ID: 480-124202-2

Date Collected: 09/14/17 10:10 — **Matrix: Water**
Date Received: 09/15/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	377443	09/19/17 00:03	RRS	TAL BUF
Total/NA	Prep	3005A			377258	09/18/17 08:58	EMB	TAL BUF
Total/NA	Analysis	6010		1	377514	09/18/17 14:36	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377020	09/15/17 06:40	CLT	TAL BUF

Client Sample ID: C091417-OSW1A — Lab Sample ID: 480-124202-3

Date Collected: 09/14/17 11:00 — **Matrix: Water**
Date Received: 09/15/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377443	09/19/17 00:27	RRS	TAL BUF
Total/NA	Prep	3005A			377258	09/18/17 08:58	EMB	TAL BUF
Total/NA	Analysis	6010		1	377514	09/18/17 14:40	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377020	09/15/17 06:40	CLT	TAL BUF

Client Sample ID: C091417-OSW1B — Lab Sample ID: 480-124202-4

Date Collected: 09/14/17 13:10 — **Matrix: Water**
Date Received: 09/15/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	377443	09/19/17 00:51	RRS	TAL BUF
Total/NA	Prep	3005A			377258	09/18/17 08:58	EMB	TAL BUF
Total/NA	Analysis	6010		1	377514	09/18/17 14:43	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377020	09/15/17 06:40	CLT	TAL BUF

Client Sample ID: C091417-OSW3B — Lab Sample ID: 480-124202-5

Date Collected: 09/14/17 14:45 — **Matrix: Water**
Date Received: 09/15/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	377443	09/19/17 01:14	RRS	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			377258	09/18/17 08:58	EMB	TAL BUF
Total/NA	Analysis	6010		1	377514	09/18/17 14:58	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377020	09/15/17 06:40	CLT	TAL BUF

Client Sample ID: C091417-CLW16B

Lab Sample ID: 480-124202-6

Date Collected: 09/14/17 13:55

Matrix: Water

Date Received: 09/15/17 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	377443	09/19/17 01:38	RRS	TAL BUF
Total/NA	Analysis	8260C	DL	400	377484	09/19/17 11:19	KMN	TAL BUF
Total/NA	Prep	3005A			377258	09/18/17 08:58	EMB	TAL BUF
Total/NA	Analysis	6010		1	377514	09/18/17 15:01	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377020	09/15/17 06:40	CLT	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Chromium
7196A		Water	Chromium, hexavalent
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride

Method Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124202-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-124202-1	C091417-CLW5A	Water	09/14/17 09:30	09/15/17 02:15
480-124202-2	C091417-CLW5B	Water	09/14/17 10:10	09/15/17 02:15
480-124202-3	C091417-OSW1A	Water	09/14/17 11:00	09/15/17 02:15
480-124202-4	C091417-OSW1B	Water	09/14/17 13:10	09/15/17 02:15
480-124202-5	C091417-OSW3B	Water	09/14/17 14:45	09/15/17 02:15
480-124202-6	C091417-CLW16B	Water	09/14/17 13:55	09/15/17 02:15

360325-Boston

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 38450.55525
COC #: C91417-C1
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential: N
EDD To: Mark.Maggiore @amec.com
Site Name: Conductorlab: April 2017 Semiannual Groundwater Sampling
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #
Analysis Turnaround Time:
Standard - 10
Rush Charges Authorized for -
2 weeks - Y
1 week - Y
Next Day - N
N

PAGE 1 of 1 — 1
Job No.

480-124202 COC

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3_7) 02-01-05 renesurg@aol.com

Preservative: 1 | 0 | 2

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds	7196A Hexavalent Chromium	SW846/6010B Total Chromium	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
CLW-5A			C091417-CLW5A	9-14-17	930	water	Gw	Reg	5	S	N	X	X	X	
CLW-5B			C091417-CLW5B	9-14-17	1010	water	Gw	Reg	5	S	N	X	X	X	
OSW-1A			C091417-OSW1A	9-14-17	1100	water	Gw	Reg	5	S	N	X	X	X	
OSW-1B			C091417-OSW1B	9-14-17	1310	water	Gw	Reg	5	S	N	X	X	X	
OSW-3B			C091417-OSW3B	9-14-17	1445	water	Gw	Reg	5	S	N	X	X	X	
CLW-16B			C091417-~~CLW16~~ CLW16B	9-14-17	1355	water	Gw	Reg	5	S	N	X	X	X	

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab.

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	AmecFW	9-14-17 1535		TA	9/14/17 1530	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	TA	9/14/17 1630		TAB	9-15-17 0215	Cooler Temp.	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

2.4 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-124202-1

Login Number: 124202

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-124283-1
Client Project/Site: September 2017 Semi Annual Ground Water
Sampling Event: Semi Annual Ground Water

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Denise L Giglia

Authorized for release by:
9/22/2017 4:42:39 PM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Qualifiers

GC/MS VOA

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-124283-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-124283-1

Receipt
The samples were received on 9/16/2017 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377484 exceeded control limits for the following analytes: Acetone. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : C0901517-PP4A (480-124283-1), C0901517-PP4B (480-124283-2), C0901517-CIW1B (480-124283-3), C0901517-RB1 (480-124283-4) and C0901517-RB2 (480-124283-5).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377484 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C0901517-PP4A (480-124283-1), C0901517-PP4B (480-124283-2), C0901517-CIW1B (480-124283-3), C0901517-RB1 (480-124283-4) and C0901517-RB2 (480-124283-5).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: C0901517-PP4A (480-124283-1), C0901517-PP4B (480-124283-2) and C0901517-CIW1B (480-124283-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-377484 recovered above the upper control limit for Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: C0901517-PP4A (480-124283-1), C0901517-PP4B (480-124283-2), C0901517-CIW1B (480-124283-3), C0901517-RB1 (480-124283-4) and C0901517-RB2 (480-124283-5).

Method 8260C: The continuing calibration verification (CCV) for 2-Hexanone and Acetone associated with batch 480-377662 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following sample was affected : C0901517-TRIP BLANK (480-124283-6).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377662 exceeded control limits for the following analytes: Acetone and Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample was affected : C0901517-TRIP BLANK (480-124283-6).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377662 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample was affected : C0901517-TRIP BLANK (480-124283-6).

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

Metals
Method 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

Job ID: 480-124283-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

General Chemistry
Method 7196A: The EPA 7196A source method specifies a recovery range of 85-115% for matrix spike (MS) and matrix spike duplicate (MSD), but MCP specifies a broader recovery range of 75-125% for MS/MSD. Therefore the MS/MSD and the associated sample data has been flagged only if the MS/MSD exceeded the MCP recovery range.

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

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-124283**
Project Location:	**Honeywell Groton CT**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-124283[1-6]

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:	Denise L Giglia	Position:	Project Manager Assistant II
Printed Name:	Denise L. Giglia	Date:	9/22/17 16:35

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-PP4A — Lab Sample ID: 480-124283-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	14		4.0	3.2	ug/L	4		8260C	Total/NA
Trichloroethene	130		4.0	1.8	ug/L	4		8260C	Total/NA
Chromium	5.2		5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C0901517-PP4B — Lab Sample ID: 480-124283-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	500		20	16	ug/L	20		8260C	Total/NA
trans-1,2-Dichloroethene	24		20	18	ug/L	20		8260C	Total/NA
Trichloroethene	740		20	9.2	ug/L	20		8260C	Total/NA
Chromium	57		5.0	1.0	ug/L	1		6010	Total/NA
Chromium, hexavalent	0.0091	J	0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C0901517-CIW1B — Lab Sample ID: 480-124283-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	140		20	16	ug/L	20		8260C	Total/NA
trans-1,2-Dichloroethene	18	J	20	18	ug/L	20		8260C	Total/NA
Trichloroethene	410		20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride	80		20	18	ug/L	20		8260C	Total/NA
Chromium	470		5.0	1.0	ug/L	1		6010	Total/NA

Client Sample ID: C0901517-RB1 — Lab Sample ID: 480-124283-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	2.1	J	10	2.1	ug/L	1		8260C	Total/NA
Acetone	3.5	J *	50	3.0	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	0.82	J	2.0	0.66	ug/L	1		8260C	Total/NA
o-Xylene	0.79	J	1.0	0.76	ug/L	1		8260C	Total/NA

Client Sample ID: C0901517-RB2 — Lab Sample ID: 480-124283-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	2.3	J	10	2.1	ug/L	1		8260C	Total/NA
Chromium, hexavalent	0.0056	J	0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C0901517-TRIP BLANK — Lab Sample ID: 480-124283-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-PP4A

Date Collected: 09/15/17 09:35
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0	1.4	ug/L			09/19/17 12:30	4
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			09/19/17 12:30	4
1,1,2,2-Tetrachloroethane	ND		2.0	0.84	ug/L			09/19/17 12:30	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			09/19/17 12:30	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			09/19/17 12:30	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			09/19/17 12:30	4
1,1-Dichloropropene	ND		4.0	2.9	ug/L			09/19/17 12:30	4
1,2,3-Trichlorobenzene	ND		4.0	1.6	ug/L			09/19/17 12:30	4
1,2,3-Trichloropropane	ND		4.0	3.6	ug/L			09/19/17 12:30	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			09/19/17 12:30	4
1,2,4-Trimethylbenzene	ND		4.0	3.0	ug/L			09/19/17 12:30	4
1,2-Dibromo-3-Chloropropane	ND		20	1.6	ug/L			09/19/17 12:30	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			09/19/17 12:30	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			09/19/17 12:30	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			09/19/17 12:30	4
1,3,5-Trimethylbenzene	ND		4.0	3.1	ug/L			09/19/17 12:30	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			09/19/17 12:30	4
1,3-Dichloropropane	ND		4.0	3.0	ug/L			09/19/17 12:30	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			09/19/17 12:30	4
1,4-Dioxane	ND		200	37	ug/L			09/19/17 12:30	4
2,2-Dichloropropane	ND		4.0	1.6	ug/L			09/19/17 12:30	4
2-Butanone (MEK)	ND	*	40	5.3	ug/L			09/19/17 12:30	4
2-Chlorotoluene	ND		4.0	3.4	ug/L			09/19/17 12:30	4
2-Hexanone	ND		40	5.0	ug/L			09/19/17 12:30	4
4-Chlorotoluene	ND		4.0	3.4	ug/L			09/19/17 12:30	4
4-Isopropyltoluene	ND		4.0	1.2	ug/L			09/19/17 12:30	4
4-Methyl-2-pentanone (MIBK)	ND		40	8.4	ug/L			09/19/17 12:30	4
Acetone	ND	*	200	12	ug/L			09/19/17 12:30	4
Benzene	ND		4.0	1.6	ug/L			09/19/17 12:30	4
Bromobenzene	ND		4.0	3.2	ug/L			09/19/17 12:30	4
Bromoform	ND		4.0	1.0	ug/L			09/19/17 12:30	4
Bromomethane	ND		8.0	2.8	ug/L			09/19/17 12:30	4
Carbon disulfide	ND		40	0.76	ug/L			09/19/17 12:30	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			09/19/17 12:30	4
Chlorobenzene	ND		4.0	3.0	ug/L			09/19/17 12:30	4
Chlorobromomethane	ND		4.0	3.5	ug/L			09/19/17 12:30	4
Chlorodibromomethane	ND		2.0	1.3	ug/L			09/19/17 12:30	4
Chloroethane	ND		8.0	1.3	ug/L			09/19/17 12:30	4
Chloroform	ND		4.0	1.4	ug/L			09/19/17 12:30	4
Chloromethane	ND		8.0	1.4	ug/L			09/19/17 12:30	4
cis-1,2-Dichloroethene	**14**		4.0	3.2	ug/L			09/19/17 12:30	4
cis-1,3-Dichloropropene	ND		1.6	1.4	ug/L			09/19/17 12:30	4
Dibromomethane	ND		4.0	1.6	ug/L			09/19/17 12:30	4
Dichlorobromomethane	ND		2.0	1.6	ug/L			09/19/17 12:30	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			09/19/17 12:30	4
Ethyl ether	ND		4.0	2.9	ug/L			09/19/17 12:30	4
Ethylbenzene	ND		4.0	3.0	ug/L			09/19/17 12:30	4
Ethylene Dibromide	ND		4.0	2.9	ug/L			09/19/17 12:30	4
Hexachlorobutadiene	ND		1.6	1.1	ug/L			09/19/17 12:30	4

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-PP4A

Date Collected: 09/15/17 09:35
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		40	2.4	ug/L			09/19/17 12:30	4
Isopropylbenzene	ND		4.0	3.2	ug/L			09/19/17 12:30	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			09/19/17 12:30	4
Methylene Chloride	ND		4.0	1.8	ug/L			09/19/17 12:30	4
m-Xylene & p-Xylene	ND		8.0	2.6	ug/L			09/19/17 12:30	4
Naphthalene	ND		20	1.7	ug/L			09/19/17 12:30	4
n-Butylbenzene	ND		4.0	2.6	ug/L			09/19/17 12:30	4
N-Propylbenzene	ND		4.0	2.8	ug/L			09/19/17 12:30	4
o-Xylene	ND		4.0	3.0	ug/L			09/19/17 12:30	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			09/19/17 12:30	4
Styrene	ND		4.0	2.9	ug/L			09/19/17 12:30	4
Tert-amyl methyl ether	ND		20	1.1	ug/L			09/19/17 12:30	4
Tert-butyl ethyl ether	ND		20	1.2	ug/L			09/19/17 12:30	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			09/19/17 12:30	4
Tetrachloroethene	ND		4.0	1.4	ug/L			09/19/17 12:30	4
Tetrahydrofuran	ND		40	5.0	ug/L			09/19/17 12:30	4
Toluene	ND		4.0	2.0	ug/L			09/19/17 12:30	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			09/19/17 12:30	4
trans-1,3-Dichloropropene	ND		1.6	1.5	ug/L			09/19/17 12:30	4
Trichloroethene	**130**		4.0	1.8	ug/L			09/19/17 12:30	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			09/19/17 12:30	4
Vinyl chloride	ND		4.0	3.6	ug/L			09/19/17 12:30	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/19/17 12:30*	*4*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*09/19/17 12:30*	*4*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 12:30*	*4*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/19/17 12:30*	*4*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**5.2**		5.0	1.0	ug/L		09/19/17 09:20	09/19/17 19:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-PP4B

Date Collected: 09/15/17 11:00
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20	7.0	ug/L			09/19/17 12:53	20
1,1,1-Trichloroethane	ND		20	16	ug/L			09/19/17 12:53	20
1,1,2,2-Tetrachloroethane	ND		10	4.2	ug/L			09/19/17 12:53	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			09/19/17 12:53	20
1,1-Dichloroethane	ND		20	7.6	ug/L			09/19/17 12:53	20
1,1-Dichloroethene	ND		20	5.8	ug/L			09/19/17 12:53	20
1,1-Dichloropropene	ND		20	14	ug/L			09/19/17 12:53	20
1,2,3-Trichlorobenzene	ND		20	8.2	ug/L			09/19/17 12:53	20
1,2,3-Trichloropropane	ND		20	18	ug/L			09/19/17 12:53	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			09/19/17 12:53	20
1,2,4-Trimethylbenzene	ND		20	15	ug/L			09/19/17 12:53	20
1,2-Dibromo-3-Chloropropane	ND		100	7.8	ug/L			09/19/17 12:53	20
1,2-Dichlorobenzene	ND		20	16	ug/L			09/19/17 12:53	20
1,2-Dichloroethane	ND		20	4.2	ug/L			09/19/17 12:53	20
1,2-Dichloropropane	ND		20	14	ug/L			09/19/17 12:53	20
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/19/17 12:53	20
1,3-Dichlorobenzene	ND		20	16	ug/L			09/19/17 12:53	20
1,3-Dichloropropane	ND		20	15	ug/L			09/19/17 12:53	20
1,4-Dichlorobenzene	ND		20	17	ug/L			09/19/17 12:53	20
1,4-Dioxane	ND		1000	190	ug/L			09/19/17 12:53	20
2,2-Dichloropropane	ND		20	8.0	ug/L			09/19/17 12:53	20
2-Butanone (MEK)	ND	*	200	26	ug/L			09/19/17 12:53	20
2-Chlorotoluene	ND		20	17	ug/L			09/19/17 12:53	20
2-Hexanone	ND		200	25	ug/L			09/19/17 12:53	20
4-Chlorotoluene	ND		20	17	ug/L			09/19/17 12:53	20
4-Isopropyltoluene	ND		20	6.2	ug/L			09/19/17 12:53	20
4-Methyl-2-pentanone (MIBK)	ND		200	42	ug/L			09/19/17 12:53	20
Acetone	ND	*	1000	60	ug/L			09/19/17 12:53	20
Benzene	ND		20	8.2	ug/L			09/19/17 12:53	20
Bromobenzene	ND		20	16	ug/L			09/19/17 12:53	20
Bromoform	ND		20	5.2	ug/L			09/19/17 12:53	20
Bromomethane	ND		40	14	ug/L			09/19/17 12:53	20
Carbon disulfide	ND		200	3.8	ug/L			09/19/17 12:53	20
Carbon tetrachloride	ND		20	5.4	ug/L			09/19/17 12:53	20
Chlorobenzene	ND		20	15	ug/L			09/19/17 12:53	20
Chlorobromomethane	ND		20	17	ug/L			09/19/17 12:53	20
Chlorodibromomethane	ND		10	6.4	ug/L			09/19/17 12:53	20
Chloroethane	ND		40	6.4	ug/L			09/19/17 12:53	20
Chloroform	ND		20	6.8	ug/L			09/19/17 12:53	20
Chloromethane	ND		40	7.0	ug/L			09/19/17 12:53	20
cis-1,2-Dichloroethene	**500**		20	16	ug/L			09/19/17 12:53	20
cis-1,3-Dichloropropene	ND		8.0	7.2	ug/L			09/19/17 12:53	20
Dibromomethane	ND		20	8.2	ug/L			09/19/17 12:53	20
Dichlorobromomethane	ND		10	7.8	ug/L			09/19/17 12:53	20
Dichlorodifluoromethane	ND		20	14	ug/L			09/19/17 12:53	20
Ethyl ether	ND		20	14	ug/L			09/19/17 12:53	20
Ethylbenzene	ND		20	15	ug/L			09/19/17 12:53	20
Ethylene Dibromide	ND		20	15	ug/L			09/19/17 12:53	20
Hexachlorobutadiene	ND		8.0	5.6	ug/L			09/19/17 12:53	20

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-PP4B

Date Collected: 09/15/17 11:00
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		200	12	ug/L			09/19/17 12:53	20
Isopropylbenzene	ND		20	16	ug/L			09/19/17 12:53	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			09/19/17 12:53	20
Methylene Chloride	ND		20	8.8	ug/L			09/19/17 12:53	20
m-Xylene & p-Xylene	ND		40	13	ug/L			09/19/17 12:53	20
Naphthalene	ND		100	8.6	ug/L			09/19/17 12:53	20
n-Butylbenzene	ND		20	13	ug/L			09/19/17 12:53	20
N-Propylbenzene	ND		20	14	ug/L			09/19/17 12:53	20
o-Xylene	ND		20	15	ug/L			09/19/17 12:53	20
sec-Butylbenzene	ND		20	15	ug/L			09/19/17 12:53	20
Styrene	ND		20	15	ug/L			09/19/17 12:53	20
Tert-amyl methyl ether	ND		100	5.4	ug/L			09/19/17 12:53	20
Tert-butyl ethyl ether	ND		100	5.9	ug/L			09/19/17 12:53	20
tert-Butylbenzene	ND		20	16	ug/L			09/19/17 12:53	20
Tetrachloroethene	ND		20	7.2	ug/L			09/19/17 12:53	20
Tetrahydrofuran	ND		200	25	ug/L			09/19/17 12:53	20
Toluene	ND		20	10	ug/L			09/19/17 12:53	20
trans-1,2-Dichloroethene	**24**		20	18	ug/L			09/19/17 12:53	20
trans-1,3-Dichloropropene	ND		8.0	7.4	ug/L			09/19/17 12:53	20
Trichloroethene	**740**		20	9.2	ug/L			09/19/17 12:53	20
Trichlorofluoromethane	ND		20	18	ug/L			09/19/17 12:53	20
Vinyl chloride	ND		20	18	ug/L			09/19/17 12:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/19/17 12:53*	*20*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/19/17 12:53*	*20*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 12:53*	*20*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/19/17 12:53*	*20*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**57**		5.0	1.0	ug/L		09/19/17 09:20	09/19/17 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.0091**	**J**	0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-CIW1B

Date Collected: 09/15/17 12:40
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20	7.0	ug/L			09/19/17 13:17	20
1,1,1-Trichloroethane	ND		20	16	ug/L			09/19/17 13:17	20
1,1,2,2-Tetrachloroethane	ND		10	4.2	ug/L			09/19/17 13:17	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			09/19/17 13:17	20
1,1-Dichloroethane	ND		20	7.6	ug/L			09/19/17 13:17	20
1,1-Dichloroethene	ND		20	5.8	ug/L			09/19/17 13:17	20
1,1-Dichloropropene	ND		20	14	ug/L			09/19/17 13:17	20
1,2,3-Trichlorobenzene	ND		20	8.2	ug/L			09/19/17 13:17	20
1,2,3-Trichloropropane	ND		20	18	ug/L			09/19/17 13:17	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			09/19/17 13:17	20
1,2,4-Trimethylbenzene	ND		20	15	ug/L			09/19/17 13:17	20
1,2-Dibromo-3-Chloropropane	ND		100	7.8	ug/L			09/19/17 13:17	20
1,2-Dichlorobenzene	ND		20	16	ug/L			09/19/17 13:17	20
1,2-Dichloroethane	ND		20	4.2	ug/L			09/19/17 13:17	20
1,2-Dichloropropane	ND		20	14	ug/L			09/19/17 13:17	20
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/19/17 13:17	20
1,3-Dichlorobenzene	ND		20	16	ug/L			09/19/17 13:17	20
1,3-Dichloropropane	ND		20	15	ug/L			09/19/17 13:17	20
1,4-Dichlorobenzene	ND		20	17	ug/L			09/19/17 13:17	20
1,4-Dioxane	ND		1000	190	ug/L			09/19/17 13:17	20
2,2-Dichloropropane	ND		20	8.0	ug/L			09/19/17 13:17	20
2-Butanone (MEK)	ND	*	200	26	ug/L			09/19/17 13:17	20
2-Chlorotoluene	ND		20	17	ug/L			09/19/17 13:17	20
2-Hexanone	ND		200	25	ug/L			09/19/17 13:17	20
4-Chlorotoluene	ND		20	17	ug/L			09/19/17 13:17	20
4-Isopropyltoluene	ND		20	6.2	ug/L			09/19/17 13:17	20
4-Methyl-2-pentanone (MIBK)	ND		200	42	ug/L			09/19/17 13:17	20
Acetone	ND	*	1000	60	ug/L			09/19/17 13:17	20
Benzene	ND		20	8.2	ug/L			09/19/17 13:17	20
Bromobenzene	ND		20	16	ug/L			09/19/17 13:17	20
Bromoform	ND		20	5.2	ug/L			09/19/17 13:17	20
Bromomethane	ND		40	14	ug/L			09/19/17 13:17	20
Carbon disulfide	ND		200	3.8	ug/L			09/19/17 13:17	20
Carbon tetrachloride	ND		20	5.4	ug/L			09/19/17 13:17	20
Chlorobenzene	ND		20	15	ug/L			09/19/17 13:17	20
Chlorobromomethane	ND		20	17	ug/L			09/19/17 13:17	20
Chlorodibromomethane	ND		10	6.4	ug/L			09/19/17 13:17	20
Chloroethane	ND		40	6.4	ug/L			09/19/17 13:17	20
Chloroform	ND		20	6.8	ug/L			09/19/17 13:17	20
Chloromethane	ND		40	7.0	ug/L			09/19/17 13:17	20
cis-1,2-Dichloroethene	**140**		20	16	ug/L			09/19/17 13:17	20
cis-1,3-Dichloropropene	ND		8.0	7.2	ug/L			09/19/17 13:17	20
Dibromomethane	ND		20	8.2	ug/L			09/19/17 13:17	20
Dichlorobromomethane	ND		10	7.8	ug/L			09/19/17 13:17	20
Dichlorodifluoromethane	ND		20	14	ug/L			09/19/17 13:17	20
Ethyl ether	ND		20	14	ug/L			09/19/17 13:17	20
Ethylbenzene	ND		20	15	ug/L			09/19/17 13:17	20
Ethylene Dibromide	ND		20	15	ug/L			09/19/17 13:17	20
Hexachlorobutadiene	ND		8.0	5.6	ug/L			09/19/17 13:17	20

Client Sample ID: C0901517-CIW1B

Lab Sample ID: 480-124283-3

Date Collected: 09/15/17 12:40

Matrix: Water

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		200	12	ug/L			09/19/17 13:17	20
Isopropylbenzene	ND		20	16	ug/L			09/19/17 13:17	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			09/19/17 13:17	20
Methylene Chloride	ND		20	8.8	ug/L			09/19/17 13:17	20
m-Xylene & p-Xylene	ND		40	13	ug/L			09/19/17 13:17	20
Naphthalene	ND		100	8.6	ug/L			09/19/17 13:17	20
n-Butylbenzene	ND		20	13	ug/L			09/19/17 13:17	20
N-Propylbenzene	ND		20	14	ug/L			09/19/17 13:17	20
o-Xylene	ND		20	15	ug/L			09/19/17 13:17	20
sec-Butylbenzene	ND		20	15	ug/L			09/19/17 13:17	20
Styrene	ND		20	15	ug/L			09/19/17 13:17	20
Tert-amyl methyl ether	ND		100	5.4	ug/L			09/19/17 13:17	20
Tert-butyl ethyl ether	ND		100	5.9	ug/L			09/19/17 13:17	20
tert-Butylbenzene	ND		20	16	ug/L			09/19/17 13:17	20
Tetrachloroethene	ND		20	7.2	ug/L			09/19/17 13:17	20
Tetrahydrofuran	ND		200	25	ug/L			09/19/17 13:17	20
Toluene	ND		20	10	ug/L			09/19/17 13:17	20
trans-1,2-Dichloroethene	**18**	**J**	20	18	ug/L			09/19/17 13:17	20
trans-1,3-Dichloropropene	ND		8.0	7.4	ug/L			09/19/17 13:17	20
Trichloroethene	**410**		20	9.2	ug/L			09/19/17 13:17	20
Trichlorofluoromethane	ND		20	18	ug/L			09/19/17 13:17	20
Vinyl chloride	**80**		20	18	ug/L			09/19/17 13:17	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/19/17 13:17*	*20*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/19/17 13:17*	*20*
Toluene-d8 (Surr)	*107*		*70 - 130*		*09/19/17 13:17*	*20*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/19/17 13:17*	*20*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**470**		5.0	1.0	ug/L		09/19/17 09:20	09/19/17 19:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-RB1

Date Collected: 09/15/17 13:30
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 13:40	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 13:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 13:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 13:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 13:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 13:40	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 13:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 13:40	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 13:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 13:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 13:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 13:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 13:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 13:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 13:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 13:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 13:40	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 13:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 13:40	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 13:40	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 13:40	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/19/17 13:40	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 13:40	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 13:40	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 13:40	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 13:40	1
4-Methyl-2-pentanone (MIBK)	**2.1**	**J**	10	2.1	ug/L			09/19/17 13:40	1
Acetone	**3.5**	**J ***	50	3.0	ug/L			09/19/17 13:40	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 13:40	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 13:40	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 13:40	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 13:40	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 13:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 13:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 13:40	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 13:40	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 13:40	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 13:40	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 13:40	1
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 13:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 13:40	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 13:40	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 13:40	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 13:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 13:40	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 13:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 13:40	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 13:40	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 13:40	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-RB1

Lab Sample ID: 480-124283-4

Date Collected: 09/15/17 13:30
Matrix: Water
Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 13:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 13:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 13:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 13:40	1
m-Xylene & p-Xylene	**0.82**	**J**	2.0	0.66	ug/L			09/19/17 13:40	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 13:40	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 13:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 13:40	1
o-Xylene	**0.79**	**J**	1.0	0.76	ug/L			09/19/17 13:40	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 13:40	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 13:40	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 13:40	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 13:40	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 13:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 13:40	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 13:40	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 13:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 13:40	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 13:40	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/17 13:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 13:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/19/17 13:40*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/19/17 13:40*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/19/17 13:40*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*09/19/17 13:40*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/19/17 09:20	09/19/17 20:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-RB2

Date Collected: 09/15/17 13:35
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 14:04	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 14:04	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 14:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 14:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 14:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 14:04	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 14:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 14:04	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 14:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 14:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 14:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 14:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 14:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 14:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 14:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 14:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 14:04	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 14:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 14:04	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 14:04	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 14:04	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/19/17 14:04	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 14:04	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 14:04	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 14:04	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 14:04	1
4-Methyl-2-pentanone (MIBK)	**2.3**	**J**	10	2.1	ug/L			09/19/17 14:04	1
Acetone	ND	*	50	3.0	ug/L			09/19/17 14:04	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 14:04	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 14:04	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 14:04	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 14:04	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 14:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 14:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 14:04	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 14:04	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 14:04	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 14:04	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 14:04	1
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 14:04	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 14:04	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 14:04	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 14:04	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 14:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 14:04	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 14:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 14:04	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 14:04	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 14:04	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-RB2

Date Collected: 09/15/17 13:35
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124283-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 14:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 14:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 14:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 14:04	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/19/17 14:04	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 14:04	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 14:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 14:04	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/17 14:04	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 14:04	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 14:04	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 14:04	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 14:04	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 14:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 14:04	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 14:04	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 14:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 14:04	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 14:04	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/17 14:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 14:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/19/17 14:04*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/19/17 14:04*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*09/19/17 14:04*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*09/19/17 14:04*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/19/17 09:20	09/19/17 20:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.0056**	**J**	0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-TRIP BLANK

Lab Sample ID: 480-124283-6

Date Collected: 09/15/17 13:45
Matrix: Water
Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/20/17 00:13	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/17 00:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/20/17 00:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/17 00:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/17 00:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/17 00:13	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/20/17 00:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 00:13	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/20/17 00:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 00:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/20/17 00:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/20/17 00:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/17 00:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/17 00:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/17 00:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/20/17 00:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/17 00:13	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/20/17 00:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/17 00:13	1
1,4-Dioxane	ND		50	9.3	ug/L			09/20/17 00:13	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/20/17 00:13	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/20/17 00:13	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/20/17 00:13	1
2-Hexanone	ND		10	1.2	ug/L			09/20/17 00:13	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/20/17 00:13	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/20/17 00:13	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/20/17 00:13	1
Acetone	ND	*	50	3.0	ug/L			09/20/17 00:13	1
Benzene	ND		1.0	0.41	ug/L			09/20/17 00:13	1
Bromobenzene	ND		1.0	0.80	ug/L			09/20/17 00:13	1
Bromoform	ND		1.0	0.26	ug/L			09/20/17 00:13	1
Bromomethane	ND		2.0	0.69	ug/L			09/20/17 00:13	1
Carbon disulfide	ND		10	0.19	ug/L			09/20/17 00:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/17 00:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/17 00:13	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/20/17 00:13	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/20/17 00:13	1
Chloroethane	ND		2.0	0.32	ug/L			09/20/17 00:13	1
Chloroform	ND		1.0	0.34	ug/L			09/20/17 00:13	1
Chloromethane	ND		2.0	0.35	ug/L			09/20/17 00:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/17 00:13	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/20/17 00:13	1
Dibromomethane	ND		1.0	0.41	ug/L			09/20/17 00:13	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/20/17 00:13	1
Dichlorodifluoromethane	ND	*	1.0	0.68	ug/L			09/20/17 00:13	1
Ethyl ether	ND		1.0	0.72	ug/L			09/20/17 00:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/17 00:13	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/20/17 00:13	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/20/17 00:13	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-TRIP BLANK

Lab Sample ID: 480-124283-6

Date Collected: 09/15/17 13:45
Date Received: 09/16/17 01:30

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/20/17 00:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/17 00:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/17 00:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/17 00:13	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/20/17 00:13	1
Naphthalene	ND		5.0	0.43	ug/L			09/20/17 00:13	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/20/17 00:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/20/17 00:13	1
o-Xylene	ND		1.0	0.76	ug/L			09/20/17 00:13	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/20/17 00:13	1
Styrene	ND		1.0	0.73	ug/L			09/20/17 00:13	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/20/17 00:13	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/20/17 00:13	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/20/17 00:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/17 00:13	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/20/17 00:13	1
Toluene	ND		1.0	0.51	ug/L			09/20/17 00:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/17 00:13	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/20/17 00:13	1
Trichloroethene	ND		1.0	0.46	ug/L			09/20/17 00:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/17 00:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/17 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/20/17 00:13*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/20/17 00:13*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/20/17 00:13*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*09/20/17 00:13*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-124283-1	C0901517-PP4A	101	93	102	96
480-124283-2	C0901517-PP4B	99	98	102	92
480-124283-3	C0901517-CIW1B	99	98	107	98
480-124283-4	C0901517-RB1	103	97	103	97
480-124283-5	C0901517-RB2	98	97	106	93
480-124283-6	C0901517-TRIP BLANK	102	101	104	95
LCS 480-377484/6	Lab Control Sample	100	95	100	96
LCS 480-377662/5	Lab Control Sample	99	96	103	96
LCSD 480-377484/7	Lab Control Sample Dup	103	96	102	97
LCSD 480-377662/6	Lab Control Sample Dup	100	96	103	93
MB 480-377484/9	Method Blank	97	95	103	92
MB 480-377662/8	Method Blank	98	96	102	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 480-377484/9
Matrix: Water
Analysis Batch: 377484

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 10:25	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 10:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 10:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 10:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 10:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 10:25	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 10:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 10:25	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 10:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 10:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 10:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 10:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 10:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 10:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 10:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 10:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 10:25	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 10:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 10:25	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 10:25	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 10:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/17 10:25	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 10:25	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 10:25	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 10:25	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 10:25	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/19/17 10:25	1
Acetone	ND		50	3.0	ug/L			09/19/17 10:25	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 10:25	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 10:25	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 10:25	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 10:25	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 10:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 10:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 10:25	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 10:25	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 10:25	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 10:25	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 10:25	1
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 10:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 10:25	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 10:25	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 10:25	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 10:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 10:25	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 10:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 10:25	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 10:25	1

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

Lab Sample ID: MB 480-377484/9
Matrix: Water
Analysis Batch: 377484

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 10:25	1
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 10:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 10:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 10:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 10:25	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/19/17 10:25	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 10:25	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 10:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 10:25	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/17 10:25	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 10:25	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 10:25	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 10:25	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 10:25	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 10:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 10:25	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 10:25	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 10:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 10:25	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 10:25	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/17 10:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 10:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/19/17 10:25*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/19/17 10:25*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/19/17 10:25*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*09/19/17 10:25*	*1*

Lab Sample ID: LCS 480-377484/6
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.5		ug/L		94	70 - 130
1,1,1-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130
1,1-Dichloroethane	25.0	24.1		ug/L		96	70 - 130
1,1-Dichloroethene	25.0	22.0		ug/L		88	70 - 130
1,1-Dichloropropene	25.0	24.5		ug/L		98	70 - 130
1,2,3-Trichlorobenzene	25.0	21.3		ug/L		85	70 - 130
1,2,3-Trichloropropane	25.0	25.4		ug/L		101	70 - 130
1,2,4-Trichlorobenzene	25.0	21.4		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130

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

Lab Sample ID: LCS 480-377484/6
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	23.0		ug/L		92	70 - 130
1,2-Dichloropropane	25.0	23.6		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130
1,3-Dichloropropane	25.0	26.1		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130
1,4-Dioxane	500	440		ug/L		88	70 - 130
2,2-Dichloropropane	25.0	24.0		ug/L		96	70 - 130
2-Butanone (MEK)	125	236	*	ug/L		189	70 - 130
2-Chlorotoluene	25.0	24.5		ug/L		98	70 - 130
2-Hexanone	125	140		ug/L		112	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	25.9		ug/L		104	70 - 130
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	70 - 130
Acetone	125	174	*	ug/L		139	70 - 130
Benzene	25.0	23.6		ug/L		95	70 - 130
Bromobenzene	25.0	22.2		ug/L		89	70 - 130
Bromoform	25.0	24.0		ug/L		96	70 - 130
Bromomethane	25.0	21.6		ug/L		86	70 - 130
Carbon disulfide	25.0	23.1		ug/L		92	70 - 130
Carbon tetrachloride	25.0	21.9		ug/L		88	70 - 130
Chlorobenzene	25.0	24.6		ug/L		98	70 - 130
Chlorobromomethane	25.0	21.7		ug/L		87	70 - 130
Chlorodibromomethane	25.0	23.2		ug/L		93	70 - 130
Chloroethane	25.0	23.5		ug/L		94	70 - 130
Chloroform	25.0	22.1		ug/L		88	70 - 130
Chloromethane	25.0	23.1		ug/L		92	70 - 130
cis-1,2-Dichloroethene	25.0	22.4		ug/L		89	70 - 130
cis-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
Dibromomethane	25.0	21.5		ug/L		86	70 - 130
Dichlorobromomethane	25.0	23.1		ug/L		93	70 - 130
Dichlorodifluoromethane	25.0	22.3		ug/L		89	70 - 130
Ethyl ether	25.0	20.6		ug/L		82	70 - 130
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130
Ethylene Dibromide	25.0	24.6		ug/L		98	70 - 130
Hexachlorobutadiene	25.0	22.7		ug/L		91	70 - 130
Isopropyl ether	25.0	25.7		ug/L		103	70 - 130
Isopropylbenzene	25.0	25.5		ug/L		102	70 - 130
Methyl tert-butyl ether	25.0	23.6		ug/L		94	70 - 130
Methylene Chloride	25.0	18.9		ug/L		76	70 - 130
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 130
Naphthalene	25.0	25.0		ug/L		100	70 - 130
n-Butylbenzene	25.0	26.5		ug/L		106	70 - 130
N-Propylbenzene	25.0	25.5		ug/L		102	70 - 130
o-Xylene	25.0	24.1		ug/L		97	70 - 130
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 130
Styrene	25.0	24.3		ug/L		97	70 - 130
Tert-amyl methyl ether	25.0	24.9		ug/L		100	70 - 130

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

Lab Sample ID: LCS 480-377484/6
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	25.6		ug/L		102	70 - 130
tert-Butylbenzene	25.0	24.4		ug/L		98	70 - 130
Tetrachloroethene	25.0	27.3		ug/L		109	70 - 130
Tetrahydrofuran	50.0	60.5		ug/L		121	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	70 - 130
trans-1,3-Dichloropropene	25.0	25.6		ug/L		102	70 - 130
Trichloroethene	25.0	23.3		ug/L		93	70 - 130
Trichlorofluoromethane	25.0	23.7		ug/L		95	70 - 130
Vinyl chloride	25.0	23.0		ug/L		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 480-377484/7
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130	3	20
1,1,1-Trichloroethane	25.0	24.7		ug/L		99	70 - 130	6	20
1,1,2,2-Tetrachloroethane	25.0	25.4		ug/L		101	70 - 130	1	20
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130	7	20
1,1-Dichloroethane	25.0	26.6		ug/L		106	70 - 130	10	20
1,1-Dichloroethene	25.0	24.5		ug/L		98	70 - 130	11	20
1,1-Dichloropropene	25.0	26.7		ug/L		107	70 - 130	8	20
1,2,3-Trichlorobenzene	25.0	21.8		ug/L		87	70 - 130	3	20
1,2,3-Trichloropropane	25.0	23.3		ug/L		93	70 - 130	9	20
1,2,4-Trichlorobenzene	25.0	21.5		ug/L		86	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	70 - 130	6	20
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130	2	20
1,2-Dichloroethane	25.0	24.4		ug/L		98	70 - 130	6	20
1,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130	6	20
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	70 - 130	2	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	0	20
1,3-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	3	20
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	2	20
1,4-Dioxane	500	508		ug/L		102	70 - 130	14	20
2,2-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	7	20
2-Butanone (MEK)	125	245	*	ug/L		196	70 - 130	4	20
2-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	2	20
2-Hexanone	125	139		ug/L		111	70 - 130	1	20
4-Chlorotoluene	25.0	25.8		ug/L		103	70 - 130	1	20
4-Isopropyltoluene	25.0	26.6		ug/L		106	70 - 130	3	20

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

Lab Sample ID: LCSD 480-377484/7
Matrix: Water
Analysis Batch: 377484

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	70 - 130	3	20
Acetone	125	182	*	ug/L		146	70 - 130	4	20
Benzene	25.0	25.2		ug/L		101	70 - 130	6	20
Bromobenzene	25.0	22.7		ug/L		91	70 - 130	2	20
Bromoform	25.0	24.0		ug/L		96	70 - 130	0	20
Bromomethane	25.0	23.4		ug/L		93	70 - 130	8	20
Carbon disulfide	25.0	24.9		ug/L		100	70 - 130	8	20
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130	10	20
Chlorobenzene	25.0	25.4		ug/L		102	70 - 130	3	20
Chlorobromomethane	25.0	23.0		ug/L		92	70 - 130	6	20
Chlorodibromomethane	25.0	23.7		ug/L		95	70 - 130	2	20
Chloroethane	25.0	24.1		ug/L		96	70 - 130	2	20
Chloroform	25.0	23.7		ug/L		95	70 - 130	7	20
Chloromethane	25.0	24.4		ug/L		98	70 - 130	6	20
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	70 - 130	9	20
cis-1,3-Dichloropropene	25.0	24.6		ug/L		98	70 - 130	8	20
Dibromomethane	25.0	23.8		ug/L		95	70 - 130	10	20
Dichlorobromomethane	25.0	24.1		ug/L		97	70 - 130	4	20
Dichlorodifluoromethane	25.0	23.9		ug/L		96	70 - 130	7	20
Ethyl ether	25.0	23.0		ug/L		92	70 - 130	11	20
Ethylbenzene	25.0	26.0		ug/L		104	70 - 130	1	20
Ethylene Dibromide	25.0	24.9		ug/L		100	70 - 130	1	20
Hexachlorobutadiene	25.0	24.4		ug/L		98	70 - 130	7	20
Isopropyl ether	25.0	27.2		ug/L		109	70 - 130	5	20
Isopropylbenzene	25.0	26.9		ug/L		108	70 - 130	5	20
Methyl tert-butyl ether	25.0	24.2		ug/L		97	70 - 130	3	20
Methylene Chloride	25.0	20.0		ug/L		80	70 - 130	5	20
m-Xylene & p-Xylene	25.0	24.6		ug/L		98	70 - 130	5	20
Naphthalene	25.0	24.4		ug/L		98	70 - 130	2	20
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 130	3	20
N-Propylbenzene	25.0	26.8		ug/L		107	70 - 130	5	20
o-Xylene	25.0	25.1		ug/L		100	70 - 130	4	20
sec-Butylbenzene	25.0	27.2		ug/L		109	70 - 130	4	20
Styrene	25.0	25.6		ug/L		102	70 - 130	5	20
Tert-amyl methyl ether	25.0	25.5		ug/L		102	70 - 130	2	20
Tert-butyl ethyl ether	25.0	26.5		ug/L		106	70 - 130	4	20
tert-Butylbenzene	25.0	25.7		ug/L		103	70 - 130	5	20
Tetrachloroethene	25.0	29.0		ug/L		116	70 - 130	6	20
Tetrahydrofuran	50.0	62.3		ug/L		125	70 - 130	3	20
Toluene	25.0	25.6		ug/L		102	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 130	5	20
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	70 - 130	2	20
Trichloroethene	25.0	24.2		ug/L		97	70 - 130	4	20
Trichlorofluoromethane	25.0	26.8		ug/L		107	70 - 130	12	20
Vinyl chloride	25.0	25.7		ug/L		103	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

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

Lab Sample ID: LCSD 480-377484/7
Matrix: Water
Analysis Batch: 377484

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 480-377662/8
Matrix: Water
Analysis Batch: 377662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 22:30	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 22:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 22:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 22:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 22:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 22:30	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 22:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 22:30	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 22:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 22:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 22:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 22:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 22:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 22:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 22:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 22:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 22:30	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 22:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 22:30	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 22:30	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 22:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/17 22:30	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 22:30	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 22:30	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 22:30	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 22:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/19/17 22:30	1
Acetone	ND		50	3.0	ug/L			09/19/17 22:30	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 22:30	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 22:30	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 22:30	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 22:30	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 22:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 22:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 22:30	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 22:30	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 22:30	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 22:30	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 22:30	1

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

Lab Sample ID: MB 480-377662/8
Matrix: Water
Analysis Batch: 377662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 22:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 22:30	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 22:30	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 22:30	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 22:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 22:30	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 22:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 22:30	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 22:30	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 22:30	1
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 22:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 22:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 22:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 22:30	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/19/17 22:30	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 22:30	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 22:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 22:30	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/17 22:30	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 22:30	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 22:30	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 22:30	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 22:30	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 22:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 22:30	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 22:30	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 22:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 22:30	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 22:30	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/17 22:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 22:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 22:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/19/17 22:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/19/17 22:30*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 22:30*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/19/17 22:30*	*1*

Lab Sample ID: LCS 480-377662/5
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 130
1,1,1-Trichloroethane	25.0	23.5		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	70 - 130

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

Lab Sample ID: LCS 480-377662/5
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.4		ug/L		98	70 - 130
1,1-Dichloroethene	25.0	23.0		ug/L		92	70 - 130
1,1-Dichloropropene	25.0	24.0		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	25.0	22.1		ug/L		88	70 - 130
1,2,3-Trichloropropane	25.0	22.6		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	25.0	21.3		ug/L		85	70 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	70 - 130
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	24.0		ug/L		96	70 - 130
1,2-Dichloropropane	25.0	24.0		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 130
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130
1,3-Dichloropropane	25.0	27.2		ug/L		109	70 - 130
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130
1,4-Dioxane	500	495		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	25.2		ug/L		101	70 - 130
2-Butanone (MEK)	125	228	*	ug/L		183	70 - 130
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 130
2-Hexanone	125	139		ug/L		111	70 - 130
4-Chlorotoluene	25.0	25.7		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	25.7		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	70 - 130
Acetone	125	171	*	ug/L		137	70 - 130
Benzene	25.0	24.5		ug/L		98	70 - 130
Bromobenzene	25.0	22.6		ug/L		90	70 - 130
Bromoform	25.0	23.6		ug/L		94	70 - 130
Bromomethane	25.0	25.6		ug/L		102	70 - 130
Carbon disulfide	25.0	24.0		ug/L		96	70 - 130
Carbon tetrachloride	25.0	23.1		ug/L		92	70 - 130
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Chlorobromomethane	25.0	21.2		ug/L		85	70 - 130
Chlorodibromomethane	25.0	23.8		ug/L		95	70 - 130
Chloroethane	25.0	26.3		ug/L		105	70 - 130
Chloroform	25.0	22.9		ug/L		92	70 - 130
Chloromethane	25.0	27.7		ug/L		111	70 - 130
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	70 - 130
cis-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
Dibromomethane	25.0	22.4		ug/L		90	70 - 130
Dichlorobromomethane	25.0	23.0		ug/L		92	70 - 130
Dichlorodifluoromethane	25.0	32.9	*	ug/L		131	70 - 130
Ethyl ether	25.0	22.4		ug/L		89	70 - 130
Ethylbenzene	25.0	26.0		ug/L		104	70 - 130
Ethylene Dibromide	25.0	24.7		ug/L		99	70 - 130
Hexachlorobutadiene	25.0	23.9		ug/L		96	70 - 130
Isopropyl ether	25.0	24.8		ug/L		99	70 - 130
Isopropylbenzene	25.0	26.4		ug/L		106	70 - 130
Methyl tert-butyl ether	25.0	23.2		ug/L		93	70 - 130

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

Lab Sample ID: LCS 480-377662/5
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	20.1		ug/L		80	70 - 130
m-Xylene & p-Xylene	25.0	24.1		ug/L		96	70 - 130
Naphthalene	25.0	24.3		ug/L		97	70 - 130
n-Butylbenzene	25.0	26.1		ug/L		104	70 - 130
N-Propylbenzene	25.0	26.4		ug/L		105	70 - 130
o-Xylene	25.0	25.3		ug/L		101	70 - 130
sec-Butylbenzene	25.0	26.4		ug/L		106	70 - 130
Styrene	25.0	24.7		ug/L		99	70 - 130
Tert-amyl methyl ether	25.0	24.0		ug/L		96	70 - 130
Tert-butyl ethyl ether	25.0	24.1		ug/L		96	70 - 130
tert-Butylbenzene	25.0	26.0		ug/L		104	70 - 130
Tetrachloroethene	25.0	26.4		ug/L		106	70 - 130
Tetrahydrofuran	50.0	57.5		ug/L		115	70 - 130
Toluene	25.0	26.1		ug/L		104	70 - 130
trans-1,2-Dichloroethene	25.0	22.8		ug/L		91	70 - 130
trans-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 130
Trichloroethene	25.0	23.4		ug/L		94	70 - 130
Trichlorofluoromethane	25.0	27.6		ug/L		110	70 - 130
Vinyl chloride	25.0	27.4		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 480-377662/6
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	70 - 130	4	20
1,1,1-Trichloroethane	25.0	22.9		ug/L		91	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	70 - 130	6	20
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 130	0	20
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130	2	20
1,1-Dichloroethene	25.0	22.6		ug/L		91	70 - 130	1	20
1,1-Dichloropropene	25.0	24.0		ug/L		96	70 - 130	0	20
1,2,3-Trichlorobenzene	25.0	20.8		ug/L		83	70 - 130	6	20
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	70 - 130	8	20
1,2,4-Trichlorobenzene	25.0	20.8		ug/L		83	70 - 130	2	20
1,2,4-Trimethylbenzene	25.0	25.4		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	70 - 130	4	20
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130	3	20
1,2-Dichloroethane	25.0	23.2		ug/L		93	70 - 130	3	20
1,2-Dichloropropane	25.0	24.1		ug/L		96	70 - 130	0	20
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		102	70 - 130	3	20
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	2	20

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

Lab Sample ID: LCSD 480-377662/6
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	25.0	27.5		ug/L		110	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	1	20
1,4-Dioxane	500	576		ug/L		115	70 - 130	15	20
2,2-Dichloropropane	25.0	24.3		ug/L		97	70 - 130	4	20
2-Butanone (MEK)	125	230	*	ug/L		184	70 - 130	1	20
2-Chlorotoluene	25.0	23.7		ug/L		95	70 - 130	3	20
2-Hexanone	125	140		ug/L		112	70 - 130	1	20
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	1	20
4-Isopropyltoluene	25.0	25.0		ug/L		100	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	70 - 130	1	20
Acetone	125	173	*	ug/L		138	70 - 130	1	20
Benzene	25.0	23.8		ug/L		95	70 - 130	3	20
Bromobenzene	25.0	22.4		ug/L		89	70 - 130	1	20
Bromoform	25.0	22.9		ug/L		92	70 - 130	3	20
Bromomethane	25.0	25.9		ug/L		104	70 - 130	1	20
Carbon disulfide	25.0	23.2		ug/L		93	70 - 130	3	20
Carbon tetrachloride	25.0	23.4		ug/L		94	70 - 130	1	20
Chlorobenzene	25.0	24.9		ug/L		100	70 - 130	3	20
Chlorobromomethane	25.0	21.9		ug/L		87	70 - 130	3	20
Chlorodibromomethane	25.0	23.9		ug/L		96	70 - 130	1	20
Chloroethane	25.0	27.4		ug/L		110	70 - 130	4	20
Chloroform	25.0	23.0		ug/L		92	70 - 130	1	20
Chloromethane	25.0	26.6		ug/L		107	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	23.6		ug/L		94	70 - 130	4	20
Dibromomethane	25.0	21.6		ug/L		87	70 - 130	4	20
Dichlorobromomethane	25.0	22.9		ug/L		91	70 - 130	1	20
Dichlorodifluoromethane	25.0	29.6		ug/L		119	70 - 130	10	20
Ethyl ether	25.0	22.3		ug/L		89	70 - 130	0	20
Ethylbenzene	25.0	25.2		ug/L		101	70 - 130	3	20
Ethylene Dibromide	25.0	24.4		ug/L		98	70 - 130	1	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	70 - 130	0	20
Isopropyl ether	25.0	25.2		ug/L		101	70 - 130	1	20
Isopropylbenzene	25.0	25.1		ug/L		100	70 - 130	5	20
Methyl tert-butyl ether	25.0	23.1		ug/L		92	70 - 130	0	20
Methylene Chloride	25.0	20.1		ug/L		80	70 - 130	0	20
m-Xylene & p-Xylene	25.0	24.3		ug/L		97	70 - 130	1	20
Naphthalene	25.0	24.1		ug/L		96	70 - 130	1	20
n-Butylbenzene	25.0	26.0		ug/L		104	70 - 130	0	20
N-Propylbenzene	25.0	25.6		ug/L		102	70 - 130	3	20
o-Xylene	25.0	25.4		ug/L		102	70 - 130	1	20
sec-Butylbenzene	25.0	25.0		ug/L		100	70 - 130	5	20
Styrene	25.0	24.3		ug/L		97	70 - 130	1	20
Tert-amyl methyl ether	25.0	24.3		ug/L		97	70 - 130	1	20
Tert-butyl ethyl ether	25.0	24.1		ug/L		96	70 - 130	0	20
tert-Butylbenzene	25.0	24.6		ug/L		98	70 - 130	6	20
Tetrachloroethene	25.0	26.2		ug/L		105	70 - 130	1	20
Tetrahydrofuran	50.0	59.6		ug/L		119	70 - 130	3	20

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

Lab Sample ID: LCSD 480-377662/6 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377662

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	25.0	25.4		ug/L		102	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	70 - 130	7	20
trans-1,3-Dichloropropene	25.0	26.6		ug/L		107	70 - 130	0	20
Trichloroethene	25.0	22.2		ug/L		89	70 - 130	5	20
Trichlorofluoromethane	25.0	26.9		ug/L		108	70 - 130	3	20
Vinyl chloride	25.0	26.6		ug/L		106	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-377414/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377748 — **Prep Batch: 377414**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.0	ug/L		09/19/17 09:20	09/19/17 19:21	1

Lab Sample ID: LCS 480-377414/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377748 — **Prep Batch: 377414**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	203		ug/L		102	80 - 120

Lab Sample ID: LCSD 480-377414/24-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377748 — **Prep Batch: 377414**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	200	203		ug/L		101	80 - 120	0	20

Lab Sample ID: 480-124283-1 MS — **Client Sample ID: C0901517-PP4A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377748 — **Prep Batch: 377414**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	5.2		200	209		ug/L		102	75 - 125

Lab Sample ID: 480-124283-1 MSD — **Client Sample ID: C0901517-PP4A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377748 — **Prep Batch: 377414**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	5.2		200	204		ug/L		100	75 - 125	2	20

QC Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-377209/27
Matrix: Water
Analysis Batch: 377209

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Lab Sample ID: LCS 480-377209/28
Matrix: Water
Analysis Batch: 377209

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			0.200	0.205		mg/L		103	80 - 120		

Lab Sample ID: 480-124283-1 MS
Matrix: Water
Analysis Batch: 377209

Client Sample ID: C0901517-PP4A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent	ND		0.200	0.196		mg/L		98	75 - 125		

Lab Sample ID: 480-124283-2 DU
Matrix: Water
Analysis Batch: 377209

Client Sample ID: C0901517-PP4B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	0.0091	J		0.00997	J	mg/L				9	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

GC/MS VOA

Analysis Batch: 377484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124283-1	C0901517-PP4A	Total/NA	Water	8260C	
480-124283-2	C0901517-PP4B	Total/NA	Water	8260C	
480-124283-3	C0901517-CIW1B	Total/NA	Water	8260C	
480-124283-4	C0901517-RB1	Total/NA	Water	8260C	
480-124283-5	C0901517-RB2	Total/NA	Water	8260C	
MB 480-377484/9	Method Blank	Total/NA	Water	8260C	
LCS 480-377484/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377484/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 377662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124283-6	C0901517-TRIP BLANK	Total/NA	Water	8260C	
MB 480-377662/8	Method Blank	Total/NA	Water	8260C	
LCS 480-377662/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377662/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 377414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124283-1	C0901517-PP4A	Total/NA	Water	3005A	
480-124283-2	C0901517-PP4B	Total/NA	Water	3005A	
480-124283-3	C0901517-CIW1B	Total/NA	Water	3005A	
480-124283-4	C0901517-RB1	Total/NA	Water	3005A	
480-124283-5	C0901517-RB2	Total/NA	Water	3005A	
MB 480-377414/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-377414/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-377414/24-A	Lab Control Sample Dup	Total/NA	Water	3005A	
480-124283-1 MS	C0901517-PP4A	Total/NA	Water	3005A	
480-124283-1 MSD	C0901517-PP4A	Total/NA	Water	3005A	

Analysis Batch: 377748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124283-1	C0901517-PP4A	Total/NA	Water	6010	377414
480-124283-2	C0901517-PP4B	Total/NA	Water	6010	377414
480-124283-3	C0901517-CIW1B	Total/NA	Water	6010	377414
480-124283-4	C0901517-RB1	Total/NA	Water	6010	377414
480-124283-5	C0901517-RB2	Total/NA	Water	6010	377414
MB 480-377414/1-A	Method Blank	Total/NA	Water	6010	377414
LCS 480-377414/2-A	Lab Control Sample	Total/NA	Water	6010	377414
LCSD 480-377414/24-A	Lab Control Sample Dup	Total/NA	Water	6010	377414
480-124283-1 MS	C0901517-PP4A	Total/NA	Water	6010	377414
480-124283-1 MSD	C0901517-PP4A	Total/NA	Water	6010	377414

General Chemistry

Analysis Batch: 377209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124283-1	C0901517-PP4A	Total/NA	Water	7196A	
480-124283-2	C0901517-PP4B	Total/NA	Water	7196A	

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

General Chemistry (Continued)

Analysis Batch: 377209 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124283-3	C0901517-CIW1B	Total/NA	Water	7196A	
480-124283-4	C0901517-RB1	Total/NA	Water	7196A	
480-124283-5	C0901517-RB2	Total/NA	Water	7196A	
MB 480-377209/27	Method Blank	Total/NA	Water	7196A	
LCS 480-377209/28	Lab Control Sample	Total/NA	Water	7196A	
480-124283-1 MS	C0901517-PP4A	Total/NA	Water	7196A	
480-124283-2 DU	C0901517-PP4B	Total/NA	Water	7196A	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-PP4A — Lab Sample ID: 480-124283-1

Date Collected: 09/15/17 09:35 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	377484	09/19/17 12:30	KMN	TAL BUF
Total/NA	Prep	3005A			377414	09/19/17 09:20	EMB	TAL BUF
Total/NA	Analysis	6010		1	377748	09/19/17 19:28	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C0901517-PP4B — Lab Sample ID: 480-124283-2

Date Collected: 09/15/17 11:00 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	377484	09/19/17 12:53	KMN	TAL BUF
Total/NA	Prep	3005A			377414	09/19/17 09:20	EMB	TAL BUF
Total/NA	Analysis	6010		1	377748	09/19/17 19:55	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C0901517-CIW1B — Lab Sample ID: 480-124283-3

Date Collected: 09/15/17 12:40 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	377484	09/19/17 13:17	KMN	TAL BUF
Total/NA	Prep	3005A			377414	09/19/17 09:20	EMB	TAL BUF
Total/NA	Analysis	6010		1	377748	09/19/17 19:59	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C0901517-RB1 — Lab Sample ID: 480-124283-4

Date Collected: 09/15/17 13:30 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377484	09/19/17 13:40	KMN	TAL BUF
Total/NA	Prep	3005A			377414	09/19/17 09:20	EMB	TAL BUF
Total/NA	Analysis	6010		1	377748	09/19/17 20:02	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C0901517-RB2 — Lab Sample ID: 480-124283-5

Date Collected: 09/15/17 13:35 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377484	09/19/17 14:04	KMN	TAL BUF
Total/NA	Prep	3005A			377414	09/19/17 09:20	EMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Client Sample ID: C0901517-RB2

Lab Sample ID: 480-124283-5
Date Collected: 09/15/17 13:35
Matrix: Water
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010		1	377748	09/19/17 20:06	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C0901517-TRIP BLANK

Lab Sample ID: 480-124283-6
Date Collected: 09/15/17 13:45
Matrix: Water
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377662	09/20/17 00:13	RRS	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Chromium
7196A		Water	Chromium, hexavalent
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride

Method Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-124283-1	C0901517-PP4A	Water	09/15/17 09:35	09/16/17 01:30
480-124283-2	C0901517-PP4B	Water	09/15/17 11:00	09/16/17 01:30
480-124283-3	C0901517-CIW1B	Water	09/15/17 12:40	09/16/17 01:30
480-124283-4	C0901517-RB1	Water	09/15/17 13:30	09/16/17 01:30
480-124283-5	C0901517-RB2	Water	09/15/17 13:35	09/16/17 01:30
480-124283-6	C0901517-TRIP BLANK	Water	09/15/17 13:45	09/16/17 01:30

360325-Boston

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

Sept 2017

AESI Ref: 38450.55525
COC # :
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential: N
EDD To: Mark.Maggiore @amec.com
Site Name: Conductorlab: ~~April 2017~~ Semiannual Groundwater Sampling
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #
Analysis Turnaround Time:
Standard - 10
Rush Charges Authorized for:
2 weeks - Y
1 week - N
Next Day - N

Preservative: 1 | 0 | 2

480-124283 COC

PAGE 1 of 1 — 1
Job No.

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3_7) 02-01-05 renesurg@aol.com

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds	7196A Hexavalent Chromium	SW846/6010B Total Chromium	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
PP-4A			C091517-PP4A	9-15-17	935	Reg	Gw	Reg	5	S	N	X	X	X	
PP-4B			C091517-PP4B	9-15-17	1100	Reg	Gw	Reg	5	S	N	X	X	X	
CIW-1B			C091517-CIW1B	9-15-17	1240	Reg	Gw	Reg	5	S	N	X	X	X	
RB-1			C091517-RB1	9-15-17	1330	RB	Gw	RB	5	S	N	X	X	X	
RB-2			C091517-RB2	9-15-17	1335	RB	Gw	RB	5	S	N	X	X	X	
Trip blank			C091517-Trip blank	9-15-17	1345	TB	Gw	TB	1	S	N	X			

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab.

Relinquished by:	Company	AmecFW	Received by	TB Company		Condition		Custody Seals Intact
	Date/Time	9-15-17 1410		9-15-17 1410		Cooler Temp.		
Relinquished by	Company		Received by	TAB Company		Condition		Custody Seals Intact
	Date/Time 9-15-17	1800		9-16-17	0130	Cooler Temp.		

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

2.6 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-124283-1

Login Number: 124283
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-124284-1
Client Project/Site: September 2017 Semi Annual Ground Water
Sampling Event: Quarterly Surface Water

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Authorized for release by:
9/26/2017 11:52:25 AM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Qualifiers

GC/MS VOA

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

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-124284-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-124284-1

Comments
No additional comments.

Receipt
The samples were received on 9/16/2017 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

GC/MS VOA
Method(s) 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for Carbon disulfide, Isopropyl ether, Naphthalene, tert-Butyl ethyl ether, tert-Amyl methyl Ether, & Tetrahydrofuran

Method(s) 8260C: The continuing calibration verification (CCV) for 2-Hexanone and Acetone associated with batch 480-377662 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : C091517-CSW5 (480-124284-1) and C091517-CSW2 (480-124284-4).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377662 exceeded control limits for the following analytes: Acetone and Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : C091517-CSW5 (480-124284-1) and C091517-CSW2 (480-124284-4).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377662 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C091517-CSW5 (480-124284-1) and C091517-CSW2 (480-124284-4).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-377723 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C091517-CSW3A (480-124284-2) and C091517-CSW3 (480-124284-3).

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

Metals
Method(s) 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

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

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-124284-1**

Project Location: **Groton** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-124284-1(1-4)

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Management Assistant

Printed Name: Rebecca Jones Date: 9/26/17 11:30

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Client Sample ID: C091517-CSW5 — Lab Sample ID: 480-124284-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.4		1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	31000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	8.6		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	8.3	J	10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2400		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3500		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	44000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.0065	J	0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091517-CSW3A — Lab Sample ID: 480-124284-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.6		1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	27000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	270		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	12		10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2100		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3800		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	29000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.29		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091517-CSW3 — Lab Sample ID: 480-124284-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.87	J	1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	10		1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	27000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	320		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	13		10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2100		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	4000		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	26000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.33		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C091517-CSW2 — Lab Sample ID: 480-124284-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium, Dissolved	25000		500	100	ug/L	1		6010	Dissolved
Magnesium, Dissolved	1800		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3300		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	27000		1000	320	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: C091517-CSW5

Lab Sample ID: 480-124284-1

Date Collected: 09/15/17 08:35

Matrix: Water

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/20/17 00:36	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/17 00:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/20/17 00:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/17 00:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/17 00:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/17 00:36	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/20/17 00:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 00:36	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/20/17 00:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 00:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/20/17 00:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/20/17 00:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/17 00:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/17 00:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/17 00:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/20/17 00:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/17 00:36	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/20/17 00:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/17 00:36	1
1,4-Dioxane	ND		50	9.3	ug/L			09/20/17 00:36	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/20/17 00:36	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/20/17 00:36	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/20/17 00:36	1
2-Hexanone	ND		10	1.2	ug/L			09/20/17 00:36	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/20/17 00:36	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/20/17 00:36	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/20/17 00:36	1
Acetone	ND	*	50	3.0	ug/L			09/20/17 00:36	1
Benzene	ND		1.0	0.41	ug/L			09/20/17 00:36	1
Bromobenzene	ND		1.0	0.80	ug/L			09/20/17 00:36	1
Bromoform	ND		1.0	0.26	ug/L			09/20/17 00:36	1
Bromomethane	ND		2.0	0.69	ug/L			09/20/17 00:36	1
Carbon disulfide	ND		10	0.19	ug/L			09/20/17 00:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/17 00:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/17 00:36	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/20/17 00:36	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/20/17 00:36	1
Chloroethane	ND		2.0	0.32	ug/L			09/20/17 00:36	1
Chloroform	ND		1.0	0.34	ug/L			09/20/17 00:36	1
Chloromethane	ND		2.0	0.35	ug/L			09/20/17 00:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/17 00:36	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/20/17 00:36	1
Dibromomethane	ND		1.0	0.41	ug/L			09/20/17 00:36	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/20/17 00:36	1
Dichlorodifluoromethane	ND	*	1.0	0.68	ug/L			09/20/17 00:36	1
Ethyl ether	ND		1.0	0.72	ug/L			09/20/17 00:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/17 00:36	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/20/17 00:36	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/20/17 00:36	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Client Sample ID: C091517-CSW5

Date Collected: 09/15/17 08:35
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124284-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/20/17 00:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/17 00:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/17 00:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/17 00:36	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/20/17 00:36	1
Naphthalene	ND		5.0	0.43	ug/L			09/20/17 00:36	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/20/17 00:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/20/17 00:36	1
o-Xylene	ND		1.0	0.76	ug/L			09/20/17 00:36	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/20/17 00:36	1
Styrene	ND		1.0	0.73	ug/L			09/20/17 00:36	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/20/17 00:36	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/20/17 00:36	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/20/17 00:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/17 00:36	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/20/17 00:36	1
Toluene	ND		1.0	0.51	ug/L			09/20/17 00:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/17 00:36	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/20/17 00:36	1
Trichloroethene	**1.4**		1.0	0.46	ug/L			09/20/17 00:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/17 00:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/17 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/20/17 00:36*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/20/17 00:36*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/20/17 00:36*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/20/17 00:36*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**31000**		500	100	ug/L		09/19/17 10:49	09/20/17 14:23	1
Chromium, Dissolved	**8.6**		5.0	1.0	ug/L		09/19/17 10:49	09/20/17 14:23	1
Copper, Dissolved	**8.3**	**J**	10	1.6	ug/L		09/19/17 10:49	09/20/17 14:23	1
Magnesium, Dissolved	**2400**		200	43	ug/L		09/19/17 10:49	09/20/17 14:23	1
Potassium, Dissolved	**3500**		500	100	ug/L		09/19/17 10:49	09/20/17 14:23	1
Sodium, Dissolved	**44000**		1000	320	ug/L		09/19/17 10:49	09/20/17 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.0065**	**J**	0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample ID: C091517-CSW3A **Lab Sample ID: 480-124284-2**

Date Collected: 09/15/17 08:50 **Matrix: Water**

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/20/17 17:06	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/17 17:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/20/17 17:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/17 17:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/17 17:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/17 17:06	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/20/17 17:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 17:06	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/20/17 17:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 17:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/20/17 17:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/20/17 17:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/17 17:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/17 17:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/17 17:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/20/17 17:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/17 17:06	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/20/17 17:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/17 17:06	1
1,4-Dioxane	ND		50	9.3	ug/L			09/20/17 17:06	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/20/17 17:06	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/20/17 17:06	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/20/17 17:06	1
2-Hexanone	ND		10	1.2	ug/L			09/20/17 17:06	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/20/17 17:06	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/20/17 17:06	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/20/17 17:06	1
Acetone	ND		50	3.0	ug/L			09/20/17 17:06	1
Benzene	ND		1.0	0.41	ug/L			09/20/17 17:06	1
Bromobenzene	ND		1.0	0.80	ug/L			09/20/17 17:06	1
Bromoform	ND		1.0	0.26	ug/L			09/20/17 17:06	1
Bromomethane	ND		2.0	0.69	ug/L			09/20/17 17:06	1
Carbon disulfide	ND		10	0.19	ug/L			09/20/17 17:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/17 17:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/17 17:06	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/20/17 17:06	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/20/17 17:06	1
Chloroethane	ND		2.0	0.32	ug/L			09/20/17 17:06	1
Chloroform	ND		1.0	0.34	ug/L			09/20/17 17:06	1
Chloromethane	ND		2.0	0.35	ug/L			09/20/17 17:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/17 17:06	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/20/17 17:06	1
Dibromomethane	ND		1.0	0.41	ug/L			09/20/17 17:06	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/20/17 17:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/17 17:06	1
Ethyl ether	ND		1.0	0.72	ug/L			09/20/17 17:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/17 17:06	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/20/17 17:06	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/20/17 17:06	1

Client Sample ID: C091517-CSW3A

Lab Sample ID: 480-124284-2

Date Collected: 09/15/17 08:50

Matrix: Water

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/20/17 17:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/17 17:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/17 17:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/17 17:06	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/20/17 17:06	1
Naphthalene	ND		5.0	0.43	ug/L			09/20/17 17:06	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/20/17 17:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/20/17 17:06	1
o-Xylene	ND		1.0	0.76	ug/L			09/20/17 17:06	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/20/17 17:06	1
Styrene	ND		1.0	0.73	ug/L			09/20/17 17:06	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/20/17 17:06	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/20/17 17:06	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/20/17 17:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/17 17:06	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/20/17 17:06	1
Toluene	ND		1.0	0.51	ug/L			09/20/17 17:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/17 17:06	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/20/17 17:06	1
Trichloroethene	**7.6**		1.0	0.46	ug/L			09/20/17 17:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/17 17:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/17 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*09/20/17 17:06*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/20/17 17:06*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/20/17 17:06*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*09/20/17 17:06*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**27000**		500	100	ug/L		09/19/17 10:49	09/20/17 14:27	1
Chromium, Dissolved	**270**		5.0	1.0	ug/L		09/19/17 10:49	09/20/17 14:27	1
Copper, Dissolved	**12**		10	1.6	ug/L		09/19/17 10:49	09/20/17 14:27	1
Magnesium, Dissolved	**2100**		200	43	ug/L		09/19/17 10:49	09/20/17 14:27	1
Potassium, Dissolved	**3800**		500	100	ug/L		09/19/17 10:49	09/20/17 14:27	1
Sodium, Dissolved	**29000**		1000	320	ug/L		09/19/17 10:49	09/20/17 14:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.29**		0.010	0.0050	mg/L			09/16/17 08:15	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Client Sample ID: C091517-CSW3

Lab Sample ID: 480-124284-3

Date Collected: 09/15/17 09:05

Matrix: Water

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/20/17 17:30	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/17 17:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/20/17 17:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/17 17:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/17 17:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/17 17:30	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/20/17 17:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 17:30	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/20/17 17:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 17:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/20/17 17:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/20/17 17:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/17 17:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/17 17:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/17 17:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/20/17 17:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/17 17:30	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/20/17 17:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/17 17:30	1
1,4-Dioxane	ND		50	9.3	ug/L			09/20/17 17:30	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/20/17 17:30	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/20/17 17:30	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/20/17 17:30	1
2-Hexanone	ND		10	1.2	ug/L			09/20/17 17:30	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/20/17 17:30	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/20/17 17:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/20/17 17:30	1
Acetone	ND		50	3.0	ug/L			09/20/17 17:30	1
Benzene	ND		1.0	0.41	ug/L			09/20/17 17:30	1
Bromobenzene	ND		1.0	0.80	ug/L			09/20/17 17:30	1
Bromoform	ND		1.0	0.26	ug/L			09/20/17 17:30	1
Bromomethane	ND		2.0	0.69	ug/L			09/20/17 17:30	1
Carbon disulfide	ND		10	0.19	ug/L			09/20/17 17:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/17 17:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/17 17:30	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/20/17 17:30	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/20/17 17:30	1
Chloroethane	ND		2.0	0.32	ug/L			09/20/17 17:30	1
Chloroform	ND		1.0	0.34	ug/L			09/20/17 17:30	1
Chloromethane	ND		2.0	0.35	ug/L			09/20/17 17:30	1
cis-1,2-Dichloroethene	**0.87**	**J**	1.0	0.81	ug/L			09/20/17 17:30	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/20/17 17:30	1
Dibromomethane	ND		1.0	0.41	ug/L			09/20/17 17:30	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/20/17 17:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/17 17:30	1
Ethyl ether	ND		1.0	0.72	ug/L			09/20/17 17:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/17 17:30	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/20/17 17:30	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/20/17 17:30	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Client Sample ID: C091517-CSW3

Lab Sample ID: 480-124284-3

Date Collected: 09/15/17 09:05

Matrix: Water

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/20/17 17:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/17 17:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/17 17:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/17 17:30	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/20/17 17:30	1
Naphthalene	ND		5.0	0.43	ug/L			09/20/17 17:30	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/20/17 17:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/20/17 17:30	1
o-Xylene	ND		1.0	0.76	ug/L			09/20/17 17:30	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/20/17 17:30	1
Styrene	ND		1.0	0.73	ug/L			09/20/17 17:30	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/20/17 17:30	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/20/17 17:30	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/20/17 17:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/17 17:30	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/20/17 17:30	1
Toluene	ND		1.0	0.51	ug/L			09/20/17 17:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/17 17:30	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/20/17 17:30	1
Trichloroethene	**10**		1.0	0.46	ug/L			09/20/17 17:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/17 17:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/17 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/20/17 17:30*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/20/17 17:30*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/20/17 17:30*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/20/17 17:30*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**27000**		500	100	ug/L		09/19/17 10:49	09/20/17 14:44	1
Chromium, Dissolved	**320**		5.0	1.0	ug/L		09/19/17 10:49	09/20/17 14:44	1
Copper, Dissolved	**13**		10	1.6	ug/L		09/19/17 10:49	09/20/17 14:44	1
Magnesium, Dissolved	**2100**		200	43	ug/L		09/19/17 10:49	09/20/17 14:44	1
Potassium, Dissolved	**4000**		500	100	ug/L		09/19/17 10:49	09/20/17 14:44	1
Sodium, Dissolved	**26000**		1000	320	ug/L		09/19/17 10:49	09/20/17 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.33**		0.010	0.0050	mg/L			09/16/17 08:15	1

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Client Sample ID: C091517-CSW2
Date Collected: 09/15/17 09:25
Date Received: 09/16/17 01:30

Lab Sample ID: 480-124284-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/20/17 01:48	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/17 01:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/20/17 01:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/17 01:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/17 01:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/17 01:48	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/20/17 01:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 01:48	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/20/17 01:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 01:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/20/17 01:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/20/17 01:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/17 01:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/17 01:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/17 01:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/20/17 01:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/17 01:48	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/20/17 01:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/17 01:48	1
1,4-Dioxane	ND		50	9.3	ug/L			09/20/17 01:48	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/20/17 01:48	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			09/20/17 01:48	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/20/17 01:48	1
2-Hexanone	ND		10	1.2	ug/L			09/20/17 01:48	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/20/17 01:48	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/20/17 01:48	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/20/17 01:48	1
Acetone	ND	*	50	3.0	ug/L			09/20/17 01:48	1
Benzene	ND		1.0	0.41	ug/L			09/20/17 01:48	1
Bromobenzene	ND		1.0	0.80	ug/L			09/20/17 01:48	1
Bromoform	ND		1.0	0.26	ug/L			09/20/17 01:48	1
Bromomethane	ND		2.0	0.69	ug/L			09/20/17 01:48	1
Carbon disulfide	ND		10	0.19	ug/L			09/20/17 01:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/17 01:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/17 01:48	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/20/17 01:48	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/20/17 01:48	1
Chloroethane	ND		2.0	0.32	ug/L			09/20/17 01:48	1
Chloroform	ND		1.0	0.34	ug/L			09/20/17 01:48	1
Chloromethane	ND		2.0	0.35	ug/L			09/20/17 01:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/17 01:48	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/20/17 01:48	1
Dibromomethane	ND		1.0	0.41	ug/L			09/20/17 01:48	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/20/17 01:48	1
Dichlorodifluoromethane	ND	*	1.0	0.68	ug/L			09/20/17 01:48	1
Ethyl ether	ND		1.0	0.72	ug/L			09/20/17 01:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/17 01:48	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/20/17 01:48	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/20/17 01:48	1

Client Sample ID: C091517-CSW2

Lab Sample ID: 480-124284-4

Date Collected: 09/15/17 09:25

Matrix: Water

Date Received: 09/16/17 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			09/20/17 01:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/17 01:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/17 01:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/17 01:48	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/20/17 01:48	1
Naphthalene	ND		5.0	0.43	ug/L			09/20/17 01:48	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/20/17 01:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/20/17 01:48	1
o-Xylene	ND		1.0	0.76	ug/L			09/20/17 01:48	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/20/17 01:48	1
Styrene	ND		1.0	0.73	ug/L			09/20/17 01:48	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/20/17 01:48	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/20/17 01:48	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/20/17 01:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/17 01:48	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/20/17 01:48	1
Toluene	ND		1.0	0.51	ug/L			09/20/17 01:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/17 01:48	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/20/17 01:48	1
Trichloroethene	ND		1.0	0.46	ug/L			09/20/17 01:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/17 01:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/17 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/20/17 01:48*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/20/17 01:48*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/20/17 01:48*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*09/20/17 01:48*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**25000**		500	100	ug/L		09/19/17 10:49	09/20/17 14:48	1
Chromium, Dissolved	ND		5.0	1.0	ug/L		09/19/17 10:49	09/20/17 14:48	1
Copper, Dissolved	ND		10	1.6	ug/L		09/19/17 10:49	09/20/17 14:48	1
Magnesium, Dissolved	**1800**		200	43	ug/L		09/19/17 10:49	09/20/17 14:48	1
Potassium, Dissolved	**3300**		500	100	ug/L		09/19/17 10:49	09/20/17 14:48	1
Sodium, Dissolved	**27000**		1000	320	ug/L		09/19/17 10:49	09/20/17 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Surrogate Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-124284-1	C091517-CSW5	103	94	103	99
480-124284-2	C091517-CSW3A	92	94	104	89
480-124284-3	C091517-CSW3	99	94	103	94
480-124284-4	C091517-CSW2	95	97	104	90
LCS 480-377662/5	Lab Control Sample	99	96	103	96
LCS 480-377723/5	Lab Control Sample	99	90	98	94
LCSD 480-377662/6	Lab Control Sample Dup	100	96	103	93
LCSD 480-377723/6	Lab Control Sample Dup	96	92	99	94
MB 480-377662/8	Method Blank	98	96	102	96
MB 480-377723/8	Method Blank	98	99	103	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 480-377662/8
Matrix: Water
Analysis Batch: 377662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/17 22:30	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/17 22:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/19/17 22:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/17 22:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/17 22:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/17 22:30	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/19/17 22:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 22:30	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/19/17 22:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/17 22:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/17 22:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/19/17 22:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/17 22:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/17 22:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/17 22:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/17 22:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/17 22:30	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/19/17 22:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/17 22:30	1
1,4-Dioxane	ND		50	9.3	ug/L			09/19/17 22:30	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/19/17 22:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/17 22:30	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/19/17 22:30	1
2-Hexanone	ND		10	1.2	ug/L			09/19/17 22:30	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/19/17 22:30	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/19/17 22:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/19/17 22:30	1
Acetone	ND		50	3.0	ug/L			09/19/17 22:30	1
Benzene	ND		1.0	0.41	ug/L			09/19/17 22:30	1
Bromobenzene	ND		1.0	0.80	ug/L			09/19/17 22:30	1
Bromoform	ND		1.0	0.26	ug/L			09/19/17 22:30	1
Bromomethane	ND		2.0	0.69	ug/L			09/19/17 22:30	1
Carbon disulfide	ND		10	0.19	ug/L			09/19/17 22:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/17 22:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/17 22:30	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/19/17 22:30	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/19/17 22:30	1
Chloroethane	ND		2.0	0.32	ug/L			09/19/17 22:30	1
Chloroform	ND		1.0	0.34	ug/L			09/19/17 22:30	1
Chloromethane	ND		2.0	0.35	ug/L			09/19/17 22:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/17 22:30	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/19/17 22:30	1
Dibromomethane	ND		1.0	0.41	ug/L			09/19/17 22:30	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/19/17 22:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/17 22:30	1
Ethyl ether	ND		1.0	0.72	ug/L			09/19/17 22:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/17 22:30	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/19/17 22:30	1

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

Lab Sample ID: MB 480-377662/8
Matrix: Water
Analysis Batch: 377662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/19/17 22:30	1
Isopropyl ether	ND		10	0.59	ug/L			09/19/17 22:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/17 22:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/17 22:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/17 22:30	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/19/17 22:30	1
Naphthalene	ND		5.0	0.43	ug/L			09/19/17 22:30	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/17 22:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/17 22:30	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/17 22:30	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/17 22:30	1
Styrene	ND		1.0	0.73	ug/L			09/19/17 22:30	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/19/17 22:30	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/19/17 22:30	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/17 22:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/17 22:30	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/19/17 22:30	1
Toluene	ND		1.0	0.51	ug/L			09/19/17 22:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/17 22:30	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/19/17 22:30	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/17 22:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/17 22:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/17 22:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/19/17 22:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/19/17 22:30*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/17 22:30*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/19/17 22:30*	*1*

Lab Sample ID: LCS 480-377662/5
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 130
1,1,1-Trichloroethane	25.0	23.5		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	70 - 130
1,1-Dichloroethane	25.0	24.4		ug/L		98	70 - 130
1,1-Dichloroethene	25.0	23.0		ug/L		92	70 - 130
1,1-Dichloropropene	25.0	24.0		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	25.0	22.1		ug/L		88	70 - 130
1,2,3-Trichloropropane	25.0	22.6		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	25.0	21.3		ug/L		85	70 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	70 - 130
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	70 - 130

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

Lab Sample ID: LCS 480-377662/5
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	24.0		ug/L		96	70 - 130
1,2-Dichloropropane	25.0	24.0		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 130
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130
1,3-Dichloropropane	25.0	27.2		ug/L		109	70 - 130
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130
1,4-Dioxane	500	495		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	25.2		ug/L		101	70 - 130
2-Butanone (MEK)	125	228	*	ug/L		183	70 - 130
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 130
2-Hexanone	125	139		ug/L		111	70 - 130
4-Chlorotoluene	25.0	25.7		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	25.7		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	70 - 130
Acetone	125	171	*	ug/L		137	70 - 130
Benzene	25.0	24.5		ug/L		98	70 - 130
Bromobenzene	25.0	22.6		ug/L		90	70 - 130
Bromoform	25.0	23.6		ug/L		94	70 - 130
Bromomethane	25.0	25.6		ug/L		102	70 - 130
Carbon disulfide	25.0	24.0		ug/L		96	70 - 130
Carbon tetrachloride	25.0	23.1		ug/L		92	70 - 130
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Chlorobromomethane	25.0	21.2		ug/L		85	70 - 130
Chlorodibromomethane	25.0	23.8		ug/L		95	70 - 130
Chloroethane	25.0	26.3		ug/L		105	70 - 130
Chloroform	25.0	22.9		ug/L		92	70 - 130
Chloromethane	25.0	27.7		ug/L		111	70 - 130
cis-1,2-Dichloroethene	25.0	24.1		ug/L		96	70 - 130
cis-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
Dibromomethane	25.0	22.4		ug/L		90	70 - 130
Dichlorobromomethane	25.0	23.0		ug/L		92	70 - 130
Dichlorodifluoromethane	25.0	32.9	*	ug/L		131	70 - 130
Ethyl ether	25.0	22.4		ug/L		89	70 - 130
Ethylbenzene	25.0	26.0		ug/L		104	70 - 130
Ethylene Dibromide	25.0	24.7		ug/L		99	70 - 130
Hexachlorobutadiene	25.0	23.9		ug/L		96	70 - 130
Isopropyl ether	25.0	24.8		ug/L		99	70 - 130
Isopropylbenzene	25.0	26.4		ug/L		106	70 - 130
Methyl tert-butyl ether	25.0	23.2		ug/L		93	70 - 130
Methylene Chloride	25.0	20.1		ug/L		80	70 - 130
m-Xylene & p-Xylene	25.0	24.1		ug/L		96	70 - 130
Naphthalene	25.0	24.3		ug/L		97	70 - 130
n-Butylbenzene	25.0	26.1		ug/L		104	70 - 130
N-Propylbenzene	25.0	26.4		ug/L		105	70 - 130
o-Xylene	25.0	25.3		ug/L		101	70 - 130
sec-Butylbenzene	25.0	26.4		ug/L		106	70 - 130
Styrene	25.0	24.7		ug/L		99	70 - 130
Tert-amyl methyl ether	25.0	24.0		ug/L		96	70 - 130

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

Lab Sample ID: LCS 480-377662/5
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	24.1		ug/L		96	70 - 130
tert-Butylbenzene	25.0	26.0		ug/L		104	70 - 130
Tetrachloroethene	25.0	26.4		ug/L		106	70 - 130
Tetrahydrofuran	50.0	57.5		ug/L		115	70 - 130
Toluene	25.0	26.1		ug/L		104	70 - 130
trans-1,2-Dichloroethene	25.0	22.8		ug/L		91	70 - 130
trans-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 130
Trichloroethene	25.0	23.4		ug/L		94	70 - 130
Trichlorofluoromethane	25.0	27.6		ug/L		110	70 - 130
Vinyl chloride	25.0	27.4		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 480-377662/6
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	70 - 130	4	20
1,1,1-Trichloroethane	25.0	22.9		ug/L		91	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	70 - 130	6	20
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 130	0	20
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130	2	20
1,1-Dichloroethene	25.0	22.6		ug/L		91	70 - 130	1	20
1,1-Dichloropropene	25.0	24.0		ug/L		96	70 - 130	0	20
1,2,3-Trichlorobenzene	25.0	20.8		ug/L		83	70 - 130	6	20
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	70 - 130	8	20
1,2,4-Trichlorobenzene	25.0	20.8		ug/L		83	70 - 130	2	20
1,2,4-Trimethylbenzene	25.0	25.4		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	70 - 130	4	20
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130	3	20
1,2-Dichloroethane	25.0	23.2		ug/L		93	70 - 130	3	20
1,2-Dichloropropane	25.0	24.1		ug/L		96	70 - 130	0	20
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		102	70 - 130	3	20
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	2	20
1,3-Dichloropropane	25.0	27.5		ug/L		110	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	1	20
1,4-Dioxane	500	576		ug/L		115	70 - 130	15	20
2,2-Dichloropropane	25.0	24.3		ug/L		97	70 - 130	4	20
2-Butanone (MEK)	125	230	*	ug/L		184	70 - 130	1	20
2-Chlorotoluene	25.0	23.7		ug/L		95	70 - 130	3	20
2-Hexanone	125	140		ug/L		112	70 - 130	1	20
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	1	20
4-Isopropyltoluene	25.0	25.0		ug/L		100	70 - 130	3	20

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

Lab Sample ID: LCSD 480-377662/6
Matrix: Water
Analysis Batch: 377662

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	70 - 130	1	20
Acetone	125	173	*	ug/L		138	70 - 130	1	20
Benzene	25.0	23.8		ug/L		95	70 - 130	3	20
Bromobenzene	25.0	22.4		ug/L		89	70 - 130	1	20
Bromoform	25.0	22.9		ug/L		92	70 - 130	3	20
Bromomethane	25.0	25.9		ug/L		104	70 - 130	1	20
Carbon disulfide	25.0	23.2		ug/L		93	70 - 130	3	20
Carbon tetrachloride	25.0	23.4		ug/L		94	70 - 130	1	20
Chlorobenzene	25.0	24.9		ug/L		100	70 - 130	3	20
Chlorobromomethane	25.0	21.9		ug/L		87	70 - 130	3	20
Chlorodibromomethane	25.0	23.9		ug/L		96	70 - 130	1	20
Chloroethane	25.0	27.4		ug/L		110	70 - 130	4	20
Chloroform	25.0	23.0		ug/L		92	70 - 130	1	20
Chloromethane	25.0	26.6		ug/L		107	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	23.6		ug/L		94	70 - 130	4	20
Dibromomethane	25.0	21.6		ug/L		87	70 - 130	4	20
Dichlorobromomethane	25.0	22.9		ug/L		91	70 - 130	1	20
Dichlorodifluoromethane	25.0	29.6		ug/L		119	70 - 130	10	20
Ethyl ether	25.0	22.3		ug/L		89	70 - 130	0	20
Ethylbenzene	25.0	25.2		ug/L		101	70 - 130	3	20
Ethylene Dibromide	25.0	24.4		ug/L		98	70 - 130	1	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	70 - 130	0	20
Isopropyl ether	25.0	25.2		ug/L		101	70 - 130	1	20
Isopropylbenzene	25.0	25.1		ug/L		100	70 - 130	5	20
Methyl tert-butyl ether	25.0	23.1		ug/L		92	70 - 130	0	20
Methylene Chloride	25.0	20.1		ug/L		80	70 - 130	0	20
m-Xylene & p-Xylene	25.0	24.3		ug/L		97	70 - 130	1	20
Naphthalene	25.0	24.1		ug/L		96	70 - 130	1	20
n-Butylbenzene	25.0	26.0		ug/L		104	70 - 130	0	20
N-Propylbenzene	25.0	25.6		ug/L		102	70 - 130	3	20
o-Xylene	25.0	25.4		ug/L		102	70 - 130	1	20
sec-Butylbenzene	25.0	25.0		ug/L		100	70 - 130	5	20
Styrene	25.0	24.3		ug/L		97	70 - 130	1	20
Tert-amyl methyl ether	25.0	24.3		ug/L		97	70 - 130	1	20
Tert-butyl ethyl ether	25.0	24.1		ug/L		96	70 - 130	0	20
tert-Butylbenzene	25.0	24.6		ug/L		98	70 - 130	6	20
Tetrachloroethene	25.0	26.2		ug/L		105	70 - 130	1	20
Tetrahydrofuran	50.0	59.6		ug/L		119	70 - 130	3	20
Toluene	25.0	25.4		ug/L		102	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	70 - 130	7	20
trans-1,3-Dichloropropene	25.0	26.6		ug/L		107	70 - 130	0	20
Trichloroethene	25.0	22.2		ug/L		89	70 - 130	5	20
Trichlorofluoromethane	25.0	26.9		ug/L		108	70 - 130	3	20
Vinyl chloride	25.0	26.6		ug/L		106	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: LCSD 480-377662/6
Matrix: Water
Analysis Batch: 377662

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*

Lab Sample ID: MB 480-377723/8
Matrix: Water
Analysis Batch: 377723

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/20/17 10:44	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/17 10:44	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			09/20/17 10:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/17 10:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/17 10:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/17 10:44	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			09/20/17 10:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 10:44	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			09/20/17 10:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/17 10:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/20/17 10:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			09/20/17 10:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/17 10:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/17 10:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/17 10:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/20/17 10:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/17 10:44	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			09/20/17 10:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/17 10:44	1
1,4-Dioxane	ND		50	9.3	ug/L			09/20/17 10:44	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			09/20/17 10:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/20/17 10:44	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			09/20/17 10:44	1
2-Hexanone	ND		10	1.2	ug/L			09/20/17 10:44	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			09/20/17 10:44	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			09/20/17 10:44	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			09/20/17 10:44	1
Acetone	ND		50	3.0	ug/L			09/20/17 10:44	1
Benzene	ND		1.0	0.41	ug/L			09/20/17 10:44	1
Bromobenzene	ND		1.0	0.80	ug/L			09/20/17 10:44	1
Bromoform	ND		1.0	0.26	ug/L			09/20/17 10:44	1
Bromomethane	ND		2.0	0.69	ug/L			09/20/17 10:44	1
Carbon disulfide	ND		10	0.19	ug/L			09/20/17 10:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/17 10:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/17 10:44	1
Chlorobromomethane	ND		1.0	0.87	ug/L			09/20/17 10:44	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			09/20/17 10:44	1
Chloroethane	ND		2.0	0.32	ug/L			09/20/17 10:44	1
Chloroform	ND		1.0	0.34	ug/L			09/20/17 10:44	1

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

Lab Sample ID: MB 480-377723/8
Matrix: Water
Analysis Batch: 377723

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0	0.35	ug/L			09/20/17 10:44	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/17 10:44	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			09/20/17 10:44	1
Dibromomethane	ND		1.0	0.41	ug/L			09/20/17 10:44	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			09/20/17 10:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/17 10:44	1
Ethyl ether	ND		1.0	0.72	ug/L			09/20/17 10:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/17 10:44	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			09/20/17 10:44	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			09/20/17 10:44	1
Isopropyl ether	ND		10	0.59	ug/L			09/20/17 10:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/17 10:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/17 10:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/17 10:44	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			09/20/17 10:44	1
Naphthalene	ND		5.0	0.43	ug/L			09/20/17 10:44	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/20/17 10:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/20/17 10:44	1
o-Xylene	ND		1.0	0.76	ug/L			09/20/17 10:44	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/20/17 10:44	1
Styrene	ND		1.0	0.73	ug/L			09/20/17 10:44	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			09/20/17 10:44	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			09/20/17 10:44	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/20/17 10:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/17 10:44	1
Tetrahydrofuran	ND		10	1.3	ug/L			09/20/17 10:44	1
Toluene	ND		1.0	0.51	ug/L			09/20/17 10:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/17 10:44	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			09/20/17 10:44	1
Trichloroethene	ND		1.0	0.46	ug/L			09/20/17 10:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/17 10:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/17 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/20/17 10:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*09/20/17 10:44*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/20/17 10:44*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*09/20/17 10:44*	*1*

Lab Sample ID: LCS 480-377723/5
Matrix: Water
Analysis Batch: 377723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.4		ug/L		89	70 - 130
1,1,1-Trichloroethane	25.0	21.5		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		97	70 - 130
1,1,2-Trichloroethane	25.0	22.8		ug/L		91	70 - 130

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

Lab Sample ID: LCS 480-377723/5
Matrix: Water
Analysis Batch: 377723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	22.4		ug/L		89	70 - 130
1,1-Dichloroethene	25.0	20.8		ug/L		83	70 - 130
1,1-Dichloropropene	25.0	22.6		ug/L		90	70 - 130
1,2,3-Trichlorobenzene	25.0	20.8		ug/L		83	70 - 130
1,2,3-Trichloropropane	25.0	22.7		ug/L		91	70 - 130
1,2,4-Trichlorobenzene	25.0	21.1		ug/L		84	70 - 130
1,2,4-Trimethylbenzene	25.0	24.4		ug/L		98	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.1		ug/L		88	70 - 130
1,2-Dichlorobenzene	25.0	24.6		ug/L		99	70 - 130
1,2-Dichloroethane	25.0	21.7		ug/L		87	70 - 130
1,2-Dichloropropane	25.0	21.5		ug/L		86	70 - 130
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 130
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130
1,3-Dichloropropane	25.0	25.0		ug/L		100	70 - 130
1,4-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,4-Dioxane	500	448		ug/L		90	70 - 130
2,2-Dichloropropane	25.0	22.2		ug/L		89	70 - 130
2-Butanone (MEK)	125	211	*	ug/L		168	70 - 130
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 130
2-Hexanone	125	121		ug/L		97	70 - 130
4-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130
4-Isopropyltoluene	25.0	24.1		ug/L		96	70 - 130
4-Methyl-2-pentanone (MIBK)	125	119		ug/L		95	70 - 130
Acetone	125	123		ug/L		99	70 - 130
Benzene	25.0	22.8		ug/L		91	70 - 130
Bromobenzene	25.0	21.5		ug/L		86	70 - 130
Bromoform	25.0	21.2		ug/L		85	70 - 130
Bromomethane	25.0	21.3		ug/L		85	70 - 130
Carbon disulfide	25.0	21.3		ug/L		85	70 - 130
Carbon tetrachloride	25.0	20.4		ug/L		81	70 - 130
Chlorobenzene	25.0	22.8		ug/L		91	70 - 130
Chlorobromomethane	25.0	20.3		ug/L		81	70 - 130
Chlorodibromomethane	25.0	21.2		ug/L		85	70 - 130
Chloroethane	25.0	23.1		ug/L		92	70 - 130
Chloroform	25.0	21.5		ug/L		86	70 - 130
Chloromethane	25.0	23.0		ug/L		92	70 - 130
cis-1,2-Dichloroethene	25.0	21.4		ug/L		86	70 - 130
cis-1,3-Dichloropropene	25.0	22.0		ug/L		88	70 - 130
Dibromomethane	25.0	21.0		ug/L		84	70 - 130
Dichlorobromomethane	25.0	21.3		ug/L		85	70 - 130
Dichlorodifluoromethane	25.0	22.1		ug/L		88	70 - 130
Ethyl ether	25.0	21.1		ug/L		84	70 - 130
Ethylbenzene	25.0	23.2		ug/L		93	70 - 130
Ethylene Dibromide	25.0	23.4		ug/L		93	70 - 130
Hexachlorobutadiene	25.0	22.4		ug/L		90	70 - 130
Isopropyl ether	25.0	24.0		ug/L		96	70 - 130
Isopropylbenzene	25.0	25.0		ug/L		100	70 - 130
Methyl tert-butyl ether	25.0	22.5		ug/L		90	70 - 130

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

Lab Sample ID: LCS 480-377723/5
Matrix: Water
Analysis Batch: 377723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	18.1		ug/L		72	70 - 130
m-Xylene & p-Xylene	25.0	21.6		ug/L		86	70 - 130
Naphthalene	25.0	23.5		ug/L		94	70 - 130
n-Butylbenzene	25.0	25.3		ug/L		101	70 - 130
N-Propylbenzene	25.0	25.2		ug/L		101	70 - 130
o-Xylene	25.0	23.1		ug/L		92	70 - 130
sec-Butylbenzene	25.0	25.1		ug/L		100	70 - 130
Styrene	25.0	21.6		ug/L		86	70 - 130
Tert-amyl methyl ether	25.0	23.4		ug/L		94	70 - 130
Tert-butyl ethyl ether	25.0	23.9		ug/L		95	70 - 130
tert-Butylbenzene	25.0	23.9		ug/L		95	70 - 130
Tetrachloroethene	25.0	25.0		ug/L		100	70 - 130
Tetrahydrofuran	50.0	57.8		ug/L		116	70 - 130
Toluene	25.0	23.0		ug/L		92	70 - 130
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	70 - 130
trans-1,3-Dichloropropene	25.0	24.9		ug/L		100	70 - 130
Trichloroethene	25.0	21.1		ug/L		84	70 - 130
Trichlorofluoromethane	25.0	23.5		ug/L		94	70 - 130
Vinyl chloride	25.0	22.5		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 480-377723/6
Matrix: Water
Analysis Batch: 377723

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	22.8		ug/L		91	70 - 130	2	20
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	70 - 130	9	20
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130	1	20
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	70 - 130	1	20
1,1-Dichloroethane	25.0	24.3		ug/L		97	70 - 130	9	20
1,1-Dichloroethene	25.0	22.5		ug/L		90	70 - 130	7	20
1,1-Dichloropropene	25.0	24.5		ug/L		98	70 - 130	8	20
1,2,3-Trichlorobenzene	25.0	20.3		ug/L		81	70 - 130	2	20
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	70 - 130	9	20
1,2,4-Trichlorobenzene	25.0	19.8		ug/L		79	70 - 130	6	20
1,2,4-Trimethylbenzene	25.0	24.2		ug/L		97	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	23.5		ug/L		94	70 - 130	6	20
1,2-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130	4	20
1,2-Dichloroethane	25.0	22.3		ug/L		89	70 - 130	2	20
1,2-Dichloropropane	25.0	23.0		ug/L		92	70 - 130	7	20
1,3,5-Trimethylbenzene	25.0	24.2		ug/L		97	70 - 130	1	20
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130	1	20

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

Lab Sample ID: LCSD 480-377723/6
Matrix: Water
Analysis Batch: 377723

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichloropropane	25.0	25.4		ug/L		102	70 - 130	2	20
1,4-Dichlorobenzene	25.0	23.1		ug/L		92	70 - 130	1	20
1,4-Dioxane	500	522		ug/L		104	70 - 130	15	20
2,2-Dichloropropane	25.0	24.1		ug/L		96	70 - 130	8	20
2-Butanone (MEK)	125	210	*	ug/L		168	70 - 130	0	20
2-Chlorotoluene	25.0	23.9		ug/L		96	70 - 130	0	20
2-Hexanone	125	122		ug/L		97	70 - 130	1	20
4-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	2	20
4-Isopropyltoluene	25.0	24.7		ug/L		99	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	120		ug/L		96	70 - 130	1	20
Acetone	125	118		ug/L		95	70 - 130	4	20
Benzene	25.0	23.4		ug/L		94	70 - 130	3	20
Bromobenzene	25.0	21.0		ug/L		84	70 - 130	2	20
Bromoform	25.0	21.6		ug/L		86	70 - 130	2	20
Bromomethane	25.0	22.6		ug/L		90	70 - 130	6	20
Carbon disulfide	25.0	23.0		ug/L		92	70 - 130	8	20
Carbon tetrachloride	25.0	22.0		ug/L		88	70 - 130	8	20
Chlorobenzene	25.0	23.9		ug/L		96	70 - 130	5	20
Chlorobromomethane	25.0	21.6		ug/L		86	70 - 130	6	20
Chlorodibromomethane	25.0	22.9		ug/L		92	70 - 130	8	20
Chloroethane	25.0	24.9		ug/L		99	70 - 130	7	20
Chloroform	25.0	22.8		ug/L		91	70 - 130	6	20
Chloromethane	25.0	24.0		ug/L		96	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	22.8		ug/L		91	70 - 130	6	20
cis-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 130	3	20
Dibromomethane	25.0	21.3		ug/L		85	70 - 130	1	20
Dichlorobromomethane	25.0	21.9		ug/L		88	70 - 130	3	20
Dichlorodifluoromethane	25.0	23.7		ug/L		95	70 - 130	7	20
Ethyl ether	25.0	19.3		ug/L		77	70 - 130	9	20
Ethylbenzene	25.0	24.4		ug/L		98	70 - 130	5	20
Ethylene Dibromide	25.0	23.6		ug/L		94	70 - 130	1	20
Hexachlorobutadiene	25.0	22.4		ug/L		90	70 - 130	0	20
Isopropyl ether	25.0	24.7		ug/L		99	70 - 130	3	20
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 130	1	20
Methyl tert-butyl ether	25.0	23.2		ug/L		93	70 - 130	3	20
Methylene Chloride	25.0	19.2		ug/L		77	70 - 130	6	20
m-Xylene & p-Xylene	25.0	23.7		ug/L		95	70 - 130	9	20
Naphthalene	25.0	22.5		ug/L		90	70 - 130	4	20
n-Butylbenzene	25.0	25.3		ug/L		101	70 - 130	0	20
N-Propylbenzene	25.0	25.1		ug/L		100	70 - 130	1	20
o-Xylene	25.0	23.5		ug/L		94	70 - 130	1	20
sec-Butylbenzene	25.0	25.4		ug/L		102	70 - 130	1	20
Styrene	25.0	22.9		ug/L		92	70 - 130	6	20
Tert-amyl methyl ether	25.0	24.9		ug/L		100	70 - 130	6	20
Tert-butyl ethyl ether	25.0	24.3		ug/L		97	70 - 130	2	20
tert-Butylbenzene	25.0	24.0		ug/L		96	70 - 130	1	20
Tetrachloroethene	25.0	27.6		ug/L		111	70 - 130	10	20
Tetrahydrofuran	50.0	57.8		ug/L		116	70 - 130	0	20

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

Lab Sample ID: LCSD 480-377723/6
Matrix: Water
Analysis Batch: 377723

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	25.0	23.9		ug/L		96	70 - 130	4	20
trans-1,2-Dichloroethene	25.0	22.4		ug/L		90	70 - 130	3	20
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	70 - 130	2	20
Trichloroethene	25.0	22.3		ug/L		89	70 - 130	5	20
Trichlorofluoromethane	25.0	25.1		ug/L		100	70 - 130	7	20
Vinyl chloride	25.0	24.2		ug/L		97	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-377283/1-B
Matrix: Water
Analysis Batch: 377991

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 377543

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	ND		500	100	ug/L		09/19/17 10:49	09/20/17 14:05	1
Chromium, Dissolved	ND		5.0	1.0	ug/L		09/19/17 10:49	09/20/17 14:05	1
Copper, Dissolved	ND		10	1.6	ug/L		09/19/17 10:49	09/20/17 14:05	1
Magnesium, Dissolved	ND		200	43	ug/L		09/19/17 10:49	09/20/17 14:05	1
Potassium, Dissolved	ND		500	100	ug/L		09/19/17 10:49	09/20/17 14:05	1
Sodium, Dissolved	ND		1000	320	ug/L		09/19/17 10:49	09/20/17 14:05	1

Lab Sample ID: LCS 480-377283/2-B
Matrix: Water
Analysis Batch: 377991

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 377543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	10000	10400		ug/L		104	80 - 120
Chromium, Dissolved	200	207		ug/L		103	80 - 120
Copper, Dissolved	200	201		ug/L		101	80 - 120
Magnesium, Dissolved	10000	10600		ug/L		106	80 - 120
Potassium, Dissolved	10000	9720		ug/L		97	80 - 120
Sodium, Dissolved	10000	9900		ug/L		99	80 - 120

Lab Sample ID: LCSD 480-377283/3-B
Matrix: Water
Analysis Batch: 377991

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 377543

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium, Dissolved	10000	9990		ug/L		100	80 - 120	4	20
Chromium, Dissolved	200	198		ug/L		99	80 - 120	4	20
Copper, Dissolved	200	198		ug/L		99	80 - 120	2	20
Magnesium, Dissolved	10000	10100		ug/L		101	80 - 120	4	20

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-377283/3-B — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 377991 — **Prep Batch: 377543**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium, Dissolved			10000	9930		ug/L		99	80 - 120	2	20
Sodium, Dissolved			10000	9980		ug/L		100	80 - 120	1	20

Lab Sample ID: 480-124284-2 MS — **Client Sample ID: C091517-CSW3A**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 377991 — **Prep Batch: 377543**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium, Dissolved	27000		10000	37600		ug/L		105	75 - 125		
Chromium, Dissolved	270		200	480		ug/L		103	75 - 125		
Copper, Dissolved	12		200	216		ug/L		102	75 - 125		
Magnesium, Dissolved	2100		10000	12600		ug/L		106	75 - 125		
Potassium, Dissolved	3800		10000	13700		ug/L		99	75 - 125		
Sodium, Dissolved	29000		10000	39300		ug/L		101	75 - 125		

Lab Sample ID: 480-124284-2 MSD — **Client Sample ID: C091517-CSW3A**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 377991 — **Prep Batch: 377543**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium, Dissolved	27000		10000	37800		ug/L		107	75 - 125	1	20
Chromium, Dissolved	270		200	478		ug/L		102	75 - 125	0	20
Copper, Dissolved	12		200	206		ug/L		97	75 - 125	5	20
Magnesium, Dissolved	2100		10000	12000		ug/L		100	75 - 125	5	20
Potassium, Dissolved	3800		10000	13800		ug/L		99	75 - 125	0	20
Sodium, Dissolved	29000		10000	40200		ug/L		110	75 - 125	2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-377209/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Lab Sample ID: MB 480-377209/50 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			09/16/17 08:15	1

Lab Sample ID: LCS 480-377209/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377209

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			0.200	0.205		mg/L		103	80 - 120		

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 480-377209/51 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377209

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.209		mg/L		104	80 - 120

Lab Sample ID: 480-124284-2 MS — **Client Sample ID: C091517-CSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.29		0.200	0.474	E	mg/L		91	75 - 125

Lab Sample ID: 480-124284-2 DU — **Client Sample ID: C091517-CSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 377209

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium, hexavalent	0.29		0.255		mg/L		13	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

GC/MS VOA

Analysis Batch: 377662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-1	C091517-CSW5	Total/NA	Water	8260C	
480-124284-4	C091517-CSW2	Total/NA	Water	8260C	
MB 480-377662/8	Method Blank	Total/NA	Water	8260C	
LCS 480-377662/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377662/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 377723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-2	C091517-CSW3A	Total/NA	Water	8260C	
480-124284-3	C091517-CSW3	Total/NA	Water	8260C	
MB 480-377723/8	Method Blank	Total/NA	Water	8260C	
LCS 480-377723/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-377723/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Filtration Batch: 377283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-1	C091517-CSW5	Dissolved	Water	FILTRATION	
480-124284-2	C091517-CSW3A	Dissolved	Water	FILTRATION	
480-124284-3	C091517-CSW3	Dissolved	Water	FILTRATION	
480-124284-4	C091517-CSW2	Dissolved	Water	FILTRATION	
MB 480-377283/1-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-377283/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-377283/3-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
480-124284-2 MS	C091517-CSW3A	Dissolved	Water	FILTRATION	
480-124284-2 MSD	C091517-CSW3A	Dissolved	Water	FILTRATION	

Prep Batch: 377543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-1	C091517-CSW5	Dissolved	Water	3005A	377283
480-124284-2	C091517-CSW3A	Dissolved	Water	3005A	377283
480-124284-3	C091517-CSW3	Dissolved	Water	3005A	377283
480-124284-4	C091517-CSW2	Dissolved	Water	3005A	377283
MB 480-377283/1-B	Method Blank	Dissolved	Water	3005A	377283
LCS 480-377283/2-B	Lab Control Sample	Dissolved	Water	3005A	377283
LCSD 480-377283/3-B	Lab Control Sample Dup	Dissolved	Water	3005A	377283
480-124284-2 MS	C091517-CSW3A	Dissolved	Water	3005A	377283
480-124284-2 MSD	C091517-CSW3A	Dissolved	Water	3005A	377283

Analysis Batch: 377991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-1	C091517-CSW5	Dissolved	Water	6010	377543
480-124284-2	C091517-CSW3A	Dissolved	Water	6010	377543
480-124284-3	C091517-CSW3	Dissolved	Water	6010	377543
480-124284-4	C091517-CSW2	Dissolved	Water	6010	377543
MB 480-377283/1-B	Method Blank	Dissolved	Water	6010	377543
LCS 480-377283/2-B	Lab Control Sample	Dissolved	Water	6010	377543
LCSD 480-377283/3-B	Lab Control Sample Dup	Dissolved	Water	6010	377543
480-124284-2 MS	C091517-CSW3A	Dissolved	Water	6010	377543

Metals (Continued)

Analysis Batch: 377991 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-2 MSD	C091517-CSW3A	Dissolved	Water	6010	377543

General Chemistry

Analysis Batch: 377209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-124284-1	C091517-CSW5	Total/NA	Water	7196A	
480-124284-2	C091517-CSW3A	Total/NA	Water	7196A	
480-124284-3	C091517-CSW3	Total/NA	Water	7196A	
480-124284-4	C091517-CSW2	Total/NA	Water	7196A	
MB 480-377209/27	Method Blank	Total/NA	Water	7196A	
MB 480-377209/50	Method Blank	Total/NA	Water	7196A	
LCS 480-377209/28	Lab Control Sample	Total/NA	Water	7196A	
LCS 480-377209/51	Lab Control Sample	Total/NA	Water	7196A	
480-124284-2 MS	C091517-CSW3A	Total/NA	Water	7196A	
480-124284-2 DU	C091517-CSW3A	Total/NA	Water	7196A	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Client Sample ID: C091517-CSW5 — Lab Sample ID: 480-124284-1

Date Collected: 09/15/17 08:35 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377662	09/20/17 00:36	RRS	TAL BUF
Dissolved	Filtration	FILTRATION			377283	09/18/17 09:04	EMB	TAL BUF
Dissolved	Prep	3005A			377543	09/19/17 10:49	EMB	TAL BUF
Dissolved	Analysis	6010		1	377991	09/20/17 14:23	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C091517-CSW3A — Lab Sample ID: 480-124284-2

Date Collected: 09/15/17 08:50 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377723	09/20/17 17:06	KMN	TAL BUF
Dissolved	Filtration	FILTRATION			377283	09/18/17 09:04	EMB	TAL BUF
Dissolved	Prep	3005A			377543	09/19/17 10:49	EMB	TAL BUF
Dissolved	Analysis	6010		1	377991	09/20/17 14:27	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C091517-CSW3 — Lab Sample ID: 480-124284-3

Date Collected: 09/15/17 09:05 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377723	09/20/17 17:30	KMN	TAL BUF
Dissolved	Filtration	FILTRATION			377283	09/18/17 09:04	EMB	TAL BUF
Dissolved	Prep	3005A			377543	09/19/17 10:49	EMB	TAL BUF
Dissolved	Analysis	6010		1	377991	09/20/17 14:44	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Client Sample ID: C091517-CSW2 — Lab Sample ID: 480-124284-4

Date Collected: 09/15/17 09:25 — **Matrix: Water**
Date Received: 09/16/17 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	377662	09/20/17 01:48	RRS	TAL BUF
Dissolved	Filtration	FILTRATION			377283	09/18/17 09:04	EMB	TAL BUF
Dissolved	Prep	3005A			377543	09/19/17 10:49	EMB	TAL BUF
Dissolved	Analysis	6010		1	377991	09/20/17 14:48	LMH	TAL BUF
Total/NA	Analysis	7196A		1	377209	09/16/17 08:15	JCL	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Calcium, Dissolved
6010	3005A	Water	Chromium, Dissolved
6010	3005A	Water	Copper, Dissolved
6010	3005A	Water	Magnesium, Dissolved
6010	3005A	Water	Potassium, Dissolved
6010	3005A	Water	Sodium, Dissolved
7196A		Water	Chromium, hexavalent
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride

Method Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Honeywell International Inc
Project/Site: September 2017 Semi Annual Ground Water

TestAmerica Job ID: 480-124284-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-124284-1	C091517-CSW5	Water	09/15/17 08:35	09/16/17 01:30
480-124284-2	C091517-CSW3A	Water	09/15/17 08:50	09/16/17 01:30
480-124284-3	C091517-CSW3	Water	09/15/17 09:05	09/16/17 01:30
480-124284-4	C091517-CSW2	Water	09/15/17 09:25	09/16/17 01:30

360325-Boston

360325-Boston

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

Sept 2017

AESI Ref: 38450.55525
COC # :
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential: N
EDD To: Mark.Maggiore @amec.com
Sampler: Amec Foster Wheeler
P O #
Site Name: Conductorlab: April 2017 Quarterly Surface Water Sampling
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Analysis Turnaround Time: 10
Standard - Y
Rush Charges Authorized for -
2 weeks - Y
1 week - N
Next Day - N

PAGE 1 of 1
Job No.

480-124284 COC

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3_7) 02-01-05
renesurgi@aol.com

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds	7196A Hexavalent Chromium	6010B Dissolved TAL metals (Lab Filtered)	SO4/Chloride/Alkalinity	Sulfide	Dissolved organic/inorganic	Lab Sample Numbers
								Preservative				1	0	2				
										Units		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	
CSW-5			C091517-CSW5	9-15-17	0835	water	SW	Reg	5	G	N	X	X	X				
CSW-3A			C091517-CSW3A	9-15-17	850	water	SW	Reg	5	G	N	X	X	X				
CSW-3			C091517-CSW3	9-15-17	905	water	SW	Reg	5	G	N	X	X	X				
CSW-2			C091517-CSW2	9-15-17	925	water	SW	Reg	5	G	N	X	X	X				

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab. Dissolved metals include: Cr,Cu,Ca,Mg,Na,K)

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
	AmecFW		FB		
	Date/Time 9-15-17 1412		Date/Time 9-15-17 1412	Cooler Temp.	
Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
			TAS		
	Date/Time 9-15-17 1800		Date/Time 9-16-17 0130	Cooler Temp.	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

2.6 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-124284-1

Login Number: 124284

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

DATA VALIDATION SUMMARY REPORT
DECEMBER 2017 SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

1.0 INTRODUCTION

Data validation was completed on samples collected during the surface water sampling event completed in December 2017. A summary of samples included in this report is presented in Table 1. Samples were reported in data package 480-129171-1. Samples were analyzed by the following Test America Laboratory (TAL):

TAL BUF- Test America Buffalo, Amherst, NY

The following U.S. Environmental Protection Agency (USEPA) SW-846 (USEPA, 1996a) analytical methods were performed:

- Volatile organic compounds (VOCs) by USEPA Method 8260C
- Dissolved Metals by USEPA Method 6010
- Hexavalent chromium by USEPA Method 7196A

Data validation was completed using Level II procedures described for Honeywell projects. Quality control (QC) data were compared to limits established for the Massachusetts Contingency Plan (MCP) in the Massachusetts Compendium of analytical methods (MassDEP, 2010). Data qualifiers were added to results if needed in accordance with general procedures described in USEPA data validation guidelines (USEPA, 1996b). A summary of QC limits used during this review is presented on Table 2.

During the Level II data validation the following data quality indicators are reviewed.

- Lab Report Narrative
- Data Completeness and Chain of Custody
- Sample Collection and Holding Times
- Blanks
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Field Duplicates
- Surrogate Spikes
- Reporting Limits
- Electronic Data Verification

Data reviews are completed using laboratory QC summary forms. Data qualifications are completed if necessary in accordance with the guidelines using the following qualifiers:

U = The target compound was not detected at a concentration greater than, or equal to, the quantitation limit.
J = The reported concentration is considered an estimated value
UJ = The target compound was not detected and the reporting limit is considered to be estimated.
R= The reported value is rejected and is considered to be unusable.

No QC issues were identified that required data validation qualification actions. A complete summary of final sample results is provided on Table 3.

2.0 DATA VALIDATION ACTIONS AND OBSERVATIONS

Quality control (QC) parameters and measurements checked during validation met requirements in the analytical method and/or validation guidelines. Unless specified below, results are interpreted to be usable as reported by the laboratory.

2.1 VOCs

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
* LCS/LCSD
* Surrogate Recoveries
* Project Reporting Limits

* - Validation checks met project and method goals.

No QC issues were identified.

2.2 Metals

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
* LCS/LCSD
* Project Reporting Limits

* - Validation checks met project and method goals.

No QC issues were identified.

2.3 General Chemistry – Hexavalent Chromium

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
* Lab Duplicate
* LCS/LCSD
* MS
* Project Reporting Limits

* - Validation checks met project and method goals.

No QC issues were identified.

References:

American Public Health Association (APHA), 2008. "Standard Methods for Examination of Water and Wastewater"; On-line Publication; APHA, 1015 Fifteenth St., NW. Washington, D.C. 20005.

Massachusetts Department of Environmental Protection (MassDEP), 2010. "The Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the Massachusetts Contingency Plan (MCP)"; Bureau of Waste Site Cleanup; 1 Winter Street, Boston, Massachusetts 02108; WSC-CAM; July 2010.

U.S. Environmental Protection Agency (USEPA), 1996a. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 -December 1996.

U.S. Environmental Protection Agency (USEPA), 1996b. "Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses"; Quality Assurance Unit Staff; Office of Environmental Measurement and Evaluation; December, 1996.

Data Validator: Sandhyasree

January 19, 2018

Senior Chemist: Chris Ricardi, NRCC-EAC

Chris Ricardi

January 22, 2018

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
DECEMBER 2017 SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

				Parameter	VOCs	Diss Metals	Cr (VI)
				Method	SW8260C	SW846 6010	SW846 7196A
SDG	Field Sample ID	Location ID	Type	Date			
480-129171-1	C121817-CSW2	CSW-2	REG	12/18/2017	71	6	1
480-129171-1	C121817-CSW3	CSW-3	REG	12/18/2017	71	6	1
480-129171-1	C121817-CSW3A	CSW-3A	REG	12/18/2017	71	6	1
480-129171-1	C121817-CSW4	CSW-4	REG	12/18/2017	71	6	1
480-129171-1	C121817-CSW5	CSW-5	REG	12/18/2017	71	6	1
480-129171-1	C121817-TRIP BLANK	QC	TB	12/18/2017	71		

Notes
QC: Quality Control
REG: Regular Sample
TB: Trip Blank

Prepared by: Sandhyasree 1/19/2018
Checked by: Lakshmi 1/19/2018

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
DECEMBER 2017 SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

PARAMETER	QC TEST	ANALYTE	WATER	
			(%R)	RPD
Volatiles	**Surrogate**	All Surrogates	70 - 130	
	LCS/LCSD	All Target Compounds	70 - 130	20
	MS/MSD	All Target Compounds	70 - 130	30
Inorganics	**LCS/LCSD**	All Target Analytes	80 - 120	
	MS/MSD	All Target Analytes	75 - 125	20
	Lab Duplicates	All Target Analytes		20

Notes:
LCS/LCSD = Laboratory Control Sample/ Laboratory Control Sample Duplicate
MS/MSD = Matrix spike/ Matrix Spike Duplicate
RPD = Relative percent difference
%R = Percent Recovery
QC = Quality Control

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
DECEMBER 2017 SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C121817-CSW2	C121817-CSW3	C121817-CSW3A	C121817-CSW4	C121817-CSW5	C121817-TRIP BLANK
		Location	CSW-2	CSW-3	CSW-3A	CSW-4	CSW-5	QC
		Sample Date	12/18/2017	12/18/2017	12/18/2017	12/18/2017	12/18/2017	12/18/2017
		Sample Delivery Group	480-129171-1	480-129171-1	480-129171-1	480-129171-1	480-129171-1	480-129171-1
Units	Method	Parameter Name						
mg/L	SW7196	Chromium, hexavalent	0.010 U	0.038	0.068	0.068	0.037	
µg/L	SW6010	Calcium, dissolved	31000	31000	31000	32000	28000	
µg/L	SW6010	Chromium, dissolved	5.0 U	47	51	51	20	
µg/L	SW6010	Copper, dissolved	2.4 J	6.3 J	4.6 J	3.0 J	6.5 J	
µg/L	SW6010	Magnesium, dissolved	2600	2500	2500	2700	2500	
µg/L	SW6010	Potassium, dissolved	3500	3500	3500	3600	3500	
µg/L	SW6010	Sodium, dissolved	28000	27000	29000	30000	38000	
µg/L	SW8260	1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1,2,2-Tetrachloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,1-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2,4-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dibromo-3-chloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3,5-Trimethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,3-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	1,4-Dioxane	50 U	50 U	50 U	50 U	50 U	50 U
µg/L	SW8260	2,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	2-Butanone (MEK)	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	2-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Prepared by:Sandhyasree 1/19/2018
Checked by: Lakshmi 1/19/2018

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
DECEMBER 2017 SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C121817-CSW2	C121817-CSW3	C121817-CSW3A	C121817-CSW4	C121817-CSW5	C121817-TRIP BLANK
		Location	CSW-2	CSW-3	CSW-3A	CSW-4	CSW-5	QC
		Sample Date	12/18/2017	12/18/2017	12/18/2017	12/18/2017	12/18/2017	12/18/2017
		Sample Delivery Group	480-129171-1	480-129171-1	480-129171-1	480-129171-1	480-129171-1	480-129171-1
Units	Method	Parameter Name						
µg/L	SW8260	2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	4-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Isopropyltoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	4-Methyl-2-pentanone (MIBK)	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Acetone	50 U	50 U	50 U	50 U	50 U	50 U
µg/L	SW8260	Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Carbon disulfide	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Carbon tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorobromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chlorodibromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	cis-1,3-Dichloropropene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Dichlorobromomethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
µg/L	SW8260	Dichlorodifluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Ethylene dibromide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Hexachlorobutadiene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Isopropyl ether	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Isopropylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	m-Xylene & p-Xylene	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
µg/L	SW8260	Methyl tert-butyl ether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Prepared by:Sandhyasree 1/19/2018
Checked by: Lakshmi 1/19/2018

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
DECEMBER 2017 SURFACE WATER SAMPLING DATA
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	C121817-CSW2	C121817-CSW3	C121817-CSW3A	C121817-CSW4	C121817-CSW5	C121817-TRIP BLANK
		Location	CSW-2	CSW-3	CSW-3A	CSW-4	CSW-5	QC
		Sample Date	12/18/2017	12/18/2017	12/18/2017	12/18/2017	12/18/2017	12/18/2017
		Sample Delivery Group	480-129171-1	480-129171-1	480-129171-1	480-129171-1	480-129171-1	480-129171-1
Units	Method	Parameter Name						
µg/L	SW8260	Methylene chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	n-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	n-Propylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Naphthalene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	o-Xylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	sec-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tert-amyl methyl ether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	Tert-butyl ethyl ether	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
µg/L	SW8260	tert-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Tetrahydrofuran	10 U	10 U	10 U	10 U	10 U	10 U
µg/L	SW8260	Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	trans-1,3-Dichloropropene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
µg/L	SW8260	Trichloroethene	1.0 U	2.8	2.9	1.5	0.57 J	1.0 U
µg/L	SW8260	Trichlorofluoromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
µg/L	SW8260	Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 1/19/2018
Checked by: Lakshmi 1/19/2018

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-129171-1
Client Project/Site: December 2017 Quarterly Surface Water
Sampling Event: Quarterly Surface Water

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Authorized for release by:
1/2/2018 3:27:36 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Qualifiers

GC/MS VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-129171-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-129171-1

Comments
No additional comments.

Receipt
The samples were received on 12/19/2017 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

GC/MS VOA
Method(s) 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for Carbon disulfide, Isopropyl ether, Naphthalene, tert-Butyl ethyl ether, tert-Amyl methyl Ether, & Tetrahydrofuran

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-393475 recovered above the upper MCP control limit but less than 40% for Carbon Tetrachloride, Vinyl Chloride, Dichlorodifluoromethane, 2,2-Dichloropropane and Trichlorofluoromethane . MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: C121817-CSW5 (480-129171-1), C121817-CSW4 (480-129171-2), C121817-CSW3A (480-129171-3), C121817-CSW3 (480-129171-4), C121817-CSW2 (480-129171-5) and C121817-TRIP BLANK (480-129171-6).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-393475 exceeded control limits for the following analyte: 2-Butanone and 2-Hexanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and n-Butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples are impacted: C121817-CSW5 (480-129171-1), C121817-CSW4 (480-129171-2), C121817-CSW3A (480-129171-3), C121817-CSW3 (480-129171-4), C121817-CSW2 (480-129171-5) and C121817-TRIP BLANK (480-129171-6).

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

Metals
Method(s) 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

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

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

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-129171-1**
Project Location:	**Groton**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-129171-1(1-5)

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:	Rjones	Position:	Project Management Assistant
Printed Name:	Rebecca Jones	Date:	1/2/18 15:18

Detection Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW5 — Lab Sample ID: 480-129171-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.57	J	1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	28000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	20		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	6.5	J	10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2500		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3500		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	38000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.037		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C121817-CSW4 — Lab Sample ID: 480-129171-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.5		1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	32000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	51		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	3.0	J	10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2700		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3600		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	30000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.068		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C121817-CSW3A — Lab Sample ID: 480-129171-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.9		1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	31000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	51		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	4.6	J	10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2500		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3500		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	29000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.068		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C121817-CSW3 — Lab Sample ID: 480-129171-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.8		1.0	0.46	ug/L	1		8260C	Total/NA
Calcium, Dissolved	31000		500	100	ug/L	1		6010	Dissolved
Chromium, Dissolved	47		5.0	1.0	ug/L	1		6010	Dissolved
Copper, Dissolved	6.3	J	10	1.6	ug/L	1		6010	Dissolved
Magnesium, Dissolved	2500		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3500		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	27000		1000	320	ug/L	1		6010	Dissolved
Chromium, hexavalent	0.038		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: C121817-CSW2 — Lab Sample ID: 480-129171-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium, Dissolved	31000		500	100	ug/L	1		6010	Dissolved
Copper, Dissolved	2.4	J	10	1.6	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW2 (Continued) — Lab Sample ID: 480-129171-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium, Dissolved	2600		200	43	ug/L	1		6010	Dissolved
Potassium, Dissolved	3500		500	100	ug/L	1		6010	Dissolved
Sodium, Dissolved	28000		1000	320	ug/L	1		6010	Dissolved

Client Sample ID: C121817-TRIP BLANK — Lab Sample ID: 480-129171-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: C121817-CSW5

Lab Sample ID: 480-129171-1

Date Collected: 12/18/17 11:05

Matrix: Water

Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 11:40	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 11:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 11:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 11:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 11:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 11:40	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 11:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 11:40	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 11:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 11:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 11:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 11:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 11:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 11:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 11:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 11:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 11:40	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 11:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 11:40	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 11:40	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 11:40	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			12/26/17 11:40	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 11:40	1
2-Hexanone	ND	*	10	1.2	ug/L			12/26/17 11:40	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 11:40	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 11:40	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 11:40	1
Acetone	ND		50	3.0	ug/L			12/26/17 11:40	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 11:40	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 11:40	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 11:40	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 11:40	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 11:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 11:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 11:40	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 11:40	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 11:40	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 11:40	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 11:40	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 11:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 11:40	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 11:40	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 11:40	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 11:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 11:40	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 11:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 11:40	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 11:40	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 11:40	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW5

Date Collected: 12/18/17 11:05
Date Received: 12/19/17 01:00

Lab Sample ID: 480-129171-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 11:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 11:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 11:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 11:40	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 11:40	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 11:40	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 11:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 11:40	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 11:40	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 11:40	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 11:40	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 11:40	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 11:40	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 11:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 11:40	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 11:40	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 11:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 11:40	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 11:40	1
Trichloroethene	**0.57**	**J**	1.0	0.46	ug/L			12/26/17 11:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 11:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*12/26/17 11:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*12/26/17 11:40*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/26/17 11:40*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*12/26/17 11:40*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**28000**		500	100	ug/L		12/26/17 14:05	12/28/17 14:27	1
Chromium, Dissolved	**20**		5.0	1.0	ug/L		12/26/17 14:05	12/28/17 14:27	1
Copper, Dissolved	**6.5**	**J**	10	1.6	ug/L		12/26/17 14:05	12/28/17 14:27	1
Magnesium, Dissolved	**2500**		200	43	ug/L		12/26/17 14:05	12/28/17 14:27	1
Potassium, Dissolved	**3500**		500	100	ug/L		12/26/17 14:05	12/28/17 14:27	1
Sodium, Dissolved	**38000**		1000	320	ug/L		12/26/17 14:05	12/28/17 14:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.037**		0.010	0.0050	mg/L			12/19/17 04:48	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW4

Lab Sample ID: 480-129171-2

Date Collected: 12/18/17 11:30

Matrix: Water

Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 12:05	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 12:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 12:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 12:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 12:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 12:05	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 12:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 12:05	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 12:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 12:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 12:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 12:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 12:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 12:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 12:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 12:05	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 12:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 12:05	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 12:05	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 12:05	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			12/26/17 12:05	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 12:05	1
2-Hexanone	ND	*	10	1.2	ug/L			12/26/17 12:05	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 12:05	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 12:05	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 12:05	1
Acetone	ND		50	3.0	ug/L			12/26/17 12:05	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 12:05	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 12:05	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 12:05	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 12:05	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 12:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 12:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 12:05	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 12:05	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 12:05	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 12:05	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 12:05	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 12:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 12:05	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 12:05	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 12:05	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 12:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 12:05	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 12:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 12:05	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 12:05	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 12:05	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW4

Date Collected: 12/18/17 11:30
Date Received: 12/19/17 01:00

Lab Sample ID: 480-129171-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 12:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 12:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 12:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 12:05	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 12:05	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 12:05	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 12:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 12:05	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 12:05	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 12:05	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 12:05	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 12:05	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 12:05	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 12:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 12:05	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 12:05	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 12:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 12:05	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 12:05	1
Trichloroethene	**1.5**		1.0	0.46	ug/L			12/26/17 12:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 12:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*12/26/17 12:05*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*12/26/17 12:05*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/26/17 12:05*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*12/26/17 12:05*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**32000**		500	100	ug/L		12/26/17 14:05	12/28/17 14:30	1
Chromium, Dissolved	**51**		5.0	1.0	ug/L		12/26/17 14:05	12/28/17 14:30	1
Copper, Dissolved	**3.0**	**J**	10	1.6	ug/L		12/26/17 14:05	12/28/17 14:30	1
Magnesium, Dissolved	**2700**		200	43	ug/L		12/26/17 14:05	12/28/17 14:30	1
Potassium, Dissolved	**3600**		500	100	ug/L		12/26/17 14:05	12/28/17 14:30	1
Sodium, Dissolved	**30000**		1000	320	ug/L		12/26/17 14:05	12/28/17 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.068**		0.010	0.0050	mg/L			12/19/17 04:48	1

Client Sample ID: C121817-CSW3A

Lab Sample ID: 480-129171-3

Date Collected: 12/18/17 11:50

Matrix: Water

Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 12:30	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 12:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 12:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 12:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 12:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 12:30	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 12:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 12:30	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 12:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 12:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 12:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 12:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 12:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 12:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 12:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 12:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 12:30	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 12:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 12:30	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 12:30	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 12:30	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			12/26/17 12:30	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 12:30	1
2-Hexanone	ND	*	10	1.2	ug/L			12/26/17 12:30	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 12:30	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 12:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 12:30	1
Acetone	ND		50	3.0	ug/L			12/26/17 12:30	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 12:30	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 12:30	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 12:30	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 12:30	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 12:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 12:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 12:30	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 12:30	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 12:30	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 12:30	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 12:30	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 12:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 12:30	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 12:30	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 12:30	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 12:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 12:30	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 12:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 12:30	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 12:30	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 12:30	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW3A

Date Collected: 12/18/17 11:50
Date Received: 12/19/17 01:00

Lab Sample ID: 480-129171-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 12:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 12:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 12:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 12:30	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 12:30	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 12:30	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 12:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 12:30	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 12:30	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 12:30	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 12:30	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 12:30	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 12:30	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 12:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 12:30	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 12:30	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 12:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 12:30	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 12:30	1
Trichloroethene	**2.9**		1.0	0.46	ug/L			12/26/17 12:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 12:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*12/26/17 12:30*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*12/26/17 12:30*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/26/17 12:30*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*12/26/17 12:30*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**31000**		500	100	ug/L		12/26/17 14:05	12/28/17 14:34	1
Chromium, Dissolved	**51**		5.0	1.0	ug/L		12/26/17 14:05	12/28/17 14:34	1
Copper, Dissolved	**4.6**	**J**	10	1.6	ug/L		12/26/17 14:05	12/28/17 14:34	1
Magnesium, Dissolved	**2500**		200	43	ug/L		12/26/17 14:05	12/28/17 14:34	1
Potassium, Dissolved	**3500**		500	100	ug/L		12/26/17 14:05	12/28/17 14:34	1
Sodium, Dissolved	**29000**		1000	320	ug/L		12/26/17 14:05	12/28/17 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.068**		0.010	0.0050	mg/L			12/19/17 04:48	1

Client Sample ID: C121817-CSW3

Lab Sample ID: 480-129171-4

Date Collected: 12/18/17 12:15

Matrix: Water

Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 12:56	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 12:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 12:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 12:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 12:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 12:56	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 12:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 12:56	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 12:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 12:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 12:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 12:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 12:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 12:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 12:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 12:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 12:56	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 12:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 12:56	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 12:56	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 12:56	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			12/26/17 12:56	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 12:56	1
2-Hexanone	ND	*	10	1.2	ug/L			12/26/17 12:56	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 12:56	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 12:56	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 12:56	1
Acetone	ND		50	3.0	ug/L			12/26/17 12:56	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 12:56	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 12:56	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 12:56	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 12:56	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 12:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 12:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 12:56	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 12:56	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 12:56	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 12:56	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 12:56	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 12:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 12:56	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 12:56	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 12:56	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 12:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 12:56	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 12:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 12:56	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 12:56	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 12:56	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW3

Date Collected: 12/18/17 12:15
Date Received: 12/19/17 01:00

Lab Sample ID: 480-129171-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 12:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 12:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 12:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 12:56	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 12:56	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 12:56	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 12:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 12:56	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 12:56	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 12:56	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 12:56	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 12:56	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 12:56	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 12:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 12:56	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 12:56	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 12:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 12:56	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 12:56	1
Trichloroethene	**2.8**		1.0	0.46	ug/L			12/26/17 12:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 12:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*12/26/17 12:56*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*12/26/17 12:56*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/26/17 12:56*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*12/26/17 12:56*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**31000**		500	100	ug/L		12/26/17 14:05	12/28/17 14:37	1
Chromium, Dissolved	**47**		5.0	1.0	ug/L		12/26/17 14:05	12/28/17 14:37	1
Copper, Dissolved	**6.3**	**J**	10	1.6	ug/L		12/26/17 14:05	12/28/17 14:37	1
Magnesium, Dissolved	**2500**		200	43	ug/L		12/26/17 14:05	12/28/17 14:37	1
Potassium, Dissolved	**3500**		500	100	ug/L		12/26/17 14:05	12/28/17 14:37	1
Sodium, Dissolved	**27000**		1000	320	ug/L		12/26/17 14:05	12/28/17 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**0.038**		0.010	0.0050	mg/L			12/19/17 04:48	1

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW2
Date Collected: 12/18/17 12:30
Date Received: 12/19/17 01:00

Lab Sample ID: 480-129171-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 13:21	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 13:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 13:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 13:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 13:21	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 13:21	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 13:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 13:21	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 13:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 13:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 13:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 13:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 13:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 13:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 13:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 13:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 13:21	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 13:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 13:21	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 13:21	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 13:21	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			12/26/17 13:21	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 13:21	1
2-Hexanone	ND	*	10	1.2	ug/L			12/26/17 13:21	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 13:21	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 13:21	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 13:21	1
Acetone	ND		50	3.0	ug/L			12/26/17 13:21	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 13:21	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 13:21	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 13:21	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 13:21	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 13:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 13:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 13:21	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 13:21	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 13:21	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 13:21	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 13:21	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 13:21	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 13:21	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 13:21	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 13:21	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 13:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 13:21	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 13:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 13:21	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 13:21	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 13:21	1

Client Sample ID: C121817-CSW2

Lab Sample ID: 480-129171-5

Date Collected: 12/18/17 12:30

Matrix: Water

Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 13:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 13:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 13:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 13:21	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 13:21	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 13:21	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 13:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 13:21	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 13:21	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 13:21	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 13:21	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 13:21	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 13:21	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 13:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 13:21	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 13:21	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 13:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 13:21	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 13:21	1
Trichloroethene	ND		1.0	0.46	ug/L			12/26/17 13:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 13:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*12/26/17 13:21*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*12/26/17 13:21*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/26/17 13:21*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*12/26/17 13:21*	*1*

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**31000**		500	100	ug/L		12/26/17 14:05	12/28/17 14:51	1
Chromium, Dissolved	ND		5.0	1.0	ug/L		12/26/17 14:05	12/28/17 14:51	1
Copper, Dissolved	**2.4**	**J**	10	1.6	ug/L		12/26/17 14:05	12/28/17 14:51	1
Magnesium, Dissolved	**2600**		200	43	ug/L		12/26/17 14:05	12/28/17 14:51	1
Potassium, Dissolved	**3500**		500	100	ug/L		12/26/17 14:05	12/28/17 14:51	1
Sodium, Dissolved	**28000**		1000	320	ug/L		12/26/17 14:05	12/28/17 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			12/19/17 04:48	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-TRIP BLANK

Lab Sample ID: 480-129171-6

Date Collected: 12/18/17 12:40
Matrix: Water
Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 13:47	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 13:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 13:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 13:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 13:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 13:47	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 13:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 13:47	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 13:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 13:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 13:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 13:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 13:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 13:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 13:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 13:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 13:47	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 13:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 13:47	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 13:47	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 13:47	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			12/26/17 13:47	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 13:47	1
2-Hexanone	ND	*	10	1.2	ug/L			12/26/17 13:47	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 13:47	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 13:47	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 13:47	1
Acetone	ND		50	3.0	ug/L			12/26/17 13:47	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 13:47	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 13:47	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 13:47	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 13:47	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 13:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 13:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 13:47	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 13:47	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 13:47	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 13:47	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 13:47	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 13:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 13:47	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 13:47	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 13:47	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 13:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 13:47	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 13:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 13:47	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 13:47	1
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 13:47	1

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-TRIP BLANK

Lab Sample ID: 480-129171-6

Date Collected: 12/18/17 12:40
Matrix: Water
Date Received: 12/19/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 13:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 13:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 13:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 13:47	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 13:47	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 13:47	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 13:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 13:47	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 13:47	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 13:47	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 13:47	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 13:47	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 13:47	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 13:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 13:47	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 13:47	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 13:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 13:47	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 13:47	1
Trichloroethene	ND		1.0	0.46	ug/L			12/26/17 13:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 13:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*12/26/17 13:47*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*12/26/17 13:47*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/26/17 13:47*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*12/26/17 13:47*	*1*

Surrogate Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-129171-1	C121817-CSW5	95	105	99	99
480-129171-2	C121817-CSW4	95	104	98	98
480-129171-3	C121817-CSW3A	97	104	100	99
480-129171-4	C121817-CSW3	99	102	99	100
480-129171-5	C121817-CSW2	95	102	99	99
480-129171-6	C121817-TRIP BLANK	96	103	99	99
LCS 480-393475/5	Lab Control Sample	96	105	98	91
LCSD 480-393475/6	Lab Control Sample Dup	98	105	100	95
MB 480-393475/8	Method Blank	97	105	99	98

Surrogate Legend

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

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

Lab Sample ID: MB 480-393475/8
Matrix: Water
Analysis Batch: 393475

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/26/17 11:03	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/26/17 11:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.21	ug/L			12/26/17 11:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/26/17 11:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/26/17 11:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/26/17 11:03	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			12/26/17 11:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 11:03	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			12/26/17 11:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/26/17 11:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/26/17 11:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.39	ug/L			12/26/17 11:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/26/17 11:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/26/17 11:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/26/17 11:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/26/17 11:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/26/17 11:03	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			12/26/17 11:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/26/17 11:03	1
1,4-Dioxane	ND		50	9.3	ug/L			12/26/17 11:03	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			12/26/17 11:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/26/17 11:03	1
2-Chlorotoluene	ND		1.0	0.86	ug/L			12/26/17 11:03	1
2-Hexanone	ND		10	1.2	ug/L			12/26/17 11:03	1
4-Chlorotoluene	ND		1.0	0.84	ug/L			12/26/17 11:03	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			12/26/17 11:03	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			12/26/17 11:03	1
Acetone	ND		50	3.0	ug/L			12/26/17 11:03	1
Benzene	ND		1.0	0.41	ug/L			12/26/17 11:03	1
Bromobenzene	ND		1.0	0.80	ug/L			12/26/17 11:03	1
Bromoform	ND		1.0	0.26	ug/L			12/26/17 11:03	1
Bromomethane	ND		2.0	0.69	ug/L			12/26/17 11:03	1
Carbon disulfide	ND		10	0.19	ug/L			12/26/17 11:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/26/17 11:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/26/17 11:03	1
Chlorobromomethane	ND		1.0	0.87	ug/L			12/26/17 11:03	1
Chlorodibromomethane	ND		0.50	0.32	ug/L			12/26/17 11:03	1
Chloroethane	ND		2.0	0.32	ug/L			12/26/17 11:03	1
Chloroform	ND		1.0	0.34	ug/L			12/26/17 11:03	1
Chloromethane	ND		2.0	0.35	ug/L			12/26/17 11:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/26/17 11:03	1
cis-1,3-Dichloropropene	ND		0.40	0.36	ug/L			12/26/17 11:03	1
Dibromomethane	ND		1.0	0.41	ug/L			12/26/17 11:03	1
Dichlorobromomethane	ND		0.50	0.39	ug/L			12/26/17 11:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/26/17 11:03	1
Ethyl ether	ND		1.0	0.72	ug/L			12/26/17 11:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/26/17 11:03	1
Ethylene Dibromide	ND		1.0	0.73	ug/L			12/26/17 11:03	1

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

Lab Sample ID: MB 480-393475/8
Matrix: Water
Analysis Batch: 393475

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.40	0.28	ug/L			12/26/17 11:03	1
Isopropyl ether	ND		10	0.59	ug/L			12/26/17 11:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/26/17 11:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/26/17 11:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/26/17 11:03	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			12/26/17 11:03	1
Naphthalene	ND		5.0	0.43	ug/L			12/26/17 11:03	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/26/17 11:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/26/17 11:03	1
o-Xylene	ND		1.0	0.76	ug/L			12/26/17 11:03	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/26/17 11:03	1
Styrene	ND		1.0	0.73	ug/L			12/26/17 11:03	1
Tert-amyl methyl ether	ND		5.0	0.27	ug/L			12/26/17 11:03	1
Tert-butyl ethyl ether	ND		5.0	0.29	ug/L			12/26/17 11:03	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/26/17 11:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/26/17 11:03	1
Tetrahydrofuran	ND		10	1.3	ug/L			12/26/17 11:03	1
Toluene	ND		1.0	0.51	ug/L			12/26/17 11:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/26/17 11:03	1
trans-1,3-Dichloropropene	ND		0.40	0.37	ug/L			12/26/17 11:03	1
Trichloroethene	ND		1.0	0.46	ug/L			12/26/17 11:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/26/17 11:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/26/17 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*12/26/17 11:03*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*12/26/17 11:03*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/26/17 11:03*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*12/26/17 11:03*	*1*

Lab Sample ID: LCS 480-393475/5
Matrix: Water
Analysis Batch: 393475

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.4		ug/L		102	70 - 130
1,1,1-Trichloroethane	25.0	24.8		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	70 - 130
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	70 - 130
1,1-Dichloroethane	25.0	23.5		ug/L		94	70 - 130
1,1-Dichloroethene	25.0	23.0		ug/L		92	70 - 130
1,1-Dichloropropene	25.0	24.1		ug/L		97	70 - 130
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	70 - 130
1,2,4-Trichlorobenzene	25.0	25.6		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	25.0	25.4		ug/L		102	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	21.3		ug/L		85	70 - 130
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130

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

Lab Sample ID: LCS 480-393475/5
Matrix: Water
Analysis Batch: 393475

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	23.1		ug/L		92	70 - 130
1,2-Dichloropropane	25.0	23.6		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	25.0	25.0		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130
1,3-Dichloropropane	25.0	24.9		ug/L		100	70 - 130
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130
1,4-Dioxane	500	463		ug/L		93	70 - 130
2,2-Dichloropropane	25.0	24.9		ug/L		100	70 - 130
2-Butanone (MEK)	125	201	*	ug/L		161	70 - 130
2-Chlorotoluene	25.0	27.5		ug/L		110	70 - 130
2-Hexanone	125	175	*	ug/L		140	70 - 130
4-Chlorotoluene	25.0	25.5		ug/L		102	70 - 130
4-Isopropyltoluene	25.0	25.8		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	125	119		ug/L		96	70 - 130
Acetone	125	116		ug/L		93	70 - 130
Benzene	25.0	23.4		ug/L		94	70 - 130
Bromobenzene	25.0	25.2		ug/L		101	70 - 130
Bromoform	25.0	27.0		ug/L		108	70 - 130
Bromomethane	25.0	24.1		ug/L		96	70 - 130
Carbon disulfide	25.0	23.2		ug/L		93	70 - 130
Carbon tetrachloride	25.0	25.2		ug/L		101	70 - 130
Chlorobenzene	25.0	25.5		ug/L		102	70 - 130
Chlorobromomethane	25.0	23.8		ug/L		95	70 - 130
Chlorodibromomethane	25.0	25.8		ug/L		103	70 - 130
Chloroethane	25.0	23.5		ug/L		94	70 - 130
Chloroform	25.0	23.1		ug/L		92	70 - 130
Chloromethane	25.0	24.2		ug/L		97	70 - 130
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 130
cis-1,3-Dichloropropene	25.0	24.4		ug/L		98	70 - 130
Dibromomethane	25.0	23.7		ug/L		95	70 - 130
Dichlorobromomethane	25.0	24.0		ug/L		96	70 - 130
Dichlorodifluoromethane	25.0	27.6		ug/L		110	70 - 130
Ethyl ether	25.0	23.5		ug/L		94	70 - 130
Ethylbenzene	25.0	25.5		ug/L		102	70 - 130
Ethylene Dibromide	25.0	24.2		ug/L		97	70 - 130
Hexachlorobutadiene	25.0	26.3		ug/L		105	70 - 130
Isopropyl ether	25.0	25.7		ug/L		103	70 - 130
Isopropylbenzene	25.0	25.2		ug/L		101	70 - 130
Methyl tert-butyl ether	25.0	23.3		ug/L		93	70 - 130
Methylene Chloride	25.0	22.0		ug/L		88	70 - 130
m-Xylene & p-Xylene	25.0	25.2		ug/L		101	70 - 130
Naphthalene	25.0	24.6		ug/L		98	70 - 130
n-Butylbenzene	25.0	25.6		ug/L		102	70 - 130
N-Propylbenzene	25.0	25.3		ug/L		101	70 - 130
o-Xylene	25.0	25.9		ug/L		104	70 - 130
sec-Butylbenzene	25.0	25.4		ug/L		101	70 - 130
Styrene	25.0	25.6		ug/L		102	70 - 130
Tert-amyl methyl ether	25.0	25.4		ug/L		101	70 - 130

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

Lab Sample ID: LCS 480-393475/5
Matrix: Water
Analysis Batch: 393475

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	25.0	25.5		ug/L		102	70 - 130
tert-Butylbenzene	25.0	25.1		ug/L		100	70 - 130
Tetrachloroethene	25.0	28.6		ug/L		114	70 - 130
Tetrahydrofuran	50.0	42.7		ug/L		85	70 - 130
Toluene	25.0	25.7		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	22.8		ug/L		91	70 - 130
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	70 - 130
Trichloroethene	25.0	24.1		ug/L		96	70 - 130
Trichlorofluoromethane	25.0	24.9		ug/L		99	70 - 130
Vinyl chloride	25.0	25.2		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 480-393475/6
Matrix: Water
Analysis Batch: 393475

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.3		ug/L		109	70 - 130	7	20
1,1,1-Trichloroethane	25.0	27.6		ug/L		111	70 - 130	11	20
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 130	5	20
1,1,2-Trichloroethane	25.0	25.5		ug/L		102	70 - 130	4	20
1,1-Dichloroethane	25.0	25.8		ug/L		103	70 - 130	9	20
1,1-Dichloroethene	25.0	26.1		ug/L		105	70 - 130	13	20
1,1-Dichloropropene	25.0	27.2		ug/L		109	70 - 130	12	20
1,2,3-Trichlorobenzene	25.0	26.8		ug/L		107	70 - 130	5	20
1,2,3-Trichloropropane	25.0	24.3		ug/L		97	70 - 130	6	20
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		108	70 - 130	5	20
1,2,4-Trimethylbenzene	25.0	27.3		ug/L		109	70 - 130	7	20
1,2-Dibromo-3-Chloropropane	25.0	22.2		ug/L		89	70 - 130	4	20
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	70 - 130	5	20
1,2-Dichloroethane	25.0	24.2		ug/L		97	70 - 130	5	20
1,2-Dichloropropane	25.0	25.3		ug/L		101	70 - 130	7	20
1,3,5-Trimethylbenzene	25.0	27.1		ug/L		108	70 - 130	8	20
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	70 - 130	6	20
1,3-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	3	20
1,4-Dichlorobenzene	25.0	26.9		ug/L		108	70 - 130	6	20
1,4-Dioxane	500	496		ug/L		99	70 - 130	7	20
2,2-Dichloropropane	25.0	27.5		ug/L		110	70 - 130	10	20
2-Butanone (MEK)	125	206	*	ug/L		164	70 - 130	2	20
2-Chlorotoluene	25.0	30.1		ug/L		121	70 - 130	9	20
2-Hexanone	125	180	*	ug/L		144	70 - 130	3	20
4-Chlorotoluene	25.0	27.1		ug/L		108	70 - 130	6	20
4-Isopropyltoluene	25.0	28.4		ug/L		114	70 - 130	10	20

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

Lab Sample ID: LCSD 480-393475/6
Matrix: Water
Analysis Batch: 393475

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	125	121		ug/L		97	70 - 130	1	20
Acetone	125	118		ug/L		94	70 - 130	1	20
Benzene	25.0	25.6		ug/L		102	70 - 130	9	20
Bromobenzene	25.0	26.6		ug/L		106	70 - 130	6	20
Bromoform	25.0	27.7		ug/L		111	70 - 130	3	20
Bromomethane	25.0	26.6		ug/L		106	70 - 130	10	20
Carbon disulfide	25.0	26.3		ug/L		105	70 - 130	12	20
Carbon tetrachloride	25.0	28.3		ug/L		113	70 - 130	11	20
Chlorobenzene	25.0	27.3		ug/L		109	70 - 130	7	20
Chlorobromomethane	25.0	24.8		ug/L		99	70 - 130	4	20
Chlorodibromomethane	25.0	27.2		ug/L		109	70 - 130	5	20
Chloroethane	25.0	26.4		ug/L		106	70 - 130	12	20
Chloroform	25.0	25.0		ug/L		100	70 - 130	8	20
Chloromethane	25.0	26.9		ug/L		108	70 - 130	10	20
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130	8	20
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	70 - 130	4	20
Dibromomethane	25.0	24.5		ug/L		98	70 - 130	3	20
Dichlorobromomethane	25.0	25.8		ug/L		103	70 - 130	7	20
Dichlorodifluoromethane	25.0	31.5		ug/L		126	70 - 130	13	20
Ethyl ether	25.0	24.6		ug/L		99	70 - 130	5	20
Ethylbenzene	25.0	27.5		ug/L		110	70 - 130	7	20
Ethylene Dibromide	25.0	25.3		ug/L		101	70 - 130	4	20
Hexachlorobutadiene	25.0	28.9		ug/L		116	70 - 130	10	20
Isopropyl ether	25.0	27.0		ug/L		108	70 - 130	5	20
Isopropylbenzene	25.0	27.4		ug/L		110	70 - 130	8	20
Methyl tert-butyl ether	25.0	24.2		ug/L		97	70 - 130	4	20
Methylene Chloride	25.0	23.7		ug/L		95	70 - 130	7	20
m-Xylene & p-Xylene	25.0	27.5		ug/L		110	70 - 130	9	20
Naphthalene	25.0	25.1		ug/L		101	70 - 130	2	20
n-Butylbenzene	25.0	28.0		ug/L		112	70 - 130	9	20
N-Propylbenzene	25.0	27.6		ug/L		110	70 - 130	9	20
o-Xylene	25.0	27.8		ug/L		111	70 - 130	7	20
sec-Butylbenzene	25.0	28.1		ug/L		112	70 - 130	10	20
Styrene	25.0	27.4		ug/L		110	70 - 130	7	20
Tert-amyl methyl ether	25.0	26.4		ug/L		106	70 - 130	4	20
Tert-butyl ethyl ether	25.0	26.7		ug/L		107	70 - 130	5	20
tert-Butylbenzene	25.0	27.4		ug/L		110	70 - 130	9	20
Tetrachloroethene	25.0	31.2		ug/L		125	70 - 130	9	20
Tetrahydrofuran	50.0	44.2		ug/L		88	70 - 130	4	20
Toluene	25.0	27.7		ug/L		111	70 - 130	8	20
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	70 - 130	11	20
trans-1,3-Dichloropropene	25.0	26.5		ug/L		106	70 - 130	4	20
Trichloroethene	25.0	26.8		ug/L		107	70 - 130	11	20
Trichlorofluoromethane	25.0	28.1		ug/L		113	70 - 130	12	20
Vinyl chloride	25.0	28.4		ug/L		114	70 - 130	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: LCSD 480-393475/6
Matrix: Water
Analysis Batch: 393475

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-393328/1-B
Matrix: Water
Analysis Batch: 394054

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 393557

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	ND		500	100	ug/L		12/26/17 14:05	12/28/17 14:20	1
Chromium, Dissolved	ND		5.0	1.0	ug/L		12/26/17 14:05	12/28/17 14:20	1
Copper, Dissolved	ND		10	1.6	ug/L		12/26/17 14:05	12/28/17 14:20	1
Magnesium, Dissolved	ND		200	43	ug/L		12/26/17 14:05	12/28/17 14:20	1
Potassium, Dissolved	ND		500	100	ug/L		12/26/17 14:05	12/28/17 14:20	1
Sodium, Dissolved	ND		1000	320	ug/L		12/26/17 14:05	12/28/17 14:20	1

Lab Sample ID: LCS 480-393328/2-B
Matrix: Water
Analysis Batch: 394054

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 393557

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium, Dissolved	10000	10400		ug/L		104	80 - 120
Chromium, Dissolved	200	208		ug/L		104	80 - 120
Copper, Dissolved	200	212		ug/L		106	80 - 120
Magnesium, Dissolved	10000	10700		ug/L		107	80 - 120
Potassium, Dissolved	10000	10100		ug/L		101	80 - 120
Sodium, Dissolved	10000	9650		ug/L		96	80 - 120

Lab Sample ID: LCSD 480-393328/3-B
Matrix: Water
Analysis Batch: 394054

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 393557

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium, Dissolved	10000	10300		ug/L		103	80 - 120	0	20
Chromium, Dissolved	200	209		ug/L		104	80 - 120	0	20
Copper, Dissolved	200	212		ug/L		106	80 - 120	0	20
Magnesium, Dissolved	10000	10700		ug/L		107	80 - 120	0	20
Potassium, Dissolved	10000	10200		ug/L		102	80 - 120	1	20
Sodium, Dissolved	10000	9750		ug/L		97	80 - 120	1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-392651/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			12/19/17 04:48	1

Lab Sample ID: MB 480-392651/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010	0.0050	mg/L			12/19/17 04:48	1

Lab Sample ID: LCS 480-392651/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.201		mg/L		101	80 - 120

Lab Sample ID: LCS 480-392651/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.199		mg/L		99	80 - 120

Lab Sample ID: LCSD 480-392651/29 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.200	0.201		mg/L		101	80 - 120	0	20

Lab Sample ID: LCSD 480-392651/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.200	0.210		mg/L		105	80 - 120	5	20

Lab Sample ID: 480-129171-1 MS — **Client Sample ID: C121817-CSW5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.037		0.200	0.215		mg/L		89	75 - 125

Lab Sample ID: 480-129171-3 MS — **Client Sample ID: C121817-CSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.068		0.200	0.250		mg/L		91	75 - 125

QC Sample Results

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Lab Sample ID: 480-129171-5 MS — **Client Sample ID: C121817-CSW2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent	ND		0.200	0.183		mg/L		92	75 - 125		

Lab Sample ID: 480-129171-1 DU — **Client Sample ID: C121817-CSW5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	0.037			0.0333		mg/L				10	20

Lab Sample ID: 480-129171-2 DU — **Client Sample ID: C121817-CSW4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	0.068			0.0587		mg/L				15	20

Lab Sample ID: 480-129171-3 DU — **Client Sample ID: C121817-CSW3A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	0.068			0.0672		mg/L				2	20

Lab Sample ID: 480-129171-4 DU — **Client Sample ID: C121817-CSW3**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	0.038			0.0442		mg/L				15	20

Lab Sample ID: 480-129171-5 DU — **Client Sample ID: C121817-CSW2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 392651

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium, hexavalent	ND			ND		mg/L				NC	20

QC Association Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

GC/MS VOA

Analysis Batch: 393475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-129171-1	C121817-CSW5	Total/NA	Water	8260C	
480-129171-2	C121817-CSW4	Total/NA	Water	8260C	
480-129171-3	C121817-CSW3A	Total/NA	Water	8260C	
480-129171-4	C121817-CSW3	Total/NA	Water	8260C	
480-129171-5	C121817-CSW2	Total/NA	Water	8260C	
480-129171-6	C121817-TRIP BLANK	Total/NA	Water	8260C	
MB 480-393475/8	Method Blank	Total/NA	Water	8260C	
LCS 480-393475/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-393475/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Filtration Batch: 393328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-129171-1	C121817-CSW5	Dissolved	Water	FILTRATION	
480-129171-2	C121817-CSW4	Dissolved	Water	FILTRATION	
480-129171-3	C121817-CSW3A	Dissolved	Water	FILTRATION	
480-129171-4	C121817-CSW3	Dissolved	Water	FILTRATION	
480-129171-5	C121817-CSW2	Dissolved	Water	FILTRATION	
MB 480-393328/1-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 480-393328/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-393328/3-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	

Prep Batch: 393557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-129171-1	C121817-CSW5	Dissolved	Water	3005A	393328
480-129171-2	C121817-CSW4	Dissolved	Water	3005A	393328
480-129171-3	C121817-CSW3A	Dissolved	Water	3005A	393328
480-129171-4	C121817-CSW3	Dissolved	Water	3005A	393328
480-129171-5	C121817-CSW2	Dissolved	Water	3005A	393328
MB 480-393328/1-B	Method Blank	Dissolved	Water	3005A	393328
LCS 480-393328/2-B	Lab Control Sample	Dissolved	Water	3005A	393328
LCSD 480-393328/3-B	Lab Control Sample Dup	Dissolved	Water	3005A	393328

Analysis Batch: 394054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-129171-1	C121817-CSW5	Dissolved	Water	6010	393557
480-129171-2	C121817-CSW4	Dissolved	Water	6010	393557
480-129171-3	C121817-CSW3A	Dissolved	Water	6010	393557
480-129171-4	C121817-CSW3	Dissolved	Water	6010	393557
480-129171-5	C121817-CSW2	Dissolved	Water	6010	393557
MB 480-393328/1-B	Method Blank	Dissolved	Water	6010	393557
LCS 480-393328/2-B	Lab Control Sample	Dissolved	Water	6010	393557
LCSD 480-393328/3-B	Lab Control Sample Dup	Dissolved	Water	6010	393557

General Chemistry

Analysis Batch: 392651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-129171-1	C121817-CSW5	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 392651 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-129171-2	C121817-CSW4	Total/NA	Water	7196A	
480-129171-3	C121817-CSW3A	Total/NA	Water	7196A	
480-129171-4	C121817-CSW3	Total/NA	Water	7196A	
480-129171-5	C121817-CSW2	Total/NA	Water	7196A	
MB 480-392651/27	Method Blank	Total/NA	Water	7196A	
MB 480-392651/3	Method Blank	Total/NA	Water	7196A	
LCS 480-392651/28	Lab Control Sample	Total/NA	Water	7196A	
LCS 480-392651/4	Lab Control Sample	Total/NA	Water	7196A	
LCSD 480-392651/29	Lab Control Sample Dup	Total/NA	Water	7196A	
LCSD 480-392651/5	Lab Control Sample Dup	Total/NA	Water	7196A	
480-129171-1 MS	C121817-CSW5	Total/NA	Water	7196A	
480-129171-3 MS	C121817-CSW3A	Total/NA	Water	7196A	
480-129171-5 MS	C121817-CSW2	Total/NA	Water	7196A	
480-129171-1 DU	C121817-CSW5	Total/NA	Water	7196A	
480-129171-2 DU	C121817-CSW4	Total/NA	Water	7196A	
480-129171-3 DU	C121817-CSW3A	Total/NA	Water	7196A	
480-129171-4 DU	C121817-CSW3	Total/NA	Water	7196A	
480-129171-5 DU	C121817-CSW2	Total/NA	Water	7196A	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW5 — Lab Sample ID: 480-129171-1

Date Collected: 12/18/17 11:05 — **Matrix: Water**
Date Received: 12/19/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	393475	12/26/17 11:40	LCH	TAL BUF
Dissolved	Filtration	FILTRATION			393328	12/22/17 11:03	EMB	TAL BUF
Dissolved	Prep	3005A			393557	12/26/17 14:05	MJW	TAL BUF
Dissolved	Analysis	6010		1	394054	12/28/17 14:27	LMH	TAL BUF
Total/NA	Analysis	7196A		1	392651	12/19/17 04:48	KMB	TAL BUF

Client Sample ID: C121817-CSW4 — Lab Sample ID: 480-129171-2

Date Collected: 12/18/17 11:30 — **Matrix: Water**
Date Received: 12/19/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	393475	12/26/17 12:05	LCH	TAL BUF
Dissolved	Filtration	FILTRATION			393328	12/22/17 11:03	EMB	TAL BUF
Dissolved	Prep	3005A			393557	12/26/17 14:05	MJW	TAL BUF
Dissolved	Analysis	6010		1	394054	12/28/17 14:30	LMH	TAL BUF
Total/NA	Analysis	7196A		1	392651	12/19/17 04:48	KMB	TAL BUF

Client Sample ID: C121817-CSW3A — Lab Sample ID: 480-129171-3

Date Collected: 12/18/17 11:50 — **Matrix: Water**
Date Received: 12/19/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	393475	12/26/17 12:30	LCH	TAL BUF
Dissolved	Filtration	FILTRATION			393328	12/22/17 11:03	EMB	TAL BUF
Dissolved	Prep	3005A			393557	12/26/17 14:05	MJW	TAL BUF
Dissolved	Analysis	6010		1	394054	12/28/17 14:34	LMH	TAL BUF
Total/NA	Analysis	7196A		1	392651	12/19/17 04:48	KMB	TAL BUF

Client Sample ID: C121817-CSW3 — Lab Sample ID: 480-129171-4

Date Collected: 12/18/17 12:15 — **Matrix: Water**
Date Received: 12/19/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	393475	12/26/17 12:56	LCH	TAL BUF
Dissolved	Filtration	FILTRATION			393328	12/22/17 11:03	EMB	TAL BUF
Dissolved	Prep	3005A			393557	12/26/17 14:05	MJW	TAL BUF
Dissolved	Analysis	6010		1	394054	12/28/17 14:37	LMH	TAL BUF
Total/NA	Analysis	7196A		1	392651	12/19/17 04:48	KMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Client Sample ID: C121817-CSW2

Lab Sample ID: 480-129171-5

Date Collected: 12/18/17 12:30
Matrix: Water
Date Received: 12/19/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	393475	12/26/17 13:21	LCH	TAL BUF
Dissolved	Filtration	FILTRATION			393328	12/22/17 11:03	EMB	TAL BUF
Dissolved	Prep	3005A			393557	12/26/17 14:05	MJW	TAL BUF
Dissolved	Analysis	6010		1	394054	12/28/17 14:51	LMH	TAL BUF
Total/NA	Analysis	7196A		1	392651	12/19/17 04:48	KMB	TAL BUF

Client Sample ID: C121817-TRIP BLANK

Lab Sample ID: 480-129171-6

Date Collected: 12/18/17 12:40
Matrix: Water
Date Received: 12/19/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	393475	12/26/17 13:47	LCH	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3005A	Water	Calcium, Dissolved
6010	3005A	Water	Chromium, Dissolved
6010	3005A	Water	Copper, Dissolved
6010	3005A	Water	Magnesium, Dissolved
6010	3005A	Water	Potassium, Dissolved
6010	3005A	Water	Sodium, Dissolved
7196A		Water	Chromium, hexavalent
8260C		Water	1,1,1,2-Tetrachloroethane
8260C		Water	1,1,1-Trichloroethane
8260C		Water	1,1,2,2-Tetrachloroethane
8260C		Water	1,1,2-Trichloroethane
8260C		Water	1,1-Dichloroethane
8260C		Water	1,1-Dichloroethene
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2,3-Trichlorobenzene
8260C		Water	1,2,3-Trichloropropane
8260C		Water	1,2,4-Trichlorobenzene
8260C		Water	1,2,4-Trimethylbenzene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,2-Dichlorobenzene
8260C		Water	1,2-Dichloroethane
8260C		Water	1,2-Dichloropropane
8260C		Water	1,3,5-Trimethylbenzene
8260C		Water	1,3-Dichlorobenzene
8260C		Water	1,3-Dichloropropane
8260C		Water	1,4-Dichlorobenzene
8260C		Water	1,4-Dioxane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Butanone (MEK)
8260C		Water	2-Chlorotoluene
8260C		Water	2-Hexanone
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	4-Methyl-2-pentanone (MIBK)
8260C		Water	Acetone
8260C		Water	Benzene
8260C		Water	Bromobenzene
8260C		Water	Bromoform
8260C		Water	Bromomethane
8260C		Water	Carbon disulfide
8260C		Water	Carbon tetrachloride
8260C		Water	Chlorobenzene
8260C		Water	Chlorobromomethane
8260C		Water	Chlorodibromomethane
8260C		Water	Chloroethane
8260C		Water	Chloroform

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Chloromethane
8260C		Water	cis-1,2-Dichloroethene
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	Dibromomethane
8260C		Water	Dichlorobromomethane
8260C		Water	Dichlorodifluoromethane
8260C		Water	Ethyl ether
8260C		Water	Ethylbenzene
8260C		Water	Ethylene Dibromide
8260C		Water	Hexachlorobutadiene
8260C		Water	Isopropyl ether
8260C		Water	Isopropylbenzene
8260C		Water	Methyl tert-butyl ether
8260C		Water	Methylene Chloride
8260C		Water	m-Xylene & p-Xylene
8260C		Water	Naphthalene
8260C		Water	n-Butylbenzene
8260C		Water	N-Propylbenzene
8260C		Water	o-Xylene
8260C		Water	sec-Butylbenzene
8260C		Water	Styrene
8260C		Water	Tert-amyl methyl ether
8260C		Water	Tert-butyl ethyl ether
8260C		Water	tert-Butylbenzene
8260C		Water	Tetrachloroethene
8260C		Water	Tetrahydrofuran
8260C		Water	Toluene
8260C		Water	trans-1,2-Dichloroethene
8260C		Water	trans-1,3-Dichloropropene
8260C		Water	Trichloroethene
8260C		Water	Trichlorofluoromethane
8260C		Water	Vinyl chloride

Method Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Honeywell International Inc
Project/Site: December 2017 Quarterly Surface Water

TestAmerica Job ID: 480-129171-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-129171-1	C121817-CSW5	Water	12/18/17 11:05	12/19/17 01:00
480-129171-2	C121817-CSW4	Water	12/18/17 11:30	12/19/17 01:00
480-129171-3	C121817-CSW3A	Water	12/18/17 11:50	12/19/17 01:00
480-129171-4	C121817-CSW3	Water	12/18/17 12:15	12/19/17 01:00
480-129171-5	C121817-CSW2	Water	12/18/17 12:30	12/19/17 01:00
480-129171-6	C121817-TRIP BLANK	Water	12/18/17 12:40	12/19/17 01:00

360325-Boston 360325-Boston 360325-Boston

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell Chain Of Custody / Analysis Request

AESI Ref: 38450.55525
COC # :
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential | N
EDD To: Mark.Maggiore @amec.com
Site Name: Conductorlab: December 2017 Quarterly Surface Water Sampling
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #
Analysis Turnaround Time: 10
Standard - Y
Rush Charges Authorized for -
2 weeks - Y
1 week - N
Next Day - N

PAGE 1 of 1 1
Job No.

480-129171 COC

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3_7) 02-01-05
renesurgi@aol.com

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds (Preservative 1)	7196A Hexavalent Chromium (Preservative 0)	6010B Dissolved TAL metals (Lab Filtered (Preservative 2)	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
CSW-5			C121817-CSW5	12/18/17	1105	SW	SW	Reg	5	G	N	X	X	X	
CSW-4			C121817-CSW4	12/18/17	1130	SW	SW	Reg	5	G	N	X	X	X	
CSW-3A			C121817-CSW3A	12/18/17	1150	SW	SW	Reg	5	G	N	X	X	X	
CSW-3			C121817-CSW3	12/18/17	1215	SW	SW	Reg	5	G	N	X	X	X	
CSW-2			C121817-CSW2	12/18/17	1230	SW	SW	Reg	5	G	N	X	X	X	
			C121817-TripBlank	12/18/17	1240	-	-	Trip Blank	1	-	-	X			

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab. Dissolved metals include: Cr,Cu,Ca,Mg,Na,K)

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
[signature]	AmecFW	12/18/17 1350	[signature]	FB	12-18-17 1350	Cooler Temp.	
[signature]	FB	12-18-17 1800	[signature]	TAS	12-19-17 0100	Cooler Temp.	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

2.0 #1

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-129171-1

Login Number: 129171

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

DATA VALIDATION SUMMARY REPORT
AUGUST 2017 CHROMIUM INVESTIGATION
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

1.0 INTRODUCTION

Data validation was completed on samples collected during the soil sampling event completed in August and September 2017. A summary of samples included in this report is presented in Table 1. Samples were reported in data package 480-123630-1. Samples were analyzed by the following Test America Laboratory (TAL):

TAL BUF- Test America Buffalo, Amherst, NY
TAL PIT - Test America Pittsburgh, Pittsburgh, PA

The following U.S. Environmental Protection Agency (USEPA) SW-846 (USEPA, 1996a) analytical methods were performed:

- Total Chromium by USEPA Method 6010
- Hexavalent chromium by USEPA Method 7196A
- Percent Solids by USEPA Method 160.3

Data validation was completed using Level II procedures described for Honeywell projects. Quality control (QC) data were compared to limits established for the Massachusetts Contingency Plan (MCP) in the Massachusetts Compendium of analytical methods (MassDEP, 2010) if available. Data qualifiers were added to results if needed in accordance with general procedures described in USEPA data validation guidelines (USEPA, 1996b). A summary of QC limits used during this review is presented on Table 2.

During the Level II data validation the following data quality indicators are reviewed.

- Lab Report Narrative
- Data Completeness and Chain of Custody
- Sample Collection and Holding Times
- Blanks
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Field Duplicates
- Surrogate Spikes
- Reporting Limits
- Electronic Data Verification

Data reviews are completed using laboratory QC summary forms. Data qualifications are completed if necessary in accordance with the guidelines using the following qualifiers:

U = The target compound was not detected at a concentration greater than, or equal to, the quantitation limit.
J = The reported concentration is considered an estimated value
UJ = The target compound was not detected and the reporting limit is considered to be estimated.

R= The reported value is rejected and is considered to be unusable.

No validation qualifiers were applied to this data set during Level II validation. A complete summary of final sample result is provided in Table 3.

2.0 DATA VALIDATION ACTIONS AND OBSERVATIONS

Quality control (QC) parameters and measurements checked during validation met requirements in the analytical method and/or validation guidelines. Unless specified below, results are interpreted to be usable as reported by the laboratory.

2.1 Total Chromium

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
* LCS/LCSD
* MS/MSD
* Field Duplicates
* Project Reporting Limits

* - Validation checks met project and method goals.

2.2 General Chemistry – Hexavalent Chromium & Percent Solids

Data were evaluated for the following parameters:

* Collection and Preservation
* Holding Times
* Data Completeness
* Blank Contamination
* LCS/LCSD
* MS/MSD
* Field Duplicates
* Laboratory Duplicates
* Project Reporting Limits

* - Validation checks met project and method goals.

References:

American Public Health Association (APHA), 2008. "Standard Methods for Examination of Water and Wastewater"; On-line Publication; APHA, 1015 Fifteenth St., NW. Washington, D.C. 20005.

Massachusetts Department of Environmental Protection (MassDEP), 2010. "The Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the Massachusetts Contingency Plan (MCP)"; Bureau of Waste Site Cleanup; 1 Winter Street, Boston, Massachusetts 02108; WSC-CAM; July 2010.

U.S. Environmental Protection Agency (USEPA), 1996a. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 -December 1996.

U.S. Environmental Protection Agency (USEPA), 1996b. "Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses"; Quality Assurance Unit Staff; Office of Environmental Measurement and Evaluation; December, 1996.

Data Validator: Sandhyasree

October 25, 2017

Senior Chemist: Chris Ricardi, NRCC-EAC

October 27, 2017

TABLE 1
SAMPLE AND ANALYTICAL SUMMARY
DATA VALIDATION SUMMARY REPORT
AUGUST 2017 CHROMIUM INVESTIGATION
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

				Parameter	Chromium (Total)	Cr (VI)	Percent Solids/Moisture
				Method	SW846 6010	SW846 7196A	EPA160.3
SDG	Field Sample ID	Location ID	Type	Date			
480-123630-1	CXRF01_5-8_083117	XRF-01	REG	8/31/2017	1	1	2
480-123630-1	CXRF05_8-10_083117	XRF-05	REG	8/31/2017	1	1	2
480-123630-1	CXRF06_5-8_083117	XRF-06	REG	8/31/2017	1	1	2
480-123630-1	CXRF06_5-8_083117DUP	XRF-06	FD	8/31/2017	1	1	2
480-123630-1	CXRF09_5-8_083117	XRF-09	REG	8/31/2017	1	1	2
480-123630-1	CXRF11_5-8_083117	XRF-11	REG	8/31/2017	1	1	2
480-123630-1	CXRF13_5-8_083117	XRF-13	REG	8/31/2017	1	1	2
480-123630-1	CXRF16_5-8_083117	XRF-16	REG	8/31/2017	1	1	2
480-123630-1	CXRF18_5-8_083117	XRF-18	REG	8/31/2017	1	1	2
480-123630-1	CXRF22_8-10_090117	XRF-22	REG	9/1/2017	1	1	2
480-123630-1	CXRF23_10-11_090117	XRF-23	REG	9/1/2017	1	1	2
480-123630-1	CXRF26_10-14_090117	XRF-26	REG	9/1/2017	1	1	2
480-123630-1	CXRF27_5-8_090117	XRF-27	REG	9/1/2017	1	1	2

Notes
REG: Regular Sample
FD: Field Duplicate

Prepared by:Sandhyasree 10/24/2017
Checked by: Suresh 10/24/2017

TABLE 2
ACCURACY AND PRECISION LIMITS
DATA VALIDATION SUMMARY REPORT
AUGUST 2017 CHROMIUM INVESTIGATION
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

PARAMETER	QC TEST	ANALYTE	SOIL	
			(%R)	RPD
Inorganics	**LCS/LCSD**	All Target Analytes	80 - 120	30
	MS/MSD	All Target Analytes	75 - 125	35
	Lab Duplicates	All Target Analytes	n/a	35
	Field Duplicates	All Target Analytes	n/a	50

Notes:
LCS/LCSD = Laboratory Control Sample/Laboratory Control Sample Duplicate
MS/MSD = Matrix spike/ Matrix Spike Duplicate
RPD= Relative Percent Difference
%R = Percent Recovery
QC = Quality Control

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
AUGUST 2017 CHROMIUM INVESTIGATION
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	**CXRF01_5-8_083117**	**CXRF05_8-10_083117**	**CXRF06_5-8_083117**	**CXRF06_5-8_083117DUP**	**CXRF09_5-8_083117**
		Location	**XRF-01**	**XRF-05**	**XRF-06**	**XRF-06**	**XRF-09**
		Sample Date	**08/31/2017**	**08/31/2017**	**08/31/2017**	**08/31/2017**	**08/31/2017**
		Sample Delivery Group	**480-123630-1**	**480-123630-1**	**480-123630-1**	**480-123630-1**	**480-123630-1**
Units	**Method**	**Parameter Name**					
%	E160.3	Percent Moisture	18.2	9.4	44.4	12.7	9.2
%	E160.3	Percent Solids	81.8	90.6	55.6	87.3	90.8
mg/kg	SW6010	Chromium	1300	1100	2900	2000	57
mg/kg	SW7196	Cr (VI)	8.8	46	0.72 U	0.46 U	0.24 J

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
AUGUST 2017 CHROMIUM INVESTIGATION
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	**CXRF11_5-8_083117**	**CXRF13_5-8_083117**	**CXRF16_5-8_083117**	**CXRF18_5-8_083117**	**CXRF22_8-10_090117**
		Location	**XRF-11**	**XRF-13**	**XRF-16**	**XRF-18**	**XRF-22**
		Sample Date	**08/31/2017**	**08/31/2017**	**08/31/2017**	**08/31/2017**	**09/01/2017**
		Sample Delivery Group	**480-123630-1**	**480-123630-1**	**480-123630-1**	**480-123630-1**	**480-123630-1**
Units	**Method**	**Parameter Name**					
%	E160.3	Percent Moisture	13.4	10.6	15.8	3.3	11.9
%	E160.3	Percent Solids	86.6	89.4	84.2	96.7	88.1
mg/kg	SW6010	Chromium	240	980	110	34	560
mg/kg	SW7196	Cr (VI)	25	25	0.97	0.76	41

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
AUGUST 2017 CHROMIUM INVESTIGATION
HONEYWELL CONDUCTOR LAB
GROTON, MASSACHUSETTS

		Field Sample ID	**CXRF23_10-11_090117**	**CXRF26_10-14_090117**	**CXRF27_5-8_090117**
		Location	**XRF-23**	**XRF-26**	**XRF-27**
		Sample Date	**09/01/2017**	**09/01/2017**	**09/01/2017**
		Sample Delivery Group	**480-123630-1**	**480-123630-1**	**480-123630-1**
Units	**Method**	**Parameter Name**			
%	E160.3	Percent Moisture	10.8	9.9	9.4
%	E160.3	Percent Solids	89.2	90.1	90.6
mg/kg	SW6010	Chromium	1600	66	400
mg/kg	SW7196	Cr (VI)	67	0.47	12

Notes:
U = undetected
J = estimated value

Prepared by:Sandhyasree 10/24/2017
Checked by:Suresh 10/24/2017

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-123630-1
Client Project/Site: September 2017 XRF Investigation

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Authorized for release by:
9/20/2017 12:49:59 PM
Rebecca Jones, Project Management Assistant I
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Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Job ID: 480-123630-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-123630-1

Comments
No additional comments.

Receipt
The samples were received on 9/6/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4º C.

Metals
Method(s) 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

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

General Chemistry
Method(s) 7196A: The sample post-digestion spike (PDS) recoveries were outside criteria. Acceptable laboratory control sample (LCS) soluble and insoluble analysis data demonstrate that the analytical system was operating in control; therefore, this condition is most likely due to a matrix effect.

Method(s) 7196A: The following samples was diluted to bring the concentration of target analytes within the calibration range: CXRF05(8-10)-083117 (480-123630-2) and CXRF23(10-11)-090117 (480-123630-10). Elevated reporting limits (RLs) are provided.

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-123630-1**

Project Location: **Groton** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-123630-1(1-13, 13MS, 13MSD)

Matrices: ☐ Groundwater/Surface Water ■ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	■ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Management Assistant

Printed Name: Rebecca Jones Date: 9/20/17 12:03

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF01(5-8)-083117 — Lab Sample ID: 480-123630-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1300	B	2.8	1.1	mg/Kg	5	☼	6010	Total/NA
Cr (VI)	8.8		0.48	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF05(8-10)-083117 — Lab Sample ID: 480-123630-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1100	B	2.5	1.0	mg/Kg	5	☼	6010	Total/NA
Cr (VI)	46		0.87	0.25	mg/Kg	2	☼	7196A	Total/NA

Client Sample ID: CXRF06(5-8)-083117 — Lab Sample ID: 480-123630-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2900	B	4.4	1.8	mg/Kg	5	☼	6010	Total/NA

Client Sample ID: CXRF06(5-8)-083117DUP — Lab Sample ID: 480-123630-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2000	B	3.2	1.3	mg/Kg	5	☼	6010	Total/NA

Client Sample ID: CXRF09(5-8)-083117 — Lab Sample ID: 480-123630-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	57	B	0.56	0.22	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	0.24	J	0.44	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF11(5-8)-083117 — Lab Sample ID: 480-123630-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	240	B	0.56	0.22	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	25		0.46	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF13(5-8)-083117 — Lab Sample ID: 480-123630-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	980	B	0.59	0.23	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	25		0.45	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF16(5-8)-083117 — Lab Sample ID: 480-123630-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	110	B	0.64	0.26	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	0.97		0.47	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF18(5-8)-083117 — Lab Sample ID: 480-123630-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	34	B	0.50	0.20	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	0.76		0.42	0.12	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF23(10-11)-090117 — Lab Sample ID: 480-123630-10

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF23(10-11)-090117 (Continued) — Lab Sample ID: 480-123630-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1600	B	2.7	1.1	mg/Kg	5	☼	6010	Total/NA
Cr (VI)	67		2.3	0.65	mg/Kg	5	☼	7196A	Total/NA

Client Sample ID: CXRF22(8-10)-090117 — Lab Sample ID: 480-123630-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	560	B	0.60	0.24	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	41		0.45	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF26(10-14)-090117 — Lab Sample ID: 480-123630-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	66	B	0.59	0.24	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	0.47		0.44	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: CXRF27(5-8)-090117 — Lab Sample ID: 480-123630-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	400	B	0.55	0.22	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	12		0.44	0.13	mg/Kg	1	☼	7196A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF01(5-8)-083117

Lab Sample ID: 480-123630-1
Date Collected: 08/31/17 15:00
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 81.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1300	B	2.8	1.1	mg/Kg	☼	09/07/17 13:42	09/11/17 13:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	8.8		0.48	0.14	mg/Kg	☼	09/12/17 06:46	09/19/17 07:23	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.2		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	81.8		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF05(8-10)-083117

Lab Sample ID: 480-123630-2
Date Collected: 08/31/17 15:10
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 90.6

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1100	B	2.5	1.0	mg/Kg	☼	09/07/17 13:42	09/11/17 13:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	46		0.87	0.25	mg/Kg	☼	09/12/17 06:46	09/19/17 07:48	2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	90.6		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF06(5-8)-083117

Lab Sample ID: 480-123630-3
Date Collected: 08/31/17 15:15
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 55.6

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2900	B	4.4	1.8	mg/Kg	☼	09/07/17 13:42	09/11/17 13:34	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.72	0.21	mg/Kg	☼	09/12/17 06:46	09/19/17 07:25	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	44.4		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	55.6		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF06(5-8)-083117DUP

Lab Sample ID: 480-123630-4
Date Collected: 08/31/17 15:15
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 87.3

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2000	B	3.2	1.3	mg/Kg	☼	09/07/17 13:42	09/13/17 08:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.46	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:26	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.7		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	87.3		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF09(5-8)-083117

Lab Sample ID: 480-123630-5
Date Collected: 08/31/17 15:20
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 90.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	57	B	0.56	0.22	mg/Kg	☼	09/07/17 13:42	09/08/17 14:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.24	J	0.44	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:28	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.2		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	90.8		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF11(5-8)-083117

Lab Sample ID: 480-123630-6
Date Collected: 08/31/17 15:25
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 86.6

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	240	B	0.56	0.22	mg/Kg	☼	09/07/17 13:42	09/08/17 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	25		0.46	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.4		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	86.6		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF13(5-8)-083117

Lab Sample ID: 480-123630-7
Date Collected: 08/31/17 15:30
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 89.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	980	B	0.59	0.23	mg/Kg	☼	09/07/17 13:42	09/08/17 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	25		0.45	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	89.4		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF16(5-8)-083117

Lab Sample ID: 480-123630-8
Date Collected: 08/31/17 15:35
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 84.2

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	110	B	0.64	0.26	mg/Kg	☼	09/07/17 13:42	09/08/17 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.97		0.47	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:34	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.8		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	84.2		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF18(5-8)-083117

Lab Sample ID: 480-123630-9
Date Collected: 08/31/17 15:40
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 96.7

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	34	B	0.50	0.20	mg/Kg	☼	09/07/17 13:42	09/08/17 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.76		0.42	0.12	mg/Kg	☼	09/12/17 06:46	09/19/17 07:35	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	3.3		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	96.7		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF23(10-11)-090117

Lab Sample ID: 480-123630-10
Date Collected: 09/01/17 11:00
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 89.2

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1600	B	2.7	1.1	mg/Kg	☼	09/07/17 13:42	09/11/17 13:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	67		2.3	0.65	mg/Kg	☼	09/12/17 06:46	09/19/17 07:49	5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.8		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	89.2		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF22(8-10)-090117

Lab Sample ID: 480-123630-11
Date Collected: 09/01/17 11:10
Matrix: Solid
Date Received: 09/06/17 09:30
Percent Solids: 88.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	560	B	0.60	0.24	mg/Kg	☼	09/07/17 13:42	09/08/17 14:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	41		0.45	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:37	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.9		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	88.1		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF26(10-14)-090117

Lab Sample ID: 480-123630-12

Date Collected: 09/01/17 11:15
Date Received: 09/06/17 09:30

Matrix: Solid
Percent Solids: 90.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	66	B	0.59	0.24	mg/Kg	☼	09/07/17 13:42	09/08/17 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.47		0.44	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.9		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	90.1		0.1	0.1	%			09/07/17 06:10	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF27(5-8)-090117

Date Collected: 09/01/17 11:20
Date Received: 09/06/17 09:30

Lab Sample ID: 480-123630-13

Matrix: Solid
Percent Solids: 90.6

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	400	B	0.55	0.22	mg/Kg	☼	09/07/17 13:42	09/08/17 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	12		0.44	0.13	mg/Kg	☼	09/12/17 06:46	09/19/17 07:39	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.1	0.1	%			09/07/17 06:10	1
Percent Solids	90.6		0.1	0.1	%			09/07/17 06:10	1

QC Sample Results

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-375627/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376078 — **Prep Batch: 375627**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.259	J	0.47	0.19	mg/Kg		09/07/17 13:42	09/08/17 13:48	1

Lab Sample ID: LCDSRM 480-375627/25-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376078 — **Prep Batch: 375627**

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	107	91.3		mg/Kg		85.4	69.4 - 134.6	2	30

Lab Sample ID: LCSSRM 480-375627/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376078 — **Prep Batch: 375627**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	107	93.4		mg/Kg		87.3	69.4 - 134.6

Lab Sample ID: 480-123630-13 MS — **Client Sample ID: CXRF27(5-8)-090117MS**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376078 — **Prep Batch: 375627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	400	B	44.6	486	4	mg/Kg	☼	185	75 - 125

Lab Sample ID: 480-123630-13 MSD — **Client Sample ID: CXRF27(5-8)-090117MSD**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376078 — **Prep Batch: 375627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	400	B	41.9	436	4	mg/Kg	☼	77	75 - 125	11	35

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-222667/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 223278 — **Prep Batch: 222667**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.40	0.11	mg/Kg		09/12/17 06:46	09/19/17 07:19	1

Lab Sample ID: LCDSRM 180-222667/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 223278 — **Prep Batch: 222667**

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	276	245		mg/Kg		88.7	31.3 - 120.3	5	30

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSSRM 180-222667/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 223278 — **Prep Batch: 222667**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)			276	257		mg/Kg		93.0	31.3 - 120.3		

Lab Sample ID: 480-123630-13 MSI — **Client Sample ID: CXRF27(5-8)-090117**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 223278 — **Prep Batch: 222667**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	12		779	910		mg/Kg	☼	115	75 - 125		

Lab Sample ID: 480-123630-13 MSS — **Client Sample ID: CXRF27(5-8)-090117**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 223278 — **Prep Batch: 222667**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	12		21.7	28.6		mg/Kg	☼	75	75 - 125		

Lab Sample ID: 480-123630-13 DU — **Client Sample ID: CXRF27(5-8)-090117**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 223278 — **Prep Batch: 222667**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cr (VI)	12			12.5		mg/Kg	☼			2	35

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Metals

Prep Batch: 375627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-1	CXRF01(5-8)-083117	Total/NA	Solid	3050B	
480-123630-2	CXRF05(8-10)-083117	Total/NA	Solid	3050B	
480-123630-3	CXRF06(5-8)-083117	Total/NA	Solid	3050B	
480-123630-4	CXRF06(5-8)-083117DUP	Total/NA	Solid	3050B	
480-123630-5	CXRF09(5-8)-083117	Total/NA	Solid	3050B	
480-123630-6	CXRF11(5-8)-083117	Total/NA	Solid	3050B	
480-123630-7	CXRF13(5-8)-083117	Total/NA	Solid	3050B	
480-123630-8	CXRF16(5-8)-083117	Total/NA	Solid	3050B	
480-123630-9	CXRF18(5-8)-083117	Total/NA	Solid	3050B	
480-123630-10	CXRF23(10-11)-090117	Total/NA	Solid	3050B	
480-123630-11	CXRF22(8-10)-090117	Total/NA	Solid	3050B	
480-123630-12	CXRF26(10-14)-090117	Total/NA	Solid	3050B	
480-123630-13	CXRF27(5-8)-090117	Total/NA	Solid	3050B	
MB 480-375627/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-375627/25-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-375627/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-123630-13 MS	CXRF27(5-8)-090117MS	Total/NA	Solid	3050B	
480-123630-13 MSD	CXRF27(5-8)-090117MSD	Total/NA	Solid	3050B	

Analysis Batch: 376078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-5	CXRF09(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-6	CXRF11(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-7	CXRF13(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-8	CXRF16(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-9	CXRF18(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-11	CXRF22(8-10)-090117	Total/NA	Solid	6010	375627
480-123630-12	CXRF26(10-14)-090117	Total/NA	Solid	6010	375627
480-123630-13	CXRF27(5-8)-090117	Total/NA	Solid	6010	375627
MB 480-375627/1-A	Method Blank	Total/NA	Solid	6010	375627
LCDSRM 480-375627/25-A	Lab Control Sample Dup	Total/NA	Solid	6010	375627
LCSSRM 480-375627/2-A	Lab Control Sample	Total/NA	Solid	6010	375627
480-123630-13 MS	CXRF27(5-8)-090117MS	Total/NA	Solid	6010	375627
480-123630-13 MSD	CXRF27(5-8)-090117MSD	Total/NA	Solid	6010	375627

Analysis Batch: 376294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-1	CXRF01(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-2	CXRF05(8-10)-083117	Total/NA	Solid	6010	375627
480-123630-3	CXRF06(5-8)-083117	Total/NA	Solid	6010	375627
480-123630-10	CXRF23(10-11)-090117	Total/NA	Solid	6010	375627

Analysis Batch: 376561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-4	CXRF06(5-8)-083117DUP	Total/NA	Solid	6010	375627

QC Association Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

General Chemistry

Prep Batch: 222667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-1	CXRF01(5-8)-083117	Total/NA	Solid	3060A	
480-123630-2	CXRF05(8-10)-083117	Total/NA	Solid	3060A	
480-123630-3	CXRF06(5-8)-083117	Total/NA	Solid	3060A	
480-123630-4	CXRF06(5-8)-083117DUP	Total/NA	Solid	3060A	
480-123630-5	CXRF09(5-8)-083117	Total/NA	Solid	3060A	
480-123630-6	CXRF11(5-8)-083117	Total/NA	Solid	3060A	
480-123630-7	CXRF13(5-8)-083117	Total/NA	Solid	3060A	
480-123630-8	CXRF16(5-8)-083117	Total/NA	Solid	3060A	
480-123630-9	CXRF18(5-8)-083117	Total/NA	Solid	3060A	
480-123630-10	CXRF23(10-11)-090117	Total/NA	Solid	3060A	
480-123630-11	CXRF22(8-10)-090117	Total/NA	Solid	3060A	
480-123630-12	CXRF26(10-14)-090117	Total/NA	Solid	3060A	
480-123630-13	CXRF27(5-8)-090117	Total/NA	Solid	3060A	
MB 180-222667/1-A	Method Blank	Total/NA	Solid	3060A	
LCDSRM 180-222667/3-A	Lab Control Sample Dup	Total/NA	Solid	3060A	
LCSSRM 180-222667/2-A	Lab Control Sample	Total/NA	Solid	3060A	
480-123630-13 MSI	CXRF27(5-8)-090117	Total/NA	Solid	3060A	
480-123630-13 MSS	CXRF27(5-8)-090117	Total/NA	Solid	3060A	
480-123630-13 DU	CXRF27(5-8)-090117	Total/NA	Solid	3060A	

Analysis Batch: 223278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-1	CXRF01(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-2	CXRF05(8-10)-083117	Total/NA	Solid	7196A	222667
480-123630-3	CXRF06(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-4	CXRF06(5-8)-083117DUP	Total/NA	Solid	7196A	222667
480-123630-5	CXRF09(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-6	CXRF11(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-7	CXRF13(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-8	CXRF16(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-9	CXRF18(5-8)-083117	Total/NA	Solid	7196A	222667
480-123630-10	CXRF23(10-11)-090117	Total/NA	Solid	7196A	222667
480-123630-11	CXRF22(8-10)-090117	Total/NA	Solid	7196A	222667
480-123630-12	CXRF26(10-14)-090117	Total/NA	Solid	7196A	222667
480-123630-13	CXRF27(5-8)-090117	Total/NA	Solid	7196A	222667
MB 180-222667/1-A	Method Blank	Total/NA	Solid	7196A	222667
LCDSRM 180-222667/3-A	Lab Control Sample Dup	Total/NA	Solid	7196A	222667
LCSSRM 180-222667/2-A	Lab Control Sample	Total/NA	Solid	7196A	222667
480-123630-13 MSI	CXRF27(5-8)-090117	Total/NA	Solid	7196A	222667
480-123630-13 MSS	CXRF27(5-8)-090117	Total/NA	Solid	7196A	222667
480-123630-13 DU	CXRF27(5-8)-090117	Total/NA	Solid	7196A	222667

Analysis Batch: 375545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-1	CXRF01(5-8)-083117	Total/NA	Solid	Moisture	
480-123630-2	CXRF05(8-10)-083117	Total/NA	Solid	Moisture	
480-123630-3	CXRF06(5-8)-083117	Total/NA	Solid	Moisture	
480-123630-4	CXRF06(5-8)-083117DUP	Total/NA	Solid	Moisture	
480-123630-5	CXRF09(5-8)-083117	Total/NA	Solid	Moisture	
480-123630-6	CXRF11(5-8)-083117	Total/NA	Solid	Moisture	
480-123630-7	CXRF13(5-8)-083117	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 375545 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-123630-8	CXRF16(5-8)-083117	Total/NA	Solid	Moisture	
480-123630-9	CXRF18(5-8)-083117	Total/NA	Solid	Moisture	
480-123630-10	CXRF23(10-11)-090117	Total/NA	Solid	Moisture	
480-123630-11	CXRF22(8-10)-090117	Total/NA	Solid	Moisture	
480-123630-12	CXRF26(10-14)-090117	Total/NA	Solid	Moisture	
480-123630-13	CXRF27(5-8)-090117	Total/NA	Solid	Moisture	
480-123630-13 MS	CXRF27(5-8)-090117MS	Total/NA	Solid	Moisture	
480-123630-13 MSD	CXRF27(5-8)-090117MSD	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF01(5-8)-083117 — Lab Sample ID: 480-123630-1

Date Collected: 08/31/17 15:00 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF01(5-8)-083117 — Lab Sample ID: 480-123630-1

Date Collected: 08/31/17 15:00 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 81.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		5	376294	09/11/17 13:27	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:23	ANA	TAL PIT

Client Sample ID: CXRF05(8-10)-083117 — Lab Sample ID: 480-123630-2

Date Collected: 08/31/17 15:10 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF05(8-10)-083117 — Lab Sample ID: 480-123630-2

Date Collected: 08/31/17 15:10 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 90.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		5	376294	09/11/17 13:31	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		2	223278	09/19/17 07:48	ANA	TAL PIT

Client Sample ID: CXRF06(5-8)-083117 — Lab Sample ID: 480-123630-3

Date Collected: 08/31/17 15:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF06(5-8)-083117 — Lab Sample ID: 480-123630-3

Date Collected: 08/31/17 15:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 55.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF06(5-8)-083117 — Lab Sample ID: 480-123630-3

Date Collected: 08/31/17 15:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 55.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010		5	376294	09/11/17 13:34	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:25	ANA	TAL PIT

Client Sample ID: CXRF06(5-8)-083117DUP — Lab Sample ID: 480-123630-4

Date Collected: 08/31/17 15:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF06(5-8)-083117DUP — Lab Sample ID: 480-123630-4

Date Collected: 08/31/17 15:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		5	376561	09/13/17 08:28	AMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:26	ANA	TAL PIT

Client Sample ID: CXRF09(5-8)-083117 — Lab Sample ID: 480-123630-5

Date Collected: 08/31/17 15:20 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF09(5-8)-083117 — Lab Sample ID: 480-123630-5

Date Collected: 08/31/17 15:20 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 90.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		1	376078	09/08/17 14:09	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:28	ANA	TAL PIT

Client Sample ID: CXRF11(5-8)-083117 — Lab Sample ID: 480-123630-6

Date Collected: 08/31/17 15:25 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF11(5-8)-083117 — Lab Sample ID: 480-123630-6

Date Collected: 08/31/17 15:25 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		1	376078	09/08/17 14:13	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:29	ANA	TAL PIT

Client Sample ID: CXRF13(5-8)-083117 — Lab Sample ID: 480-123630-7

Date Collected: 08/31/17 15:30 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF13(5-8)-083117 — Lab Sample ID: 480-123630-7

Date Collected: 08/31/17 15:30 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 89.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		1	376078	09/08/17 14:16	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:30	ANA	TAL PIT

Client Sample ID: CXRF16(5-8)-083117 — Lab Sample ID: 480-123630-8

Date Collected: 08/31/17 15:35 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF16(5-8)-083117 — Lab Sample ID: 480-123630-8

Date Collected: 08/31/17 15:35 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF16(5-8)-083117 — Lab Sample ID: 480-123630-8

Date Collected: 08/31/17 15:35 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010		1	376078	09/08/17 14:30	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:34	ANA	TAL PIT

Client Sample ID: CXRF18(5-8)-083117 — Lab Sample ID: 480-123630-9

Date Collected: 08/31/17 15:40 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF18(5-8)-083117 — Lab Sample ID: 480-123630-9

Date Collected: 08/31/17 15:40 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 96.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		1	376078	09/08/17 14:34	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:35	ANA	TAL PIT

Client Sample ID: CXRF23(10-11)-090117 — Lab Sample ID: 480-123630-10

Date Collected: 09/01/17 11:00 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF23(10-11)-090117 — Lab Sample ID: 480-123630-10

Date Collected: 09/01/17 11:00 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 89.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		5	376294	09/11/17 13:38	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		5	223278	09/19/17 07:49	ANA	TAL PIT

Client Sample ID: CXRF22(8-10)-090117 — Lab Sample ID: 480-123630-11

Date Collected: 09/01/17 11:10 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF22(8-10)-090117 — Lab Sample ID: 480-123630-11

Date Collected: 09/01/17 11:10 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 88.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		1	376078	09/08/17 14:41	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:37	ANA	TAL PIT

Client Sample ID: CXRF26(10-14)-090117 — Lab Sample ID: 480-123630-12

Date Collected: 09/01/17 11:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF26(10-14)-090117 — Lab Sample ID: 480-123630-12

Date Collected: 09/01/17 11:15 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 90.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF
Total/NA	Analysis	6010		1	376078	09/08/17 14:45	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:38	ANA	TAL PIT

Client Sample ID: CXRF27(5-8)-090117 — Lab Sample ID: 480-123630-13

Date Collected: 09/01/17 11:20 — **Matrix: Solid**
Date Received: 09/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	375545	09/07/17 06:10	CSW	TAL BUF

Client Sample ID: CXRF27(5-8)-090117 — Lab Sample ID: 480-123630-13

Date Collected: 09/01/17 11:20 — **Matrix: Solid**
Date Received: 09/06/17 09:30 — **Percent Solids: 90.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			375627	09/07/17 13:42	EMB	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Client Sample ID: CXRF27(5-8)-090117

Date Collected: 09/01/17 11:20
Date Received: 09/06/17 09:30

Lab Sample ID: 480-123630-13

Matrix: Solid
Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010		1	376078	09/08/17 14:48	LMH	TAL BUF
Total/NA	Prep	3060A			222667	09/12/17 06:46	ANA	TAL PIT
Total/NA	Analysis	7196A		1	223278	09/19/17 07:39	ANA	TAL PIT

Laboratory References:

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

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3050B	Solid	Chromium
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Pittsburgh

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-18
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-18
North Carolina (WW/SW)	State Program	4	434	12-31-17
Pennsylvania	NELAP	3	02-00416	04-30-18
South Carolina	State Program	4	89014	04-30-18
Texas	NELAP	6	T104704528-15-2	03-31-18
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-18
Wisconsin	State Program	5	998027800	08-31-18

Method Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Method	Method Description	Protocol	Laboratory
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL PIT
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Honeywell International Inc
Project/Site: September 2017 XRF Investigation

TestAmerica Job ID: 480-123630-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-123630-1	CXRF01(5-8)-083117	Solid	08/31/17 15:00	09/06/17 09:30
480-123630-2	CXRF05(8-10)-083117	Solid	08/31/17 15:10	09/06/17 09:30
480-123630-3	CXRF06(5-8)-083117	Solid	08/31/17 15:15	09/06/17 09:30
480-123630-4	CXRF06(5-8)-083117DUP	Solid	08/31/17 15:15	09/06/17 09:30
480-123630-5	CXRF09(5-8)-083117	Solid	08/31/17 15:20	09/06/17 09:30
480-123630-6	CXRF11(5-8)-083117	Solid	08/31/17 15:25	09/06/17 09:30
480-123630-7	CXRF13(5-8)-083117	Solid	08/31/17 15:30	09/06/17 09:30
480-123630-8	CXRF16(5-8)-083117	Solid	08/31/17 15:35	09/06/17 09:30
480-123630-9	CXRF18(5-8)-083117	Solid	08/31/17 15:40	09/06/17 09:30
480-123630-10	CXRF23(10-11)-090117	Solid	09/01/17 11:00	09/06/17 09:30
480-123630-11	CXRF22(8-10)-090117	Solid	09/01/17 11:10	09/06/17 09:30
480-123630-12	CXRF26(10-14)-090117	Solid	09/01/17 11:15	09/06/17 09:30
480-123630-13	CXRF27(5-8)-090117	Solid	09/01/17 11:20	09/06/17 09:30

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

AESI Ref:
COC # :
Lab Use Only
480-123630 COC

Privileged & Confidential: N
Site Name: Conductorlab: septmeber2017 XRF Investigation
Lab Proj #
Lab ID

EDD To: Mark.Maggiore @amec.com
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #

Analysis Turnaround Time:	10
Standard -	Y
Rush Charges Authorized for -	
2 weeks -	Y
1 week -	N
Next Day -	N

PAGE 1 of 2 — 1
Job No

What is in the Text File? Mouse over here.

Written and maintained by AESI (Ver 3_7) 02-01-05
renesurgi@aol.com

Sample Identification: Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	SW846/8260B Volatile Organic Compounds (Preservative 1)	7196A Hexavalent Chromium (Preservative 0)	SW846/6010B Total Chromium (Preservative 2)	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
XRF-01	5	8	CXRF01(5-8)-083117	8/31/2017	15:00	SOIL	Soil	REG	2	com	N		X	X	
XRF-05	8	10	CXRF05(8-10)-083117	8/31/2017	15:10	SOIL	Soil	REG	2	com	N		X	X	
XR-F06	5	8	CXRF06(5-8)-083117	8/31/2017	15:15	SOIL	Soil	REG	2	com	N		X	X	
XRF-06	5	8	CXRF06(5-8)-083117DUP	8/31/2017	15:15	FB	Soil	FD	2	com	N		X	X	
XRF-09	5	8	CXRF09(5-8)-083117	8/31/2017	15:20	SOIL	Soil	REG	2	com	N		X	X	
XRF-11	5	8	CXRF11(5-8)-083117	8/31/2017	15:25	SOIL	Soil	REG	2	com	N		X	X	
XRF-13	5	8	CXRF13(5-8)-083117	8/31/2017	15:30	SOIL	Soil	REG	2	com	N		X	X	
XRF-16	5	8	CXRF16(5-8)-083117	8/31/2017	15:35	SOIL	Soil	REG	2	com	N		X	X	
XRF-18	5	8	CXRF18(5-8)-083117	8/31/2017	15:40	SOIL	Soil	REG	2	com	N		X	X	
XRF-23	10	11	CXRF23(10-11)-090117	9/1/2017	11:00	SOIL	Soil	REG	2	com	N		X	X	
XRF-22	8	10	CXRF22(8-10)-090117	9/1/2017	11:10	SOIL	Soil	REG	2	com	N		X	X	
XRF-26	10	14	CXRF26(10-14)-090117	9/1/2017	11:15	SOIL	Soil	REG	2	com	N		X	X	
XRF-27	5	8	CXRF27(5-8)-090117	9/1/2017	11:20	SOIL	Soil	REG	2	com	N		X	X	

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab.

#1 3,4

Relinquished by	Company	AmecFW	Received by	Company		Condition		Custody Seals Intact
	Date/Time	9/5/17 12:50		Date/Time 9-15-17 12:50		Cooler Temp.		
Relinquished by	Company TA		Received by	Company TAB		Condition		Custody Seals Intact
	Date/Time 9-5-17 1800			Date/Time 9/6/17 0930		Cooler Temp.		

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Tel 716.504.9838 | Fax 716.691.7991; Contact: JOHN SCHOVE

Honeywell — Chain Of Custody / Analysis Request

AESI Ref: 38450.55525
COC # : 90517
Lab Use Only
Lab Proj #
Lab ID

Privileged & Confidential: N
EDD To: Mark.Maggiore @amec.com
Site Name: Conductorlab:
Location of Site: Groton, Massachusetts

Client Contact: (name, co., address)
Honeywell International, Inc.
101 Columbia Road
Morristown, NJ 07962

Hardcopy Report To: Chris Ricardi (Amec) 207.775.5401
Invoice To: Honeywell International, Inc.

Sampler: Amec Foster Wheeler
P O #
Analysis Turnaround Time: 10
Standard - Y
Rush Charges Authorized for -
2 weeks - Y
1 week - N
Next Day - N

PAGE2 of2 1
Job No.

What is in the Text File? Mouse over here.
Written and maintained by AESI (Ver 3_7) 02-01-05 renesurgi@aol.com

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Grab/Composite	Field Filtered Sample ?	Preservative 1: SW846/8260B Volatile Organic Compounds	Preservative 0: 7196A Hexavalent Chromium	Preservative 2: SW846/6010B Total Chromium	Lab Sample Numbers
										Units		ug/L	mg/L	mg/L	
XRF-27	5	8	CXRF27(5-8)-090117MS	9/1/2017	11:20	SOIL	Soil	MS	2	com	N		X	X	
XRF-27	5	8	CXRF27(5-8)-090117MSD	9/1/2017	11:20	SOIL	Soil	MSD	2	com	N		X	X	

Special Instructions: MCP Protocol, GW-1 Detection Limits, MCP QA/QC Report. - LOWEST RL POSSIBLE
SW846/8260B Volatile Organic Compounds. 7196A Hexavalent Chromium, SW846/6010B Total Chromium, Enclosed Trip Blank Sampled by Lab.

#1 3,4

Relinquished by :	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	AmecFW	9/5/17 1256		TA	9-5-17 1256	Cooler Temp.	
Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Condition	Custody Seals Intact
	TA	9-5-17 1256			9/6/17 0930	Cooler Temp.	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn. Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

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

170P

Chain of Custody Record

480-123630 Chain of Custody

America
R IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	480-123630 Chain of Custody	.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	Massachusetts	Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Massachusetts		Job #: 480-123630-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/18/2017			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Honeywell Conductor lab	Project #: 48006721			
Site: Honeywell - Conductor Lab	SSOW#:			

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196MCP/3060A Chromium, Hexavalent	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
CXRF01(5-8)-083117 (480-123630-1)	8/31/17	15:00 Eastern		Solid			X	1	
CXRF05(8-10)-083117 (480-123630-2)	8/31/17	15:10 Eastern		Solid			X	1	
CXRF06(5-8)-083117 (480-123630-3)	8/31/17	15:15 Eastern		Solid			X	1	
CXRF06(5-8)-083117DUP (480-123630-4)	8/31/17	15:15 Eastern		Solid			X	1	
CXRF09(5-8)-083117 (480-123630-5)	8/31/17	15:20 Eastern		Solid			X	1	
CXRF11(5-8)-083117 (480-123630-6)	8/31/17	15:25 Eastern		Solid			X	1	
CXRF13(5-8)-083117 (480-123630-7)	8/31/17	15:30 Eastern		Solid			X	1	
CXRF16(5-8)-083117 (480-123630-8)	8/31/17	15:35 Eastern		Solid			X	1	
CXRF18(5-8)-083117 (480-123630-9)	8/31/17	15:40 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Cwallace	9/6/17 1630	TAB	DWalsh	9-7-17 9:30	TAB

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-37026.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	State of Origin: Massachusetts	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Massachusetts		Job #: 480-123630-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/18/2017			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Honeywell Conductor lab	Project #: 48006721			
Site: Honeywell - Conductor Lab	SSOW#:			

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196MCP/3060A Chromium, Hexavalent	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
CXRF23(10-11)-090117 (480-123630-10)	9/1/17	11:00 Eastern		Solid			X	1	
CXRF22(8-10)-090117 (480-123630-11)	9/1/17	11:10 Eastern		Solid			X	1	
CXRF26(10-14)-090117 (480-123630-12)	9/1/17	11:15 Eastern		Solid			X	1	
CXRF27(5-8)-090117 (480-123630-13)	9/1/17	11:20 Eastern		Solid			X	1	
CXRF27(5-8)-090117MS (480-123630-13MS)	9/1/17	11:20 Eastern	MS	Solid			X	1	
CXRF27(5-8)-090117MSD (480-123630-13MSD)	9/1/17	11:20 Eastern	MSD	Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [illegible]	Date/Time: 9/6/17 1630	Company: TAB	Received by: D Watson	Date/Time: 9-7-17 9:30	Company: TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-123630-1

Login Number: 123630
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-123630-1

Login Number: 123630
List Number: 2
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh
List Creation: 09/07/17 01:14 PM

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-127206-1
Client Project/Site: Honeywell Conductor lab

For:
Honeywell International Inc
Remediation & Evaluation Services
115 Tabor Road
Morris Plains, New Jersey 07950

Attn: Ms. Maria Kaouris

Authorized for release by:
11/20/2017 4:41:49 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-127206-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-127206-1

Comments
No additional comments.

Receipt
The samples were received on 11/8/2017 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

GC/MS VOA
Method(s) 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for Carbon disulfide, Isopropyl ether, Naphthalene, tert-Butyl ethyl ether, tert-Amyl methyl Ether, & Tetrahydrofuran

Method(s) 8260C: The continuing calibration verification (CCV) for Chloromethane, Dichlorodifluoromethane and Vinyl chloride associated with batch 480-387183 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : C110617-01 SOIL-0-1 (480-127206-1), C110617-02 SOIL-0-1 (480-127206-2), C110617-03 SOIL-0-1 (480-127206-3), C110617-04 SOIL-0-1 (480-127206-4), C110617-05 SOIL-0-1 (480-127206-5) and C110617-06 SOIL-0-1 (480-127206-6).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-387195 exceeded control limits for the following analyte: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate and Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : C110617-01 SOIL-0-1 (480-127206-1), C110617-02 SOIL-0-1 (480-127206-2), C110617-03 SOIL-0-1 (480-127206-3), C110617-04 SOIL-0-1 (480-127206-4), C110617-05 SOIL-0-1 (480-127206-5) and C110617-06 SOIL-0-1 (480-127206-6).

Method(s) 8260C: The laboratory control sample (LCS) for batch 480-387195 recovered outside control limits but was greater than 10% for the following analytes: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted: C110617-01 SOIL-0-1 (480-127206-1), C110617-02 SOIL-0-1 (480-127206-2), C110617-03 SOIL-0-1 (480-127206-3), C110617-04 SOIL-0-1 (480-127206-4), C110617-05 SOIL-0-1 (480-127206-5) and C110617-06 SOIL-0-1 (480-127206-6).

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

Metals
Method(s) 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

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

General Chemistry
Method(s) 7196A: The sample post-digestion spike (PDS) recoveries were outside criteria. Acceptable laboratory control sample (LCS) soluble and insoluble analysis data demonstrate that the analytical system was operating in control; therefore, this condition is most likely due to a matrix effect.

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

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-127206-1**
Project Location:	**Groton**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-127206-1(1-6)

Matrices: ☐ Groundwater/Surface Water ■ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ■	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:		Position:	Project Management Assistant
Printed Name:	Rebecca Jones	Date:	11/20/17 16:29

Detection Summary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-01 SOIL-0-1 — Lab Sample ID: 480-127206-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4	J	230	3.8	ug/Kg	1	☼	8260C	Total/NA
Chromium	60	B	0.57	0.23	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	2.9		0.44	0.13	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: C110617-02 SOIL-0-1 — Lab Sample ID: 480-127206-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.40	J	4.2	0.32	ug/Kg	1	☼	8260C	Total/NA
Chromium	74	B	0.54	0.21	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	0.55		0.43	0.12	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: C110617-03 SOIL-0-1 — Lab Sample ID: 480-127206-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3	J	240	4.0	ug/Kg	1	☼	8260C	Total/NA
Chromium	83	B	0.56	0.22	mg/Kg	1	☼	6010	Total/NA

Client Sample ID: C110617-04 SOIL-0-1 — Lab Sample ID: 480-127206-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.5	J	250	4.3	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.38	J	5.1	0.38	ug/Kg	1	☼	8260C	Total/NA
Chromium	56	B	0.55	0.22	mg/Kg	1	☼	6010	Total/NA

Client Sample ID: C110617-05 SOIL-0-1 — Lab Sample ID: 480-127206-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.6	J	6.9	1.5	ug/Kg	1	☼	8260C	Total/NA
Chromium	63	B	0.58	0.23	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	0.17	J	0.43	0.12	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: C110617-06 SOIL-0-1 — Lab Sample ID: 480-127206-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.3	J	240	4.0	ug/Kg	1	☼	8260C	Total/NA
Chromium	66	B	0.54	0.22	mg/Kg	1	☼	6010	Total/NA
Cr (VI)	2.5		0.42	0.12	mg/Kg	1	☼	7196A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: C110617-01 SOIL-0-1

Date Collected: 11/06/17 15:00
Date Received: 11/08/17 01:00

Lab Sample ID: 480-127206-1

Matrix: Solid
Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.5	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.73	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,1,2-Trichloroethane	ND		4.5	0.59	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,1-Dichloropropene	ND		4.5	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2,3-Trichlorobenzene	ND		4.5	0.48	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2,3-Trichloropropane	ND		4.5	0.46	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2,4-Trichlorobenzene	ND		4.5	0.27	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2,4-Trimethylbenzene	ND		4.5	0.87	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2-Dibromo-3-Chloropropane	ND		23	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,2-Dichloropropane	ND		4.5	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,3,5-Trimethylbenzene	ND		4.5	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,3-Dichloropropane	ND		4.5	0.27	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,4-Dichlorobenzene	ND		4.5	0.63	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
1,4-Dioxane	ND		230	22	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
2,2-Dichloropropane	ND		4.5	0.77	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
2-Butanone (MEK)	ND	*	23	1.7	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
2-Chlorotoluene	ND		4.5	0.30	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
4-Chlorotoluene	ND		4.5	0.53	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
4-Isopropyltoluene	ND		4.5	0.36	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Acetone	**6.4**	**J**	230	3.8	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Benzene	ND		4.5	0.22	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Bromobenzene	ND		4.5	0.79	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Bromoform	ND		4.5	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Bromomethane	ND		4.5	0.41	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Carbon disulfide	ND		4.5	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Carbon tetrachloride	ND		4.5	0.44	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Chlorobenzene	ND		4.5	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Chlorobromomethane	ND		4.5	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Chlorodibromomethane	ND		4.5	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
cis-1,2-Dichloroethene	ND		4.5	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Dibromomethane	ND		4.5	0.46	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Dichlorobromomethane	ND		4.5	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Dichlorodifluoromethane	ND	*	4.5	0.37	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Ethyl ether	ND		4.5	1.9	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Ethylene Dibromide	ND		4.5	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Hexachlorobutadiene	ND		4.5	0.53	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-01 SOIL-0-1

Date Collected: 11/06/17 15:00
Date Received: 11/08/17 01:00

Lab Sample ID: 480-127206-1

Matrix: Solid
Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		4.5	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Isopropylbenzene	ND		4.5	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
m-Xylene & p-Xylene	ND		4.5	0.76	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Naphthalene	ND		23	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
n-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
N-Propylbenzene	ND		4.5	0.36	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
o-Xylene	ND		4.5	0.59	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
sec-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Styrene	ND		4.5	0.23	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Tert-amyl methyl ether	ND		4.5	1.2	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Tert-butyl ethyl ether	ND		4.5	2.0	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
tert-Butylbenzene	ND		4.5	0.47	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Tetrachloroethene	ND		4.5	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Tetrahydrofuran	ND	*	45	4.2	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Toluene	ND		4.5	0.34	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
trans-1,2-Dichloroethene	ND		4.5	0.47	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Trichlorofluoromethane	ND		4.5	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:05*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:05*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:05*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:05*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**60**	**B**	0.57	0.23	mg/Kg	☼	11/08/17 14:54	11/15/17 22:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**2.9**		0.44	0.13	mg/Kg	☼	11/16/17 11:20	11/16/17 16:37	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.4**		0.1	0.1	%			11/08/17 09:06	1
Percent Solids	**90.6**		0.1	0.1	%			11/08/17 09:06	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-02 SOIL-0-1

Lab Sample ID: 480-127206-2

Date Collected: 11/06/17 15:17
Matrix: Solid
Date Received: 11/08/17 01:00
Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.2	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,1-Dichloropropene	ND		4.2	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2,3-Trichlorobenzene	ND		4.2	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2,3-Trichloropropane	ND		4.2	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2,4-Trichlorobenzene	ND		4.2	0.26	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2,4-Trimethylbenzene	ND		4.2	0.81	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2-Dibromo-3-Chloropropane	ND		21	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,3,5-Trimethylbenzene	ND		4.2	0.27	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,3-Dichloropropane	ND		4.2	0.25	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
1,4-Dioxane	ND		210	20	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
2,2-Dichloropropane	ND		4.2	0.71	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
2-Butanone (MEK)	ND	*	21	1.5	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
2-Chlorotoluene	ND		4.2	0.28	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
4-Chlorotoluene	ND		4.2	0.50	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
4-Isopropyltoluene	ND		4.2	0.34	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Acetone	ND		210	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Benzene	ND		4.2	0.21	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Bromobenzene	ND		4.2	0.74	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Chlorobromomethane	ND		4.2	0.30	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Chlorodibromomethane	ND		4.2	0.54	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Chloroethane	ND		4.2	0.95	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Dibromomethane	ND		4.2	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Dichlorobromomethane	ND		4.2	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Dichlorodifluoromethane	ND	*	4.2	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Ethyl ether	ND		4.2	1.8	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Ethylene Dibromide	ND		4.2	0.54	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Hexachlorobutadiene	ND		4.2	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-02 SOIL-0-1

Date Collected: 11/06/17 15:17
Date Received: 11/08/17 01:00

Lab Sample ID: 480-127206-2

Matrix: Solid
Percent Solids: 93.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		4.2	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Isopropylbenzene	ND		4.2	0.63	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
m-Xylene & p-Xylene	ND		4.2	0.71	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Naphthalene	ND		21	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
n-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
N-Propylbenzene	ND		4.2	0.34	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
o-Xylene	ND		4.2	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
sec-Butylbenzene	ND		4.2	0.37	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Styrene	ND		4.2	0.21	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Tert-amyl methyl ether	ND		4.2	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Tert-butyl ethyl ether	ND		4.2	1.8	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
tert-Butylbenzene	ND		4.2	0.44	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Tetrahydrofuran	ND	*	42	3.9	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Toluene	**0.40**	**J**	4.2	0.32	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
trans-1,3-Dichloropropene	ND		4.2	1.8	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:31*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:31*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:31*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:31*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**74**	**B**	0.54	0.21	mg/Kg	☼	11/08/17 14:54	11/15/17 23:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.55**		0.43	0.12	mg/Kg	☼	11/16/17 11:20	11/16/17 16:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.8**		0.1	0.1	%			11/08/17 09:06	1
Percent Solids	**93.2**		0.1	0.1	%			11/08/17 09:06	1

Client Sample ID: C110617-03 SOIL-0-1

Lab Sample ID: 480-127206-3

Date Collected: 11/06/17 15:35
Matrix: Solid
Date Received: 11/08/17 01:00
Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.8	0.48	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,1,2,2-Tetrachloroethane	ND		4.8	0.77	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,1-Dichloroethane	ND		4.8	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,1-Dichloroethene	ND		4.8	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,1-Dichloropropene	ND		4.8	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2,3-Trichlorobenzene	ND		4.8	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2,3-Trichloropropane	ND		4.8	0.48	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2,4-Trimethylbenzene	ND		4.8	0.91	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2-Dibromo-3-Chloropropane	ND		24	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2-Dichlorobenzene	ND		4.8	0.37	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,3,5-Trimethylbenzene	ND		4.8	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,3-Dichlorobenzene	ND		4.8	0.24	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,3-Dichloropropane	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
1,4-Dioxane	ND		240	23	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
2,2-Dichloropropane	ND		4.8	0.81	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
2-Butanone (MEK)	ND	*	24	1.7	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
2-Chlorotoluene	ND		4.8	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
4-Chlorotoluene	ND		4.8	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
4-Isopropyltoluene	ND		4.8	0.38	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Acetone	**5.3**	**J**	240	4.0	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Benzene	ND		4.8	0.23	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Bromobenzene	ND		4.8	0.84	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Chlorobromomethane	ND		4.8	0.34	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Chlorodibromomethane	ND		4.8	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Chloroform	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
cis-1,2-Dichloroethene	ND		4.8	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Dibromomethane	ND		4.8	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Dichlorobromomethane	ND		4.8	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Dichlorodifluoromethane	ND	*	4.8	0.39	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Ethyl ether	ND		4.8	2.0	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Ethylene Dibromide	ND		4.8	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Hexachlorobutadiene	ND		4.8	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-03 SOIL-0-1

Date Collected: 11/06/17 15:35
Date Received: 11/08/17 01:00

Lab Sample ID: 480-127206-3

Matrix: Solid
Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Isopropylbenzene	ND		4.8	0.72	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
m-Xylene & p-Xylene	ND		4.8	0.80	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Naphthalene	ND		24	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
n-Butylbenzene	ND		4.8	0.41	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
N-Propylbenzene	ND		4.8	0.38	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
o-Xylene	ND		4.8	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
sec-Butylbenzene	ND		4.8	0.41	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Styrene	ND		4.8	0.24	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Tert-amyl methyl ether	ND		4.8	1.2	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Tert-butyl ethyl ether	ND		4.8	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
tert-Butylbenzene	ND		4.8	0.50	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Tetrahydrofuran	ND	*	48	4.4	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Toluene	ND		4.8	0.36	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
trans-1,2-Dichloroethene	ND		4.8	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Trichloroethene	ND		4.8	1.0	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1
Vinyl chloride	ND		4.8	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:56*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:56*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*11/08/17 08:00*	*11/14/17 16:56*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**83**	**B**	0.56	0.22	mg/Kg	☼	11/08/17 14:54	11/15/17 23:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.43	0.12	mg/Kg	☼	11/16/17 11:20	11/16/17 16:40	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.9**		0.1	0.1	%			11/08/17 09:06	1
Percent Solids	**94.1**		0.1	0.1	%			11/08/17 09:06	1

Client Sample ID: C110617-04 SOIL-0-1

Lab Sample ID: 480-127206-4

Date Collected: 11/06/17 15:55
Matrix: Solid
Date Received: 11/08/17 01:00
Percent Solids: 92.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,1,2,2-Tetrachloroethane	ND		5.1	0.82	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,1,2-Trichloroethane	ND		5.1	0.66	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,1-Dichloroethene	ND		5.1	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,1-Dichloropropene	ND		5.1	0.72	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2,3-Trichlorobenzene	ND		5.1	0.54	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2,3-Trichloropropane	ND		5.1	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2,4-Trichlorobenzene	ND		5.1	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2,4-Trimethylbenzene	ND		5.1	0.97	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2-Dibromo-3-Chloropropane	ND		25	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2-Dichlorobenzene	ND		5.1	0.40	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2-Dichloroethane	ND		5.1	0.25	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,2-Dichloropropane	ND		5.1	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,3,5-Trimethylbenzene	ND		5.1	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,3-Dichlorobenzene	ND		5.1	0.26	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,3-Dichloropropane	ND		5.1	0.30	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,4-Dichlorobenzene	ND		5.1	0.71	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
1,4-Dioxane	ND		250	24	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
2,2-Dichloropropane	ND		5.1	0.86	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
2-Butanone (MEK)	ND	*	25	1.9	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
2-Chlorotoluene	ND		5.1	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
4-Chlorotoluene	ND		5.1	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
4-Isopropyltoluene	ND		5.1	0.41	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.7	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Acetone	**7.5**	**J**	250	4.3	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Benzene	ND		5.1	0.25	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Bromobenzene	ND		5.1	0.89	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Bromoform	ND		5.1	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Bromomethane	ND		5.1	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Carbon disulfide	ND		5.1	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Chlorobromomethane	ND		5.1	0.36	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Chlorodibromomethane	ND		5.1	0.65	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Chloroethane	ND		5.1	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Chloroform	ND		5.1	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Chloromethane	ND		5.1	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
cis-1,2-Dichloroethene	ND		5.1	0.65	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
cis-1,3-Dichloropropene	ND		5.1	0.73	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Dibromomethane	ND		5.1	0.52	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Dichlorobromomethane	ND		5.1	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Dichlorodifluoromethane	ND	*	5.1	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Ethyl ether	ND		5.1	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Ethylene Dibromide	ND		5.1	0.65	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Hexachlorobutadiene	ND		5.1	0.59	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1

Client Sample Results

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-04 SOIL-0-1

Date Collected: 11/06/17 15:55
Date Received: 11/08/17 01:00

Lab Sample ID: 480-127206-4

Matrix: Solid
Percent Solids: 92.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		5.1	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Isopropylbenzene	ND		5.1	0.76	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Methylene Chloride	ND		5.1	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
m-Xylene & p-Xylene	ND		5.1	0.85	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Naphthalene	ND		25	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
n-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
N-Propylbenzene	ND		5.1	0.40	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
o-Xylene	ND		5.1	0.66	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
sec-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Styrene	ND		5.1	0.25	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Tert-amyl methyl ether	ND		5.1	1.3	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Tert-butyl ethyl ether	ND		5.1	2.2	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
tert-Butylbenzene	ND		5.1	0.53	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Tetrachloroethene	ND		5.1	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Tetrahydrofuran	ND	*	51	4.7	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Toluene	**0.38**	**J**	5.1	0.38	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
trans-1,2-Dichloroethene	ND		5.1	0.52	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
trans-1,3-Dichloropropene	ND		5.1	2.2	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Trichlorofluoromethane	ND		5.1	0.48	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:21*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:21*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:21*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:21*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**56**	**B**	0.55	0.22	mg/Kg	☼	11/08/17 14:54	11/15/17 23:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.43	0.12	mg/Kg	☼	11/16/17 11:20	11/16/17 16:42	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.5**		0.1	0.1	%			11/08/17 09:06	1
Percent Solids	**92.5**		0.1	0.1	%			11/08/17 09:06	1

Client Sample ID: C110617-05 SOIL-0-1

Lab Sample ID: 480-127206-5

Date Collected: 11/06/17 16:10
Matrix: Solid
Date Received: 11/08/17 01:00
Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.9	0.69	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,1,1-Trichloroethane	ND		6.9	0.50	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,1,2,2-Tetrachloroethane	ND		6.9	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,1,2-Trichloroethane	ND		6.9	0.90	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,1-Dichloroethane	ND		6.9	0.85	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,1-Dichloroethene	ND		6.9	0.85	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,1-Dichloropropene	ND		6.9	0.98	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2,3-Trichlorobenzene	ND		6.9	0.74	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2,3-Trichloropropane	ND		6.9	0.71	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2,4-Trichlorobenzene	ND		6.9	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2,4-Trimethylbenzene	ND		6.9	1.3	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2-Dibromo-3-Chloropropane	ND		35	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2-Dichlorobenzene	ND		6.9	0.54	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2-Dichloroethane	ND		6.9	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,2-Dichloropropane	ND		6.9	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,3,5-Trimethylbenzene	ND		6.9	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,3-Dichlorobenzene	ND		6.9	0.36	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,3-Dichloropropane	ND		6.9	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,4-Dichlorobenzene	ND		6.9	0.97	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
1,4-Dioxane	ND		350	33	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
2,2-Dichloropropane	ND		6.9	1.2	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
2-Butanone (MEK)	ND	*	35	2.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
2-Chlorotoluene	ND		6.9	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
2-Hexanone	ND		35	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
4-Chlorotoluene	ND		6.9	0.82	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
4-Isopropyltoluene	ND		6.9	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
4-Methyl-2-pentanone (MIBK)	ND		35	2.3	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Acetone	ND		350	5.8	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Benzene	ND		6.9	0.34	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Bromobenzene	ND		6.9	1.2	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Bromoform	ND		6.9	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Bromomethane	ND		6.9	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Carbon disulfide	ND		6.9	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Carbon tetrachloride	ND		6.9	0.67	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Chlorobenzene	ND		6.9	0.92	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Chlorobromomethane	ND		6.9	0.50	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Chlorodibromomethane	ND		6.9	0.89	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Chloroethane	ND		6.9	1.6	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Chloroform	ND		6.9	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Chloromethane	ND		6.9	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
cis-1,2-Dichloroethene	ND		6.9	0.89	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
cis-1,3-Dichloropropene	ND		6.9	1.0	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Dibromomethane	ND		6.9	0.71	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Dichlorobromomethane	ND		6.9	0.93	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Dichlorodifluoromethane	ND	*	6.9	0.57	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Ethyl ether	ND		6.9	2.9	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Ethylbenzene	ND		6.9	0.48	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Ethylene Dibromide	ND		6.9	0.89	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Hexachlorobutadiene	ND		6.9	0.81	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-05 SOIL-0-1

Date Collected: 11/06/17 16:10
Date Received: 11/08/17 01:00

Lab Sample ID: 480-127206-5

Matrix: Solid
Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		6.9	3.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Isopropylbenzene	ND		6.9	1.0	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Methyl tert-butyl ether	ND		6.9	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Methylene Chloride	ND		6.9	3.2	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
m-Xylene & p-Xylene	ND		6.9	1.2	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Naphthalene	ND		35	0.93	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
n-Butylbenzene	ND		6.9	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
N-Propylbenzene	ND		6.9	0.55	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
o-Xylene	ND		6.9	0.91	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
sec-Butylbenzene	ND		6.9	0.60	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Styrene	ND		6.9	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Tert-amyl methyl ether	ND		6.9	1.8	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Tert-butyl ethyl ether	ND		6.9	3.1	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
tert-Butylbenzene	ND		6.9	0.72	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Tetrachloroethene	ND		6.9	0.93	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Tetrahydrofuran	ND	*	69	6.4	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Toluene	ND		6.9	0.52	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
trans-1,2-Dichloroethene	ND		6.9	0.72	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
trans-1,3-Dichloropropene	ND		6.9	3.1	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Trichloroethene	**3.6**	**J**	6.9	1.5	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Trichlorofluoromethane	ND		6.9	0.66	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1
Vinyl chloride	ND		6.9	0.85	ug/Kg	☼	11/08/17 08:00	11/14/17 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:47*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:47*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:47*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*11/08/17 08:00*	*11/14/17 17:47*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**63**	**B**	0.58	0.23	mg/Kg	☼	11/08/17 14:54	11/15/17 23:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.17**	**J**	0.43	0.12	mg/Kg	☼	11/16/17 11:20	11/16/17 16:43	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.1**		0.1	0.1	%			11/08/17 09:06	1
Percent Solids	**93.9**		0.1	0.1	%			11/08/17 09:06	1

Client Sample ID: C110617-06 SOIL-0-1

Lab Sample ID: 480-127206-6

Date Collected: 11/06/17 16:30
Matrix: Solid
Date Received: 11/08/17 01:00
Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.8	0.48	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,1,2,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,1-Dichloroethane	ND		4.8	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,1-Dichloropropene	ND		4.8	0.68	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2,3-Trichlorobenzene	ND		4.8	0.51	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2,3-Trichloropropane	ND		4.8	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2,4-Trimethylbenzene	ND		4.8	0.92	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2-Dibromo-3-Chloropropane	ND		24	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2-Dichlorobenzene	ND		4.8	0.37	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,3,5-Trimethylbenzene	ND		4.8	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,3-Dichloropropane	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
1,4-Dioxane	ND		240	23	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
2,2-Dichloropropane	ND		4.8	0.81	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
2-Butanone (MEK)	ND	*	24	1.8	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
2-Chlorotoluene	ND		4.8	0.31	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
4-Chlorotoluene	ND		4.8	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
4-Isopropyltoluene	ND		4.8	0.38	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Acetone	**9.3**	**J**	240	4.0	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Benzene	ND		4.8	0.23	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Bromobenzene	ND		4.8	0.84	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Chlorobromomethane	ND		4.8	0.35	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Chlorodibromomethane	ND		4.8	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Chloroform	ND		4.8	0.30	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
cis-1,2-Dichloroethene	ND		4.8	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Dibromomethane	ND		4.8	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Dichlorobromomethane	ND		4.8	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Dichlorodifluoromethane	ND	*	4.8	0.40	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Ethyl ether	ND		4.8	2.0	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Ethylene Dibromide	ND		4.8	0.61	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Hexachlorobutadiene	ND		4.8	0.56	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1

Client Sample ID: C110617-06 SOIL-0-1

Lab Sample ID: 480-127206-6

Date Collected: 11/06/17 16:30
Matrix: Solid
Date Received: 11/08/17 01:00
Percent Solids: 95.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		4.8	2.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Isopropylbenzene	ND		4.8	0.72	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
m-Xylene & p-Xylene	ND		4.8	0.80	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Naphthalene	ND		24	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
n-Butylbenzene	ND		4.8	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
N-Propylbenzene	ND		4.8	0.38	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
o-Xylene	ND		4.8	0.62	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
sec-Butylbenzene	ND		4.8	0.42	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Styrene	ND		4.8	0.24	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Tert-amyl methyl ether	ND		4.8	1.2	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Tert-butyl ethyl ether	ND		4.8	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
tert-Butylbenzene	ND		4.8	0.50	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Tetrahydrofuran	ND	*	48	4.4	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Toluene	ND		4.8	0.36	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
trans-1,2-Dichloroethene	ND		4.8	0.49	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1
Vinyl chloride	ND		4.8	0.58	ug/Kg	☼	11/08/17 08:00	11/14/17 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*	*11/08/17 08:00*	*11/14/17 18:12*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/08/17 08:00*	*11/14/17 18:12*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*11/08/17 08:00*	*11/14/17 18:12*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*11/08/17 08:00*	*11/14/17 18:12*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**66**	**B**	0.54	0.22	mg/Kg	☼	11/08/17 14:54	11/15/17 23:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**2.5**		0.42	0.12	mg/Kg	☼	11/16/17 11:20	11/16/17 16:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.4**		0.1	0.1	%			11/08/17 09:06	1
Percent Solids	**95.6**		0.1	0.1	%			11/08/17 09:06	1

Surrogate Summary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-127206-1	C110617-01 SOIL-0-1	105	98	102	99
480-127206-2	C110617-02 SOIL-0-1	103	99	102	99
480-127206-3	C110617-03 SOIL-0-1	101	98	100	100
480-127206-4	C110617-04 SOIL-0-1	104	96	102	98
480-127206-5	C110617-05 SOIL-0-1	112	100	106	103
480-127206-6	C110617-06 SOIL-0-1	107	98	104	100
LCS 480-387195/1-A	Lab Control Sample	110	99	100	99
LCSD 480-387195/2-A	Lab Control Sample Dup	108	101	102	101
MB 480-387195/3-A	Method Blank	98	96	99	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 480-387195/3-A
Matrix: Solid
Analysis Batch: 387183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,1-Dichloropropene	ND		5.0	0.71	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2,3-Trichlorobenzene	ND		5.0	0.53	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2,3-Trichloropropane	ND		5.0	0.51	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2-Dibromo-3-Chloropropane	ND		25	2.5	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,3-Dichloropropane	ND		5.0	0.30	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
1,4-Dioxane	ND		250	24	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
2,2-Dichloropropane	ND		5.0	0.85	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
2-Chlorotoluene	ND		5.0	0.33	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
2-Hexanone	ND		25	2.5	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
4-Chlorotoluene	ND		5.0	0.59	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Acetone	ND		250	4.2	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Benzene	ND		5.0	0.25	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Bromobenzene	ND		5.0	0.88	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Bromoform	ND		5.0	2.5	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Bromomethane	ND		5.0	0.45	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Chlorobromomethane	ND		5.0	0.36	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Chlorodibromomethane	ND		5.0	0.64	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Chloroethane	ND		5.0	1.1	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Chloroform	ND		5.0	0.31	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Chloromethane	ND		5.0	0.30	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Dibromomethane	ND		5.0	0.52	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Dichlorobromomethane	ND		5.0	0.67	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Ethyl ether	ND		5.0	2.1	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Ethylene Dibromide	ND		5.0	0.64	ug/Kg		11/14/17 09:16	11/14/17 12:43	1

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

Lab Sample ID: MB 480-387195/3-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387183 — **Prep Batch: 387195**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		5.0	0.59	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Isopropyl ether	ND		5.0	2.5	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
m-Xylene & p-Xylene	ND		5.0	0.84	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Naphthalene	ND		25	0.67	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
o-Xylene	ND		5.0	0.65	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Styrene	ND		5.0	0.25	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Tert-amyl methyl ether	ND		5.0	1.3	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Tert-butyl ethyl ether	ND		5.0	2.2	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Tetrahydrofuran	ND		50	4.6	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Toluene	ND		5.0	0.38	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Trichloroethene	ND		5.0	1.1	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		11/14/17 09:16	11/14/17 12:43	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		11/14/17 09:16	11/14/17 12:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*11/14/17 09:16*	*11/14/17 12:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*11/14/17 09:16*	*11/14/17 12:43*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*11/14/17 09:16*	*11/14/17 12:43*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*11/14/17 09:16*	*11/14/17 12:43*	*1*

Lab Sample ID: LCS 480-387195/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387183 — **Prep Batch: 387195**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	49.4		ug/Kg		99	70 - 130
1,1,1-Trichloroethane	50.0	46.8		ug/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	50.0	52.2		ug/Kg		104	70 - 130
1,1,2-Trichloroethane	50.0	48.6		ug/Kg		97	70 - 130
1,1-Dichloroethane	50.0	49.0		ug/Kg		98	70 - 130
1,1-Dichloroethene	50.0	46.6		ug/Kg		93	70 - 130
1,1-Dichloropropene	50.0	48.3		ug/Kg		97	70 - 130
1,2,3-Trichlorobenzene	50.0	49.4		ug/Kg		99	70 - 130
1,2,3-Trichloropropane	50.0	52.1		ug/Kg		104	70 - 130
1,2,4-Trichlorobenzene	50.0	50.3		ug/Kg		101	70 - 130
1,2,4-Trimethylbenzene	50.0	49.7		ug/Kg		99	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	59.6		ug/Kg		119	70 - 130
1,2-Dichlorobenzene	50.0	49.1		ug/Kg		98	70 - 130

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

Lab Sample ID: LCS 480-387195/1-A
Matrix: Solid
Analysis Batch: 387183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	47.5		ug/Kg		95	70 - 130
1,2-Dichloropropane	50.0	46.5		ug/Kg		93	70 - 130
1,3,5-Trimethylbenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	49.3		ug/Kg		99	70 - 130
1,3-Dichloropropane	50.0	48.3		ug/Kg		97	70 - 130
1,4-Dichlorobenzene	50.0	48.2		ug/Kg		96	70 - 130
1,4-Dioxane	1000	914		ug/Kg		91	70 - 130
2,2-Dichloropropane	50.0	50.2		ug/Kg		100	70 - 130
2-Butanone (MEK)	250	485	*	ug/Kg		194	70 - 130
2-Chlorotoluene	50.0	50.1		ug/Kg		100	70 - 130
2-Hexanone	250	281		ug/Kg		112	70 - 130
4-Chlorotoluene	50.0	50.5		ug/Kg		101	70 - 130
4-Isopropyltoluene	50.0	51.3		ug/Kg		103	70 - 130
4-Methyl-2-pentanone (MIBK)	250	274		ug/Kg		110	70 - 130
Acetone	250	278		ug/Kg		111	70 - 130
Benzene	50.0	47.3		ug/Kg		95	70 - 130
Bromobenzene	50.0	48.4		ug/Kg		97	70 - 130
Bromoform	50.0	44.7		ug/Kg		89	70 - 130
Bromomethane	50.0	53.6		ug/Kg		107	70 - 130
Carbon disulfide	50.0	48.0		ug/Kg		96	70 - 130
Carbon tetrachloride	50.0	47.4		ug/Kg		95	70 - 130
Chlorobenzene	50.0	47.3		ug/Kg		95	70 - 130
Chlorobromomethane	50.0	46.3		ug/Kg		93	70 - 130
Chlorodibromomethane	50.0	46.2		ug/Kg		92	70 - 130
Chloroethane	50.0	57.8		ug/Kg		116	70 - 130
Chloroform	50.0	47.4		ug/Kg		95	70 - 130
Chloromethane	50.0	57.3		ug/Kg		115	70 - 130
cis-1,2-Dichloroethene	50.0	47.5		ug/Kg		95	70 - 130
cis-1,3-Dichloropropene	50.0	49.9		ug/Kg		100	70 - 130
Dibromomethane	50.0	48.3		ug/Kg		97	70 - 130
Dichlorobromomethane	50.0	49.8		ug/Kg		100	70 - 130
Dichlorodifluoromethane	50.0	68.4	*	ug/Kg		137	70 - 130
Ethyl ether	50.0	44.1		ug/Kg		88	70 - 130
Ethylbenzene	50.0	49.0		ug/Kg		98	70 - 130
Ethylene Dibromide	50.0	50.2		ug/Kg		100	70 - 130
Hexachlorobutadiene	50.0	45.9		ug/Kg		92	70 - 130
Isopropyl ether	50.0	48.7		ug/Kg		97	70 - 130
Isopropylbenzene	50.0	50.2		ug/Kg		100	70 - 130
Methyl tert-butyl ether	50.0	48.5		ug/Kg		97	70 - 130
Methylene Chloride	50.0	49.2		ug/Kg		98	70 - 130
m-Xylene & p-Xylene	50.0	47.4		ug/Kg		95	70 - 130
Naphthalene	50.0	52.4		ug/Kg		105	70 - 130
n-Butylbenzene	50.0	51.0		ug/Kg		102	70 - 130
N-Propylbenzene	50.0	50.3		ug/Kg		101	70 - 130
o-Xylene	50.0	47.4		ug/Kg		95	70 - 130
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 130
Styrene	50.0	48.6		ug/Kg		97	70 - 130
Tert-amyl methyl ether	50.0	50.7		ug/Kg		101	70 - 130

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

Lab Sample ID: LCS 480-387195/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387183 — **Prep Batch: 387195**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tert-butyl ethyl ether	50.0	49.1		ug/Kg		98	70 - 130
tert-Butylbenzene	50.0	47.5		ug/Kg		95	70 - 130
Tetrachloroethene	50.0	51.4		ug/Kg		103	70 - 130
Tetrahydrofuran	100	140	*	ug/Kg		140	70 - 130
Toluene	50.0	48.1		ug/Kg		96	70 - 130
trans-1,2-Dichloroethene	50.0	48.5		ug/Kg		97	70 - 130
trans-1,3-Dichloropropene	50.0	51.3		ug/Kg		103	70 - 130
Trichloroethene	50.0	47.1		ug/Kg		94	70 - 130
Trichlorofluoromethane	50.0	52.0		ug/Kg		104	70 - 130
Vinyl chloride	50.0	56.0		ug/Kg		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 480-387195/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387183 — **Prep Batch: 387195**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/Kg		94	70 - 130	5	20
1,1,1-Trichloroethane	50.0	43.1		ug/Kg		86	70 - 130	8	20
1,1,2,2-Tetrachloroethane	50.0	51.5		ug/Kg		103	70 - 130	1	20
1,1,2-Trichloroethane	50.0	47.3		ug/Kg		95	70 - 130	3	20
1,1-Dichloroethane	50.0	45.6		ug/Kg		91	70 - 130	7	20
1,1-Dichloroethene	50.0	42.3		ug/Kg		85	70 - 130	10	20
1,1-Dichloropropene	50.0	44.5		ug/Kg		89	70 - 130	8	20
1,2,3-Trichlorobenzene	50.0	47.2		ug/Kg		94	70 - 130	5	20
1,2,3-Trichloropropane	50.0	51.1		ug/Kg		102	70 - 130	2	20
1,2,4-Trichlorobenzene	50.0	47.7		ug/Kg		95	70 - 130	5	20
1,2,4-Trimethylbenzene	50.0	46.0		ug/Kg		92	70 - 130	8	20
1,2-Dibromo-3-Chloropropane	50.0	60.4		ug/Kg		121	70 - 130	1	20
1,2-Dichlorobenzene	50.0	46.4		ug/Kg		93	70 - 130	6	20
1,2-Dichloroethane	50.0	46.0		ug/Kg		92	70 - 130	3	20
1,2-Dichloropropane	50.0	43.6		ug/Kg		87	70 - 130	6	20
1,3,5-Trimethylbenzene	50.0	46.0		ug/Kg		92	70 - 130	8	20
1,3-Dichlorobenzene	50.0	46.3		ug/Kg		93	70 - 130	6	20
1,3-Dichloropropane	50.0	46.8		ug/Kg		94	70 - 130	3	20
1,4-Dichlorobenzene	50.0	45.0		ug/Kg		90	70 - 130	7	20
1,4-Dioxane	1000	1010		ug/Kg		101	70 - 130	10	20
2,2-Dichloropropane	50.0	46.1		ug/Kg		92	70 - 130	9	20
2-Butanone (MEK)	250	483	*	ug/Kg		193	70 - 130	1	20
2-Chlorotoluene	50.0	47.0		ug/Kg		94	70 - 130	6	20
2-Hexanone	250	281		ug/Kg		112	70 - 130	0	20
4-Chlorotoluene	50.0	46.5		ug/Kg		93	70 - 130	8	20
4-Isopropyltoluene	50.0	47.0		ug/Kg		94	70 - 130	9	20

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

Lab Sample ID: LCSD 480-387195/2-A
Matrix: Solid
Analysis Batch: 387183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387195

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	250	270		ug/Kg		108	70 - 130	1	20
Acetone	250	272		ug/Kg		109	70 - 130	2	20
Benzene	50.0	44.2		ug/Kg		88	70 - 130	7	20
Bromobenzene	50.0	45.5		ug/Kg		91	70 - 130	6	20
Bromoform	50.0	44.1		ug/Kg		88	70 - 130	1	20
Bromomethane	50.0	43.9		ug/Kg		88	70 - 130	20	20
Carbon disulfide	50.0	43.1		ug/Kg		86	70 - 130	11	20
Carbon tetrachloride	50.0	44.1		ug/Kg		88	70 - 130	7	20
Chlorobenzene	50.0	44.8		ug/Kg		90	70 - 130	5	20
Chlorobromomethane	50.0	44.2		ug/Kg		88	70 - 130	5	20
Chlorodibromomethane	50.0	45.1		ug/Kg		90	70 - 130	2	20
Chloroethane	50.0	50.0		ug/Kg		100	70 - 130	14	20
Chloroform	50.0	44.8		ug/Kg		90	70 - 130	6	20
Chloromethane	50.0	50.3		ug/Kg		101	70 - 130	13	20
cis-1,2-Dichloroethene	50.0	44.9		ug/Kg		90	70 - 130	6	20
cis-1,3-Dichloropropene	50.0	47.6		ug/Kg		95	70 - 130	5	20
Dibromomethane	50.0	47.2		ug/Kg		94	70 - 130	2	20
Dichlorobromomethane	50.0	47.0		ug/Kg		94	70 - 130	6	20
Dichlorodifluoromethane	50.0	63.8		ug/Kg		128	70 - 130	7	20
Ethyl ether	50.0	42.8		ug/Kg		86	70 - 130	3	20
Ethylbenzene	50.0	45.9		ug/Kg		92	70 - 130	6	20
Ethylene Dibromide	50.0	49.6		ug/Kg		99	70 - 130	1	20
Hexachlorobutadiene	50.0	41.8		ug/Kg		84	70 - 130	9	20
Isopropyl ether	50.0	46.4		ug/Kg		93	70 - 130	5	20
Isopropylbenzene	50.0	46.1		ug/Kg		92	70 - 130	8	20
Methyl tert-butyl ether	50.0	47.5		ug/Kg		95	70 - 130	2	20
Methylene Chloride	50.0	46.2		ug/Kg		92	70 - 130	6	20
m-Xylene & p-Xylene	50.0	44.2		ug/Kg		88	70 - 130	7	20
Naphthalene	50.0	51.0		ug/Kg		102	70 - 130	3	20
n-Butylbenzene	50.0	46.6		ug/Kg		93	70 - 130	9	20
N-Propylbenzene	50.0	46.1		ug/Kg		92	70 - 130	9	20
o-Xylene	50.0	45.4		ug/Kg		91	70 - 130	4	20
sec-Butylbenzene	50.0	46.0		ug/Kg		92	70 - 130	8	20
Styrene	50.0	46.1		ug/Kg		92	70 - 130	5	20
Tert-amyl methyl ether	50.0	50.0		ug/Kg		100	70 - 130	1	20
Tert-butyl ethyl ether	50.0	46.9		ug/Kg		94	70 - 130	5	20
tert-Butylbenzene	50.0	44.3		ug/Kg		89	70 - 130	7	20
Tetrachloroethene	50.0	48.8		ug/Kg		98	70 - 130	5	20
Tetrahydrofuran	100	139	*	ug/Kg		139	70 - 130	1	20
Toluene	50.0	45.1		ug/Kg		90	70 - 130	7	20
trans-1,2-Dichloroethene	50.0	44.5		ug/Kg		89	70 - 130	9	20
trans-1,3-Dichloropropene	50.0	49.7		ug/Kg		99	70 - 130	3	20
Trichloroethene	50.0	43.3		ug/Kg		87	70 - 130	8	20
Trichlorofluoromethane	50.0	46.8		ug/Kg		94	70 - 130	11	20
Vinyl chloride	50.0	49.6		ug/Kg		99	70 - 130	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*

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

Lab Sample ID: LCSD 480-387195/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387183 — **Prep Batch: 387195**

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-386318/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387724 — **Prep Batch: 386318**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.306	J	0.55	0.22	mg/Kg		11/08/17 14:54	11/15/17 22:14	1

Lab Sample ID: LCDSRM 480-386318/18-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387724 — **Prep Batch: 386318**

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium			107	101		mg/Kg		94.0	69.4 - 134.6	0	30

Lab Sample ID: LCSSRM 480-386318/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387724 — **Prep Batch: 386318**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			107	100		mg/Kg		93.6	69.4 - 134.6		

Lab Sample ID: 480-127206-1 MS — **Client Sample ID: C110617-01 SOIL-0-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387724 — **Prep Batch: 386318**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	60	B	47.5	113		mg/Kg	☼	112	75 - 125		

Lab Sample ID: 480-127206-1 MSD — **Client Sample ID: C110617-01 SOIL-0-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 387724 — **Prep Batch: 386318**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	60	B	40.2	99.0		mg/Kg	☼	97	75 - 125	13	35

QC Sample Results

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-229151/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 229239 — **Prep Batch: 229151**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.40	0.11	mg/Kg		11/16/17 11:20	11/16/17 16:32	1

Lab Sample ID: LCDSRM 180-229151/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 229239 — **Prep Batch: 229151**

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)			276	93.2		mg/Kg		33.8	31.3 - 120.3	0	30

Lab Sample ID: LCSSRM 180-229151/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 229239 — **Prep Batch: 229151**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)			277	93.1		mg/Kg		33.6	31.3 - 120.3		

Lab Sample ID: 480-127206-6 MSI — **Client Sample ID: C110617-06 SOIL-0-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 229239 — **Prep Batch: 229151**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	2.5		729	592		mg/Kg	☼	81	75 - 125		

Lab Sample ID: 480-127206-6 MSS — **Client Sample ID: C110617-06 SOIL-0-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 229239 — **Prep Batch: 229151**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	2.5		20.7	21.4		mg/Kg	☼	91	75 - 125		

Lab Sample ID: 480-127206-6 DU — **Client Sample ID: C110617-06 SOIL-0-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 229239 — **Prep Batch: 229151**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cr (VI)	2.5			2.56		mg/Kg	☼			4	35

QC Association Summary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

GC/MS VOA

Analysis Batch: 387183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	8260C	387195
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	8260C	387195
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	8260C	387195
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	8260C	387195
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	8260C	387195
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	8260C	387195
MB 480-387195/3-A	Method Blank	Total/NA	Solid	8260C	387195
LCS 480-387195/1-A	Lab Control Sample	Total/NA	Solid	8260C	387195
LCSD 480-387195/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	387195

Prep Batch: 387195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	5035A_L	
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	5035A_L	
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	5035A_L	
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	5035A_L	
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	5035A_L	
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	5035A_L	
MB 480-387195/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-387195/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
LCSD 480-387195/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_L	

Metals

Prep Batch: 386318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	3050B	
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	3050B	
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	3050B	
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	3050B	
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	3050B	
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	3050B	
MB 480-386318/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-386318/18-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-386318/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-127206-1 MS	C110617-01 SOIL-0-1	Total/NA	Solid	3050B	
480-127206-1 MSD	C110617-01 SOIL-0-1	Total/NA	Solid	3050B	

Analysis Batch: 387724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	6010	386318
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	6010	386318
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	6010	386318
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	6010	386318
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	6010	386318
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	6010	386318
MB 480-386318/1-A	Method Blank	Total/NA	Solid	6010	386318
LCDSRM 480-386318/18-A	Lab Control Sample Dup	Total/NA	Solid	6010	386318
LCSSRM 480-386318/2-A	Lab Control Sample	Total/NA	Solid	6010	386318
480-127206-1 MS	C110617-01 SOIL-0-1	Total/NA	Solid	6010	386318

Metals (Continued)

Analysis Batch: 387724 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1 MSD	C110617-01 SOIL-0-1	Total/NA	Solid	6010	386318

General Chemistry

Prep Batch: 229151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	3060A	
MB 180-229151/1-A	Method Blank	Total/NA	Solid	3060A	
LCDSRM 180-229151/3-A	Lab Control Sample Dup	Total/NA	Solid	3060A	
LCSSRM 180-229151/2-A	Lab Control Sample	Total/NA	Solid	3060A	
480-127206-6 MSI	C110617-06 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-6 MSS	C110617-06 SOIL-0-1	Total/NA	Solid	3060A	
480-127206-6 DU	C110617-06 SOIL-0-1	Total/NA	Solid	3060A	

Analysis Batch: 229239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	7196A	229151
MB 180-229151/1-A	Method Blank	Total/NA	Solid	7196A	229151
LCDSRM 180-229151/3-A	Lab Control Sample Dup	Total/NA	Solid	7196A	229151
LCSSRM 180-229151/2-A	Lab Control Sample	Total/NA	Solid	7196A	229151
480-127206-6 MSI	C110617-06 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-6 MSS	C110617-06 SOIL-0-1	Total/NA	Solid	7196A	229151
480-127206-6 DU	C110617-06 SOIL-0-1	Total/NA	Solid	7196A	229151

Analysis Batch: 386229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-127206-1	C110617-01 SOIL-0-1	Total/NA	Solid	Moisture	
480-127206-2	C110617-02 SOIL-0-1	Total/NA	Solid	Moisture	
480-127206-3	C110617-03 SOIL-0-1	Total/NA	Solid	Moisture	
480-127206-4	C110617-04 SOIL-0-1	Total/NA	Solid	Moisture	
480-127206-5	C110617-05 SOIL-0-1	Total/NA	Solid	Moisture	
480-127206-6	C110617-06 SOIL-0-1	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-01 SOIL-0-1 — Lab Sample ID: 480-127206-1

Date Collected: 11/06/17 15:00 — **Matrix: Solid**
Date Received: 11/08/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	386229	11/08/17 09:06	CSW	TAL BUF

Client Sample ID: C110617-01 SOIL-0-1 — Lab Sample ID: 480-127206-1

Date Collected: 11/06/17 15:00 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 90.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			387195	11/08/17 08:00	CDC	TAL BUF
Total/NA	Analysis	8260C		1	387183	11/14/17 16:05	CDC	TAL BUF
Total/NA	Prep	3050B			386318	11/08/17 14:54	EMB	TAL BUF
Total/NA	Analysis	6010		1	387724	11/15/17 22:42	LMH	TAL BUF
Total/NA	Prep	3060A			229151	11/16/17 11:20	SES	TAL PIT
Total/NA	Analysis	7196A		1	229239	11/16/17 16:37	SES	TAL PIT

Client Sample ID: C110617-02 SOIL-0-1 — Lab Sample ID: 480-127206-2

Date Collected: 11/06/17 15:17 — **Matrix: Solid**
Date Received: 11/08/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	386229	11/08/17 09:06	CSW	TAL BUF

Client Sample ID: C110617-02 SOIL-0-1 — Lab Sample ID: 480-127206-2

Date Collected: 11/06/17 15:17 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 93.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			387195	11/08/17 08:00	CDC	TAL BUF
Total/NA	Analysis	8260C		1	387183	11/14/17 16:31	CDC	TAL BUF
Total/NA	Prep	3050B			386318	11/08/17 14:54	EMB	TAL BUF
Total/NA	Analysis	6010		1	387724	11/15/17 23:00	LMH	TAL BUF
Total/NA	Prep	3060A			229151	11/16/17 11:20	SES	TAL PIT
Total/NA	Analysis	7196A		1	229239	11/16/17 16:38	SES	TAL PIT

Client Sample ID: C110617-03 SOIL-0-1 — Lab Sample ID: 480-127206-3

Date Collected: 11/06/17 15:35 — **Matrix: Solid**
Date Received: 11/08/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	386229	11/08/17 09:06	CSW	TAL BUF

Lab Chronicle

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-03 SOIL-0-1 — Lab Sample ID: 480-127206-3

Date Collected: 11/06/17 15:35 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 94.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			387195	11/08/17 08:00	CDC	TAL BUF
Total/NA	Analysis	8260C		1	387183	11/14/17 16:56	CDC	TAL BUF
Total/NA	Prep	3050B			386318	11/08/17 14:54	EMB	TAL BUF
Total/NA	Analysis	6010		1	387724	11/15/17 23:14	LMH	TAL BUF
Total/NA	Prep	3060A			229151	11/16/17 11:20	SES	TAL PIT
Total/NA	Analysis	7196A		1	229239	11/16/17 16:40	SES	TAL PIT

Client Sample ID: C110617-04 SOIL-0-1 — Lab Sample ID: 480-127206-4

Date Collected: 11/06/17 15:55 — **Matrix: Solid**
Date Received: 11/08/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	386229	11/08/17 09:06	CSW	TAL BUF

Client Sample ID: C110617-04 SOIL-0-1 — Lab Sample ID: 480-127206-4

Date Collected: 11/06/17 15:55 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 92.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			387195	11/08/17 08:00	CDC	TAL BUF
Total/NA	Analysis	8260C		1	387183	11/14/17 17:21	CDC	TAL BUF
Total/NA	Prep	3050B			386318	11/08/17 14:54	EMB	TAL BUF
Total/NA	Analysis	6010		1	387724	11/15/17 23:17	LMH	TAL BUF
Total/NA	Prep	3060A			229151	11/16/17 11:20	SES	TAL PIT
Total/NA	Analysis	7196A		1	229239	11/16/17 16:42	SES	TAL PIT

Client Sample ID: C110617-05 SOIL-0-1 — Lab Sample ID: 480-127206-5

Date Collected: 11/06/17 16:10 — **Matrix: Solid**
Date Received: 11/08/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	386229	11/08/17 09:06	CSW	TAL BUF

Client Sample ID: C110617-05 SOIL-0-1 — Lab Sample ID: 480-127206-5

Date Collected: 11/06/17 16:10 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			387195	11/08/17 08:00	CDC	TAL BUF
Total/NA	Analysis	8260C		1	387183	11/14/17 17:47	CDC	TAL BUF
Total/NA	Prep	3050B			386318	11/08/17 14:54	EMB	TAL BUF
Total/NA	Analysis	6010		1	387724	11/15/17 23:21	LMH	TAL BUF
Total/NA	Prep	3060A			229151	11/16/17 11:20	SES	TAL PIT

Lab Chronicle

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Client Sample ID: C110617-05 SOIL-0-1 — Lab Sample ID: 480-127206-5

Date Collected: 11/06/17 16:10 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 93.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1	229239	11/16/17 16:43	SES	TAL PIT

Client Sample ID: C110617-06 SOIL-0-1 — Lab Sample ID: 480-127206-6

Date Collected: 11/06/17 16:30 — **Matrix: Solid**
Date Received: 11/08/17 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	386229	11/08/17 09:06	CSW	TAL BUF

Client Sample ID: C110617-06 SOIL-0-1 — Lab Sample ID: 480-127206-6

Date Collected: 11/06/17 16:30 — **Matrix: Solid**
Date Received: 11/08/17 01:00 — **Percent Solids: 95.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			387195	11/08/17 08:00	CDC	TAL BUF
Total/NA	Analysis	8260C		1	387183	11/14/17 18:12	CDC	TAL BUF
Total/NA	Prep	3050B			386318	11/08/17 14:54	EMB	TAL BUF
Total/NA	Analysis	6010		1	387724	11/15/17 23:24	LMH	TAL BUF
Total/NA	Prep	3060A			229151	11/16/17 11:20	SES	TAL PIT
Total/NA	Analysis	7196A		1	229239	11/16/17 16:45	SES	TAL PIT

Laboratory References:

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

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010	3050B	Solid	Chromium
8260C	5035A_L	Solid	1,1,1,2-Tetrachloroethane
8260C	5035A_L	Solid	1,1,1-Trichloroethane
8260C	5035A_L	Solid	1,1,2,2-Tetrachloroethane
8260C	5035A_L	Solid	1,1,2-Trichloroethane
8260C	5035A_L	Solid	1,1-Dichloroethane
8260C	5035A_L	Solid	1,1-Dichloroethene
8260C	5035A_L	Solid	1,1-Dichloropropene
8260C	5035A_L	Solid	1,2,3-Trichlorobenzene
8260C	5035A_L	Solid	1,2,3-Trichloropropane
8260C	5035A_L	Solid	1,2,4-Trichlorobenzene
8260C	5035A_L	Solid	1,2,4-Trimethylbenzene
8260C	5035A_L	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035A_L	Solid	1,2-Dichlorobenzene
8260C	5035A_L	Solid	1,2-Dichloroethane
8260C	5035A_L	Solid	1,2-Dichloropropane
8260C	5035A_L	Solid	1,3,5-Trimethylbenzene
8260C	5035A_L	Solid	1,3-Dichlorobenzene
8260C	5035A_L	Solid	1,3-Dichloropropane
8260C	5035A_L	Solid	1,4-Dichlorobenzene
8260C	5035A_L	Solid	1,4-Dioxane
8260C	5035A_L	Solid	2,2-Dichloropropane
8260C	5035A_L	Solid	2-Butanone (MEK)
8260C	5035A_L	Solid	2-Chlorotoluene
8260C	5035A_L	Solid	2-Hexanone
8260C	5035A_L	Solid	4-Chlorotoluene
8260C	5035A_L	Solid	4-Isopropyltoluene
8260C	5035A_L	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035A_L	Solid	Acetone
8260C	5035A_L	Solid	Benzene
8260C	5035A_L	Solid	Bromobenzene
8260C	5035A_L	Solid	Bromoform
8260C	5035A_L	Solid	Bromomethane
8260C	5035A_L	Solid	Carbon disulfide
8260C	5035A_L	Solid	Carbon tetrachloride
8260C	5035A_L	Solid	Chlorobenzene
8260C	5035A_L	Solid	Chlorobromomethane
8260C	5035A_L	Solid	Chlorodibromomethane
8260C	5035A_L	Solid	Chloroethane
8260C	5035A_L	Solid	Chloroform
8260C	5035A_L	Solid	Chloromethane
8260C	5035A_L	Solid	cis-1,2-Dichloroethene
8260C	5035A_L	Solid	cis-1,3-Dichloropropene
8260C	5035A_L	Solid	Dibromomethane
8260C	5035A_L	Solid	Dichlorobromomethane
8260C	5035A_L	Solid	Dichlorodifluoromethane

Laboratory: TestAmerica Buffalo (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Massachusetts	State Program	1	M-NY044	06-30-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035A_L	Solid	Ethyl ether
8260C	5035A_L	Solid	Ethylbenzene
8260C	5035A_L	Solid	Ethylene Dibromide
8260C	5035A_L	Solid	Hexachlorobutadiene
8260C	5035A_L	Solid	Isopropyl ether
8260C	5035A_L	Solid	Isopropylbenzene
8260C	5035A_L	Solid	Methyl tert-butyl ether
8260C	5035A_L	Solid	Methylene Chloride
8260C	5035A_L	Solid	m-Xylene & p-Xylene
8260C	5035A_L	Solid	Naphthalene
8260C	5035A_L	Solid	n-Butylbenzene
8260C	5035A_L	Solid	N-Propylbenzene
8260C	5035A_L	Solid	o-Xylene
8260C	5035A_L	Solid	sec-Butylbenzene
8260C	5035A_L	Solid	Styrene
8260C	5035A_L	Solid	Tert-amyl methyl ether
8260C	5035A_L	Solid	Tert-butyl ethyl ether
8260C	5035A_L	Solid	tert-Butylbenzene
8260C	5035A_L	Solid	Tetrachloroethene
8260C	5035A_L	Solid	Tetrahydrofuran
8260C	5035A_L	Solid	Toluene
8260C	5035A_L	Solid	trans-1,2-Dichloroethene
8260C	5035A_L	Solid	trans-1,3-Dichloropropene
8260C	5035A_L	Solid	Trichloroethene
8260C	5035A_L	Solid	Trichlorofluoromethane
8260C	5035A_L	Solid	Vinyl chloride
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Pittsburgh

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-18
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-18
North Carolina (WW/SW)	State Program	4	434	12-31-17
Pennsylvania	NELAP	3	02-00416	04-30-18

Laboratory: TestAmerica Pittsburgh (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
South Carolina	State Program	4	89014	04-30-18
Texas	NELAP	6	T104704528-15-2	03-31-18
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-18
Wisconsin	State Program	5	998027800	08-31-18

Method Summary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL PIT
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Honeywell International Inc
Project/Site: Honeywell Conductor lab

TestAmerica Job ID: 480-127206-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-127206-1	C110617-01 SOIL-0-1	Solid	11/06/17 15:00	11/08/17 01:00
480-127206-2	C110617-02 SOIL-0-1	Solid	11/06/17 15:17	11/08/17 01:00
480-127206-3	C110617-03 SOIL-0-1	Solid	11/06/17 15:35	11/08/17 01:00
480-127206-4	C110617-04 SOIL-0-1	Solid	11/06/17 15:55	11/08/17 01:00
480-127206-5	C110617-05 SOIL-0-1	Solid	11/06/17 16:10	11/08/17 01:00
480-127206-6	C110617-06 SOIL-0-1	Solid	11/06/17 16:30	11/08/17 01:00

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

Chain of Custody Record

360325-Boston

TestAmerica

Client Information	Sampler: W B Judge	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-104616-24717.1
Client Contact: Chris Mazzolini	Phone: 207 602 9022	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: AMEC Foster Wheeler E & I, Inc				Job #
Address: 107 Audubon Road, Suite 301	Due Date Requested:			
City: Wakefield	TAT Requested (days): STANDARD			
State, Zip: MA, 01880				
Phone: 973-455-3302(Tel)	PO #: 4500080297			
Email: chris.mazzolini@amecfw.com	WO #: Honeywell Project # 3650080107			
Project Name: Honeywell Conductor lab	Project #: 48006721			
Site: Massachusetts	SSOW#:			

480-127206 COC

Analysis Rec

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196MCP - Chromium, Hexavalent	6010MCP - 6010 MCP - Chromium	8260MCP - 8260MCP Analyte List 2(J), 1(F)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N			
C110517 - 01 SOIL - 0-1	11/5/17	15:00	C, G	Solid			✓	✓	✓		2-4 OZ 3-40ml, 1-Plastic 9oM
- 02 SOIL - 0-1		15:17		Solid							
- 03 SOIL - 0-1		15:35		Solid							
- 04 SOIL - 0-1		15:55		Solid							
- 05 SOIL - 0-1		16:10		SOLID							
- 06 SOIL - 0-1		16:30		SOLID							

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: W B Judge	Date/Time: 11/7/17, 11:15	Company: AMEC	Received by:	Date/Time: 11/7/17 11:15	Company: TA
Relinquished by:	Date/Time: 11/7/17 14:15	Company: TA	Received by:	Date/Time: 11-8-17 0100	Company: TAB
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: 2.8 #1

Ver: 08/04/2016

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

3AA

Chain of Custody Record

480-127206 Chain of Custody

testAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	C No: 0-38706.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	Massachusetts	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Massachusetts	Job #: 480-127206-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 11/20/2017		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email:	WO #:		
Project Name: Honeywell Conductor lab	Project #: 48006721		
Site: Honeywell - Conductor Lab	SSOW#:		

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7196MCP/3060A Chromium, Hexavalent	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
C110617-01 SOIL-0-1 (480-127206-1)	11/6/17	15:00 Eastern		Solid			X	1	
C110617-02 SOIL-0-1 (480-127206-2)	11/6/17	15:17 Eastern		Solid			X	1	
C110617-03 SOIL-0-1 (480-127206-3)	11/6/17	15:35 Eastern		Solid			X	1	
C110617-04 SOIL-0-1 (480-127206-4)	11/6/17	15:55 Eastern		Solid			X	1	
C110617-05 SOIL-0-1 (480-127206-5)	11/6/17	16:10 Eastern		Solid			X	1	
C110617-06 SOIL-0-1 (480-127206-6)	11/6/17	16:30 Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: C Walbe	Date/Time: 11/8/17 1600	Company: TAB	Received by:	Date/Time: 11/9/17 9am	Company: TAB
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:		

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-127206-1

Login Number: 127206

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	FREEZER ON 08NOV2017 @ 0800
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Honeywell International Inc

Job Number: 480-127206-1

Login Number: 127206
List Number: 2
Creator: Say, Thomas C

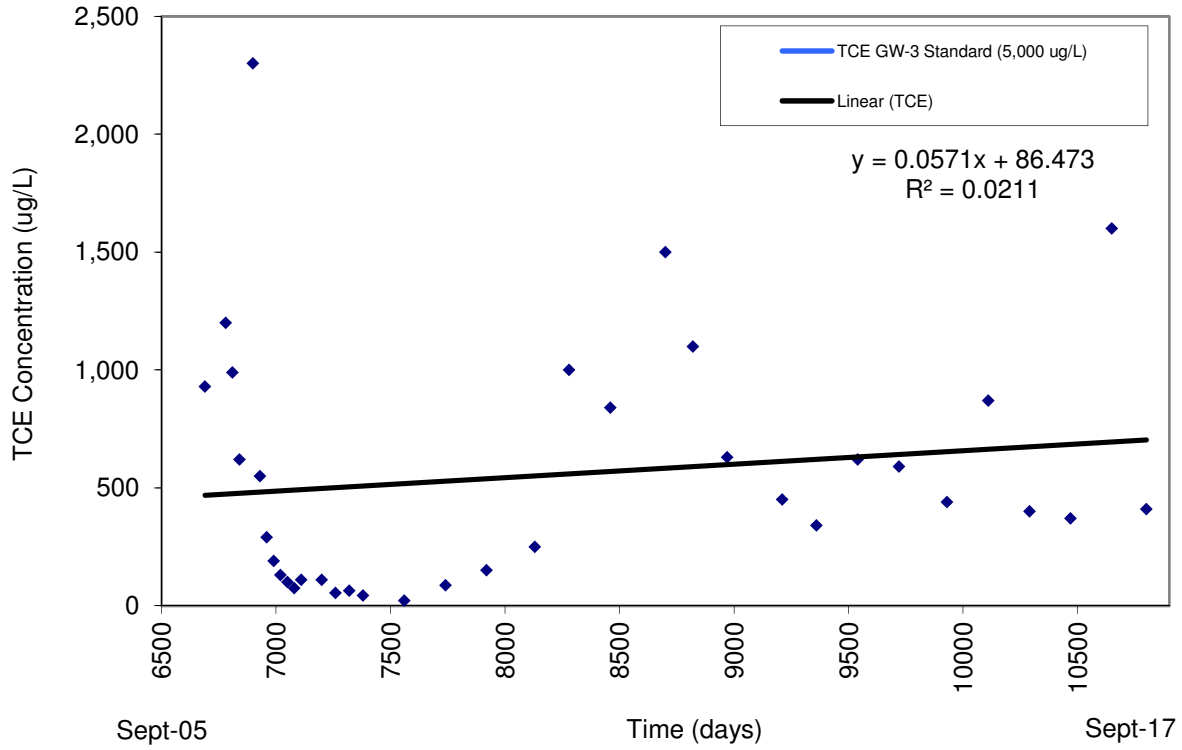
List Source: TestAmerica Pittsburgh
List Creation: 11/09/17 03:58 PM

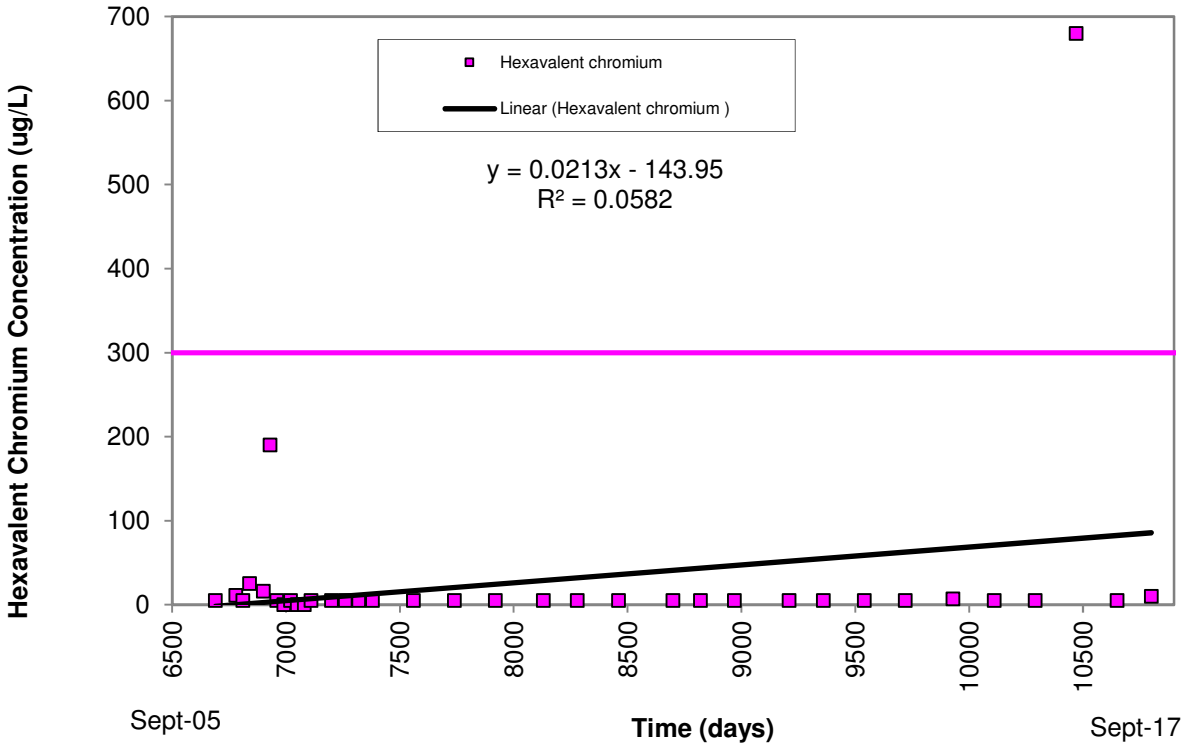
Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True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

APPENDIX D

GROUNDWATER AND SURFACE WATER TREND GRAPHS

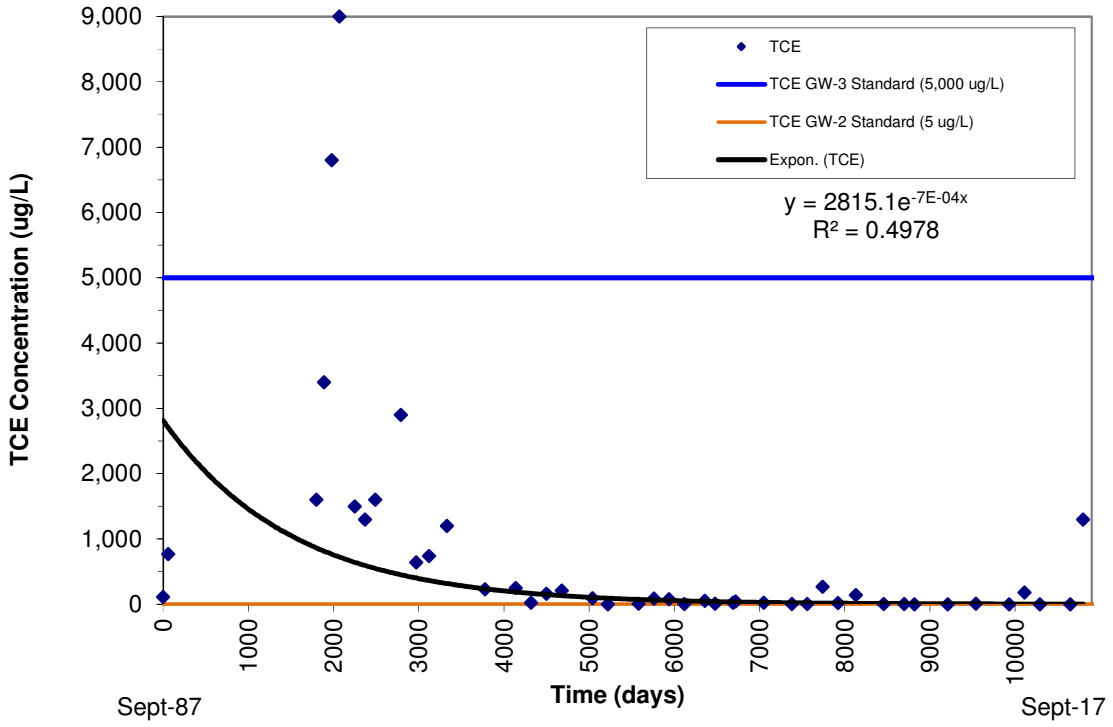
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL CIW-1B
Conductorlab - Groton, Massachusetts

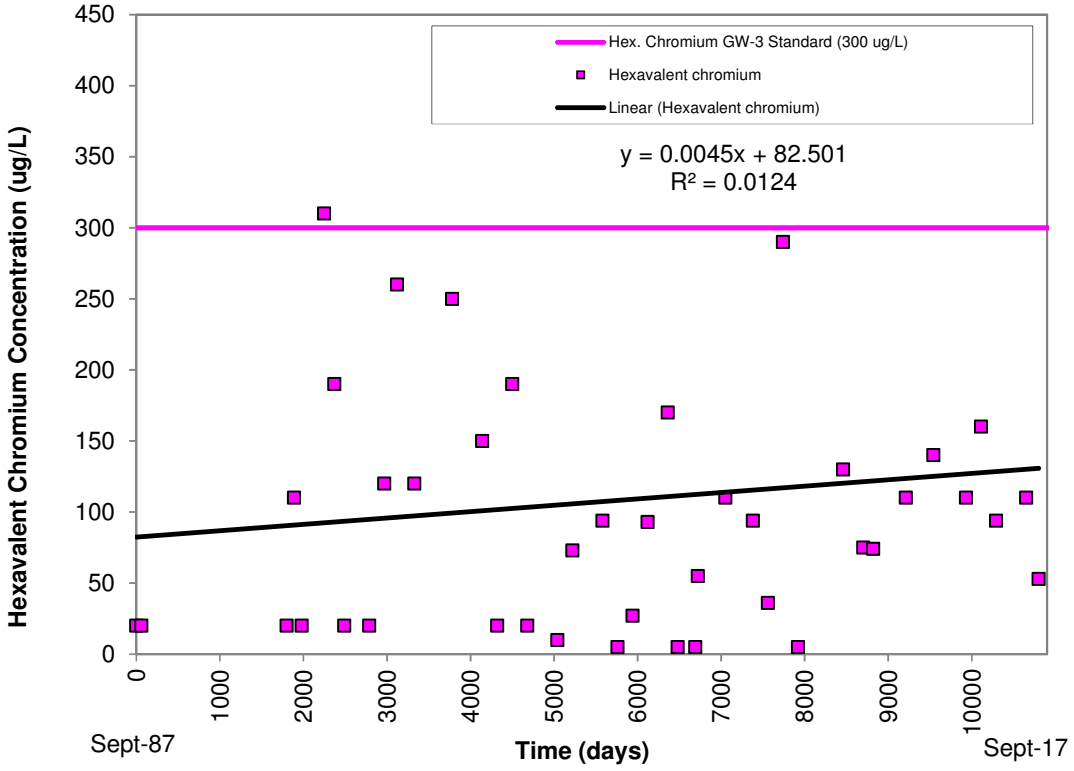




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

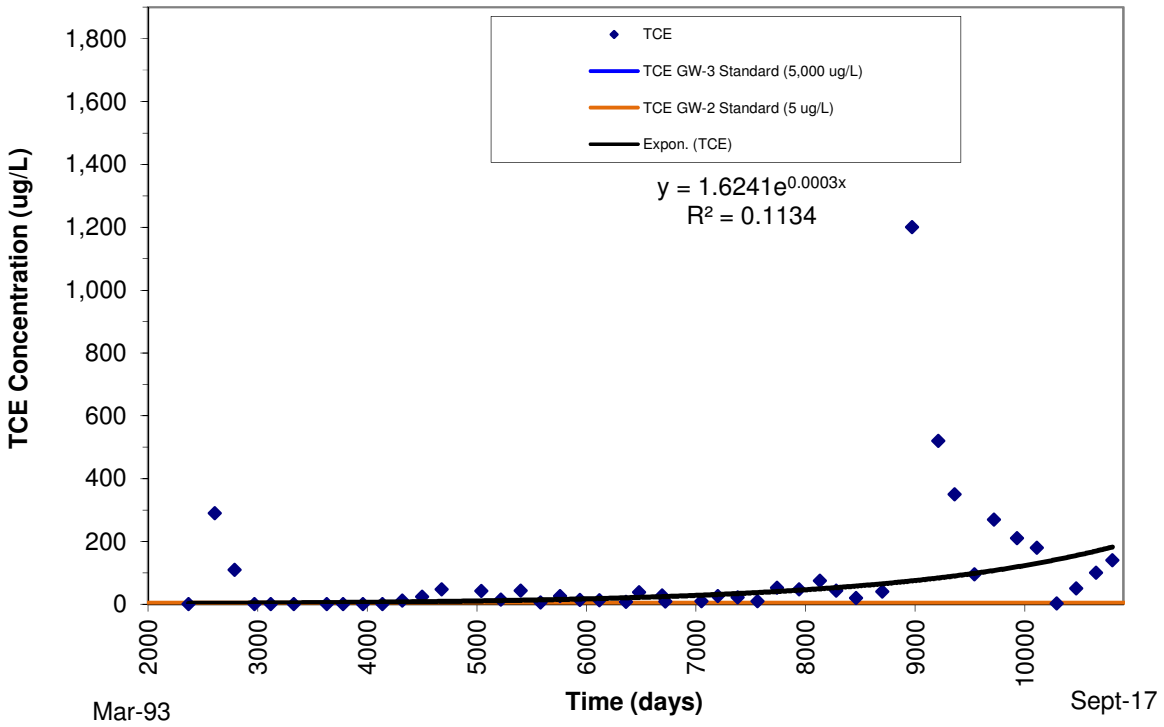
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL CLW-5
Conductorlab - Groton, Massachusetts

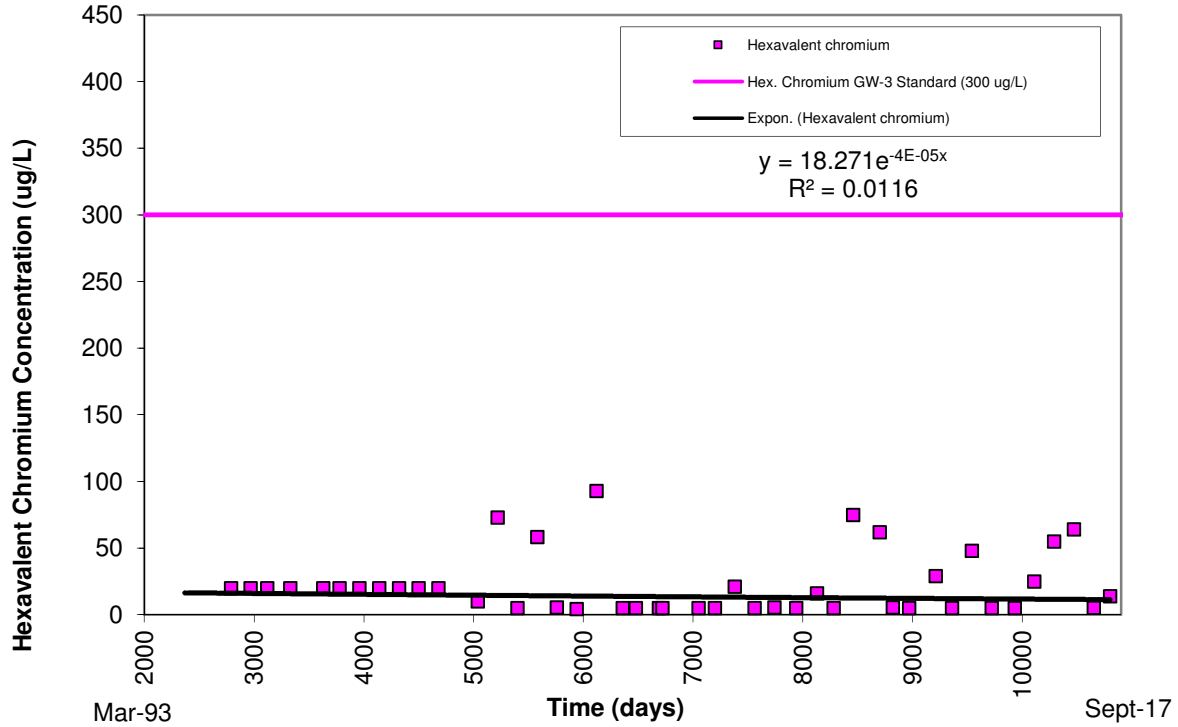




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

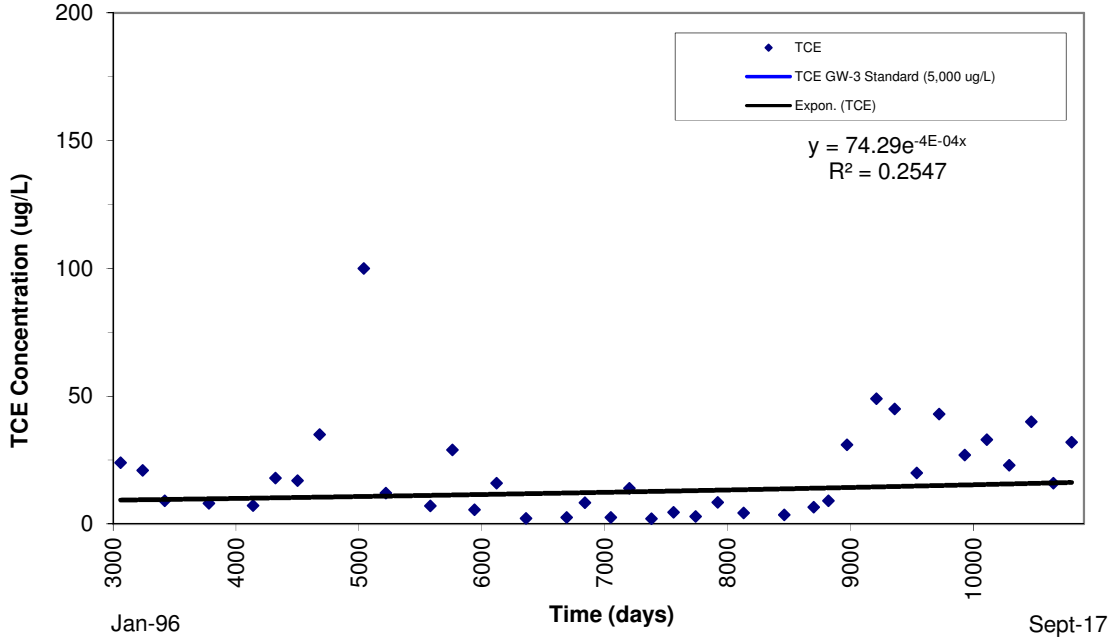
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL CLW-5B
Conductorlab - Groton, Massachusetts

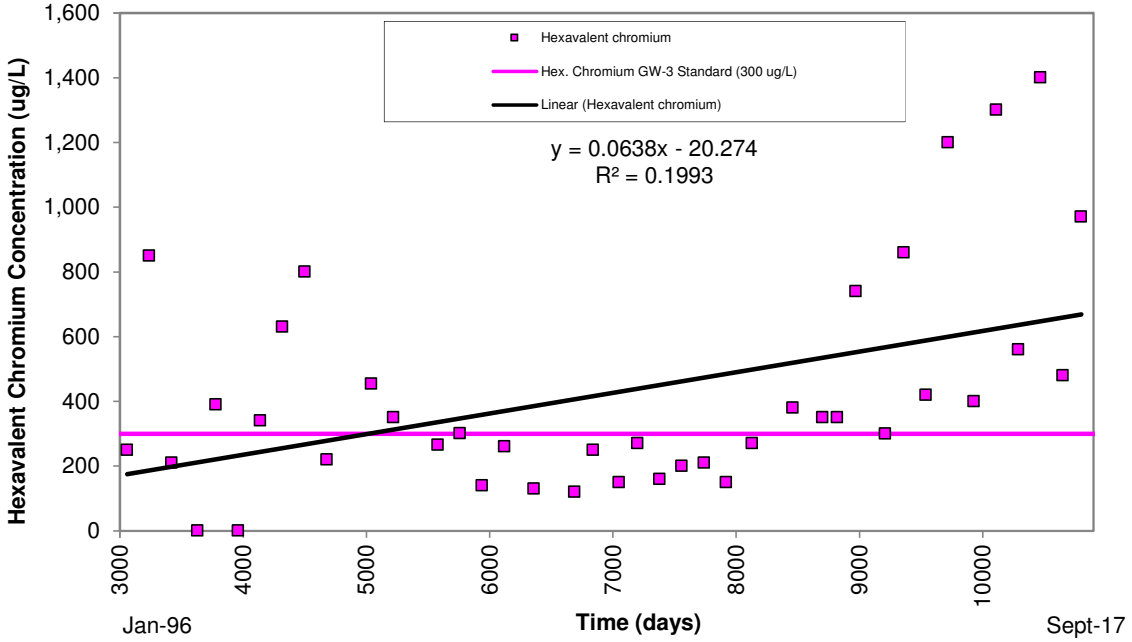




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

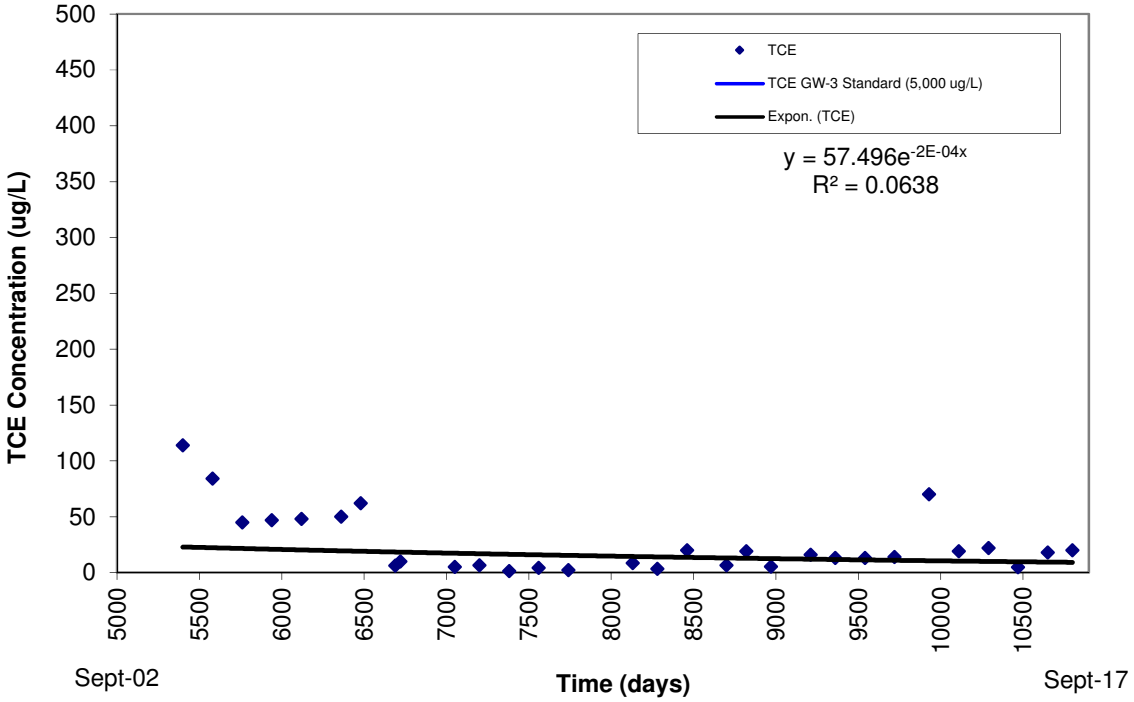
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL CLW-8
Conductorlab - Groton, Massachusetts

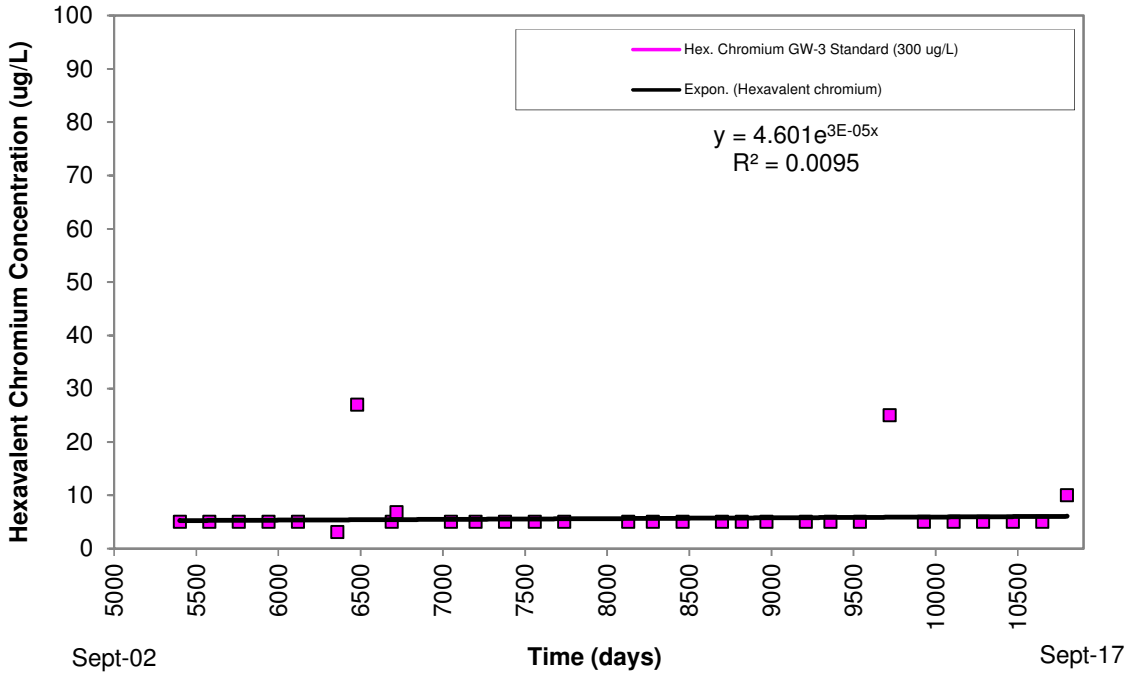




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

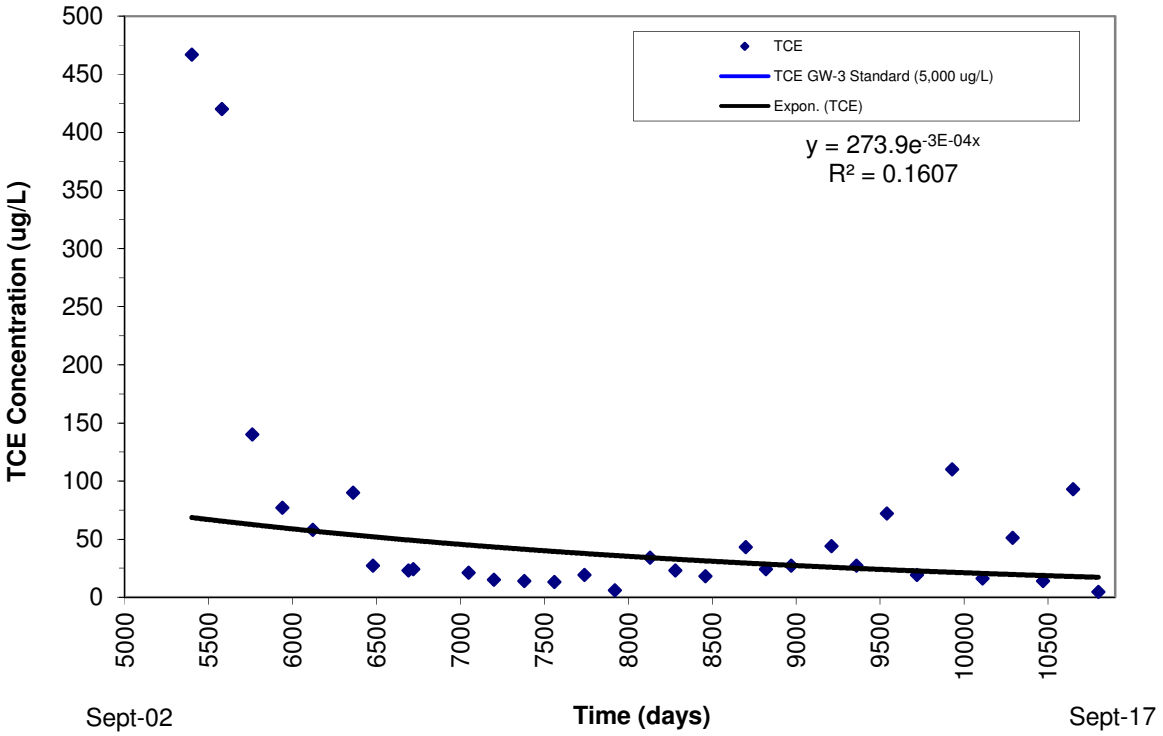
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL DMW-A
Conductorlab - Groton, Massachusetts

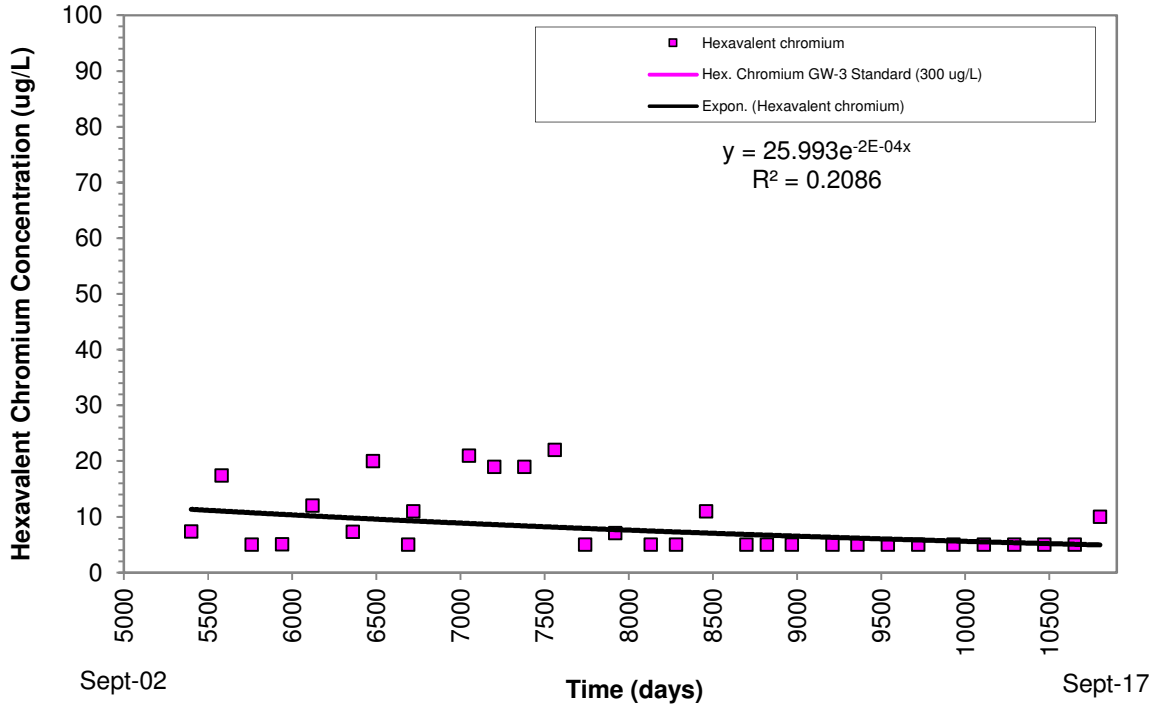




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

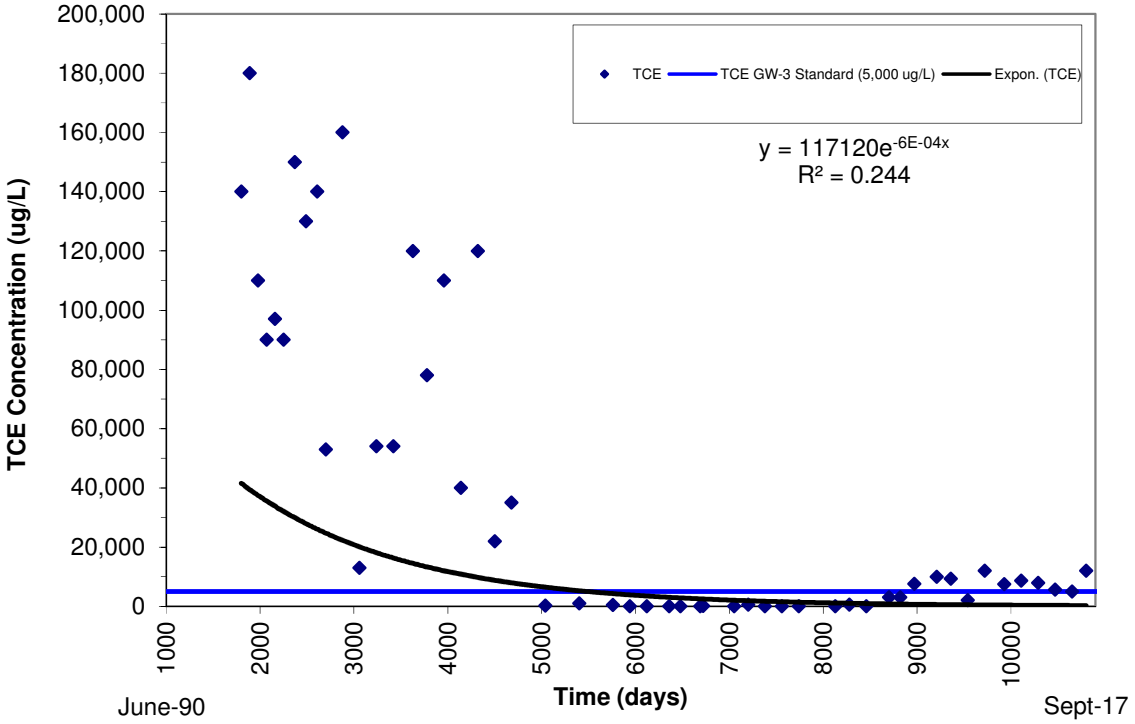
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL DMW-B
Conductorlab - Groton, Massachusetts

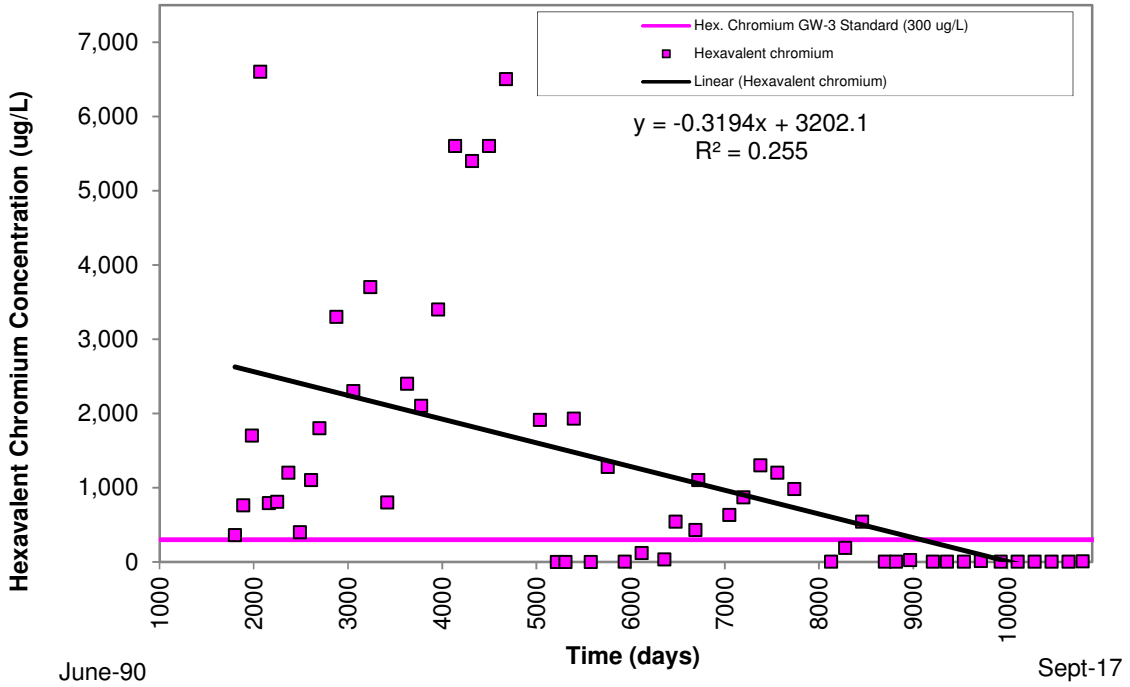




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

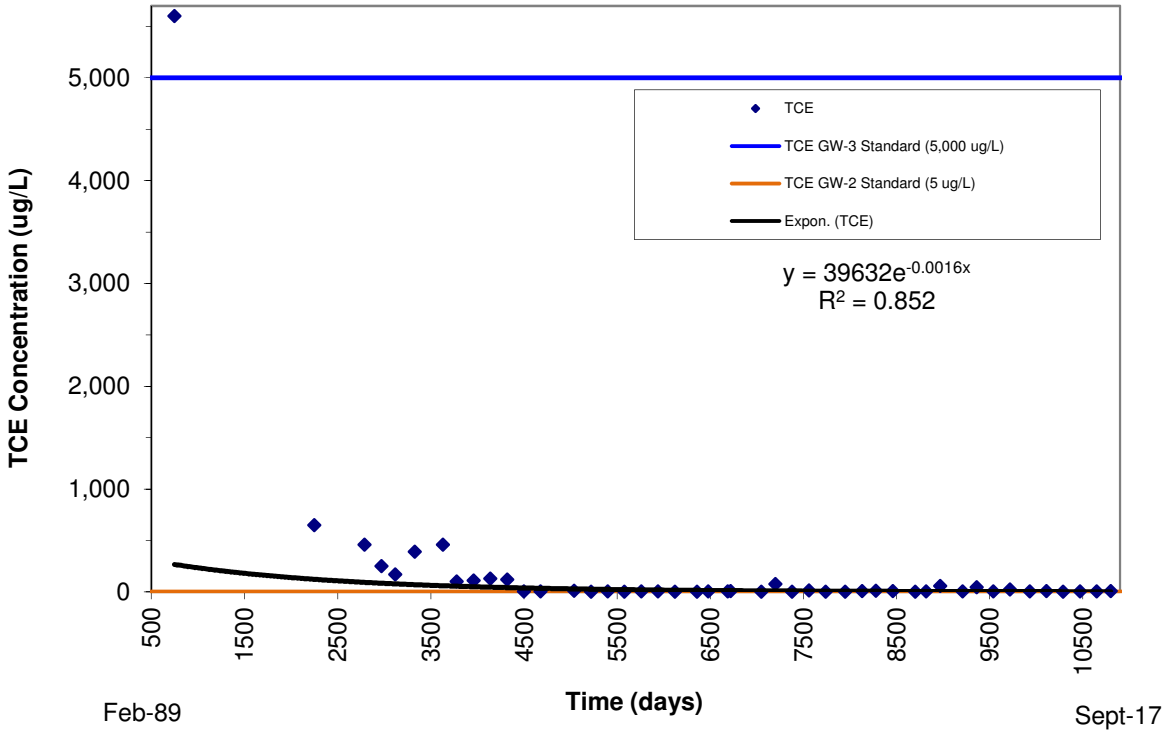
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL CLW-16B
Conductorlab - Groton, Massachusetts

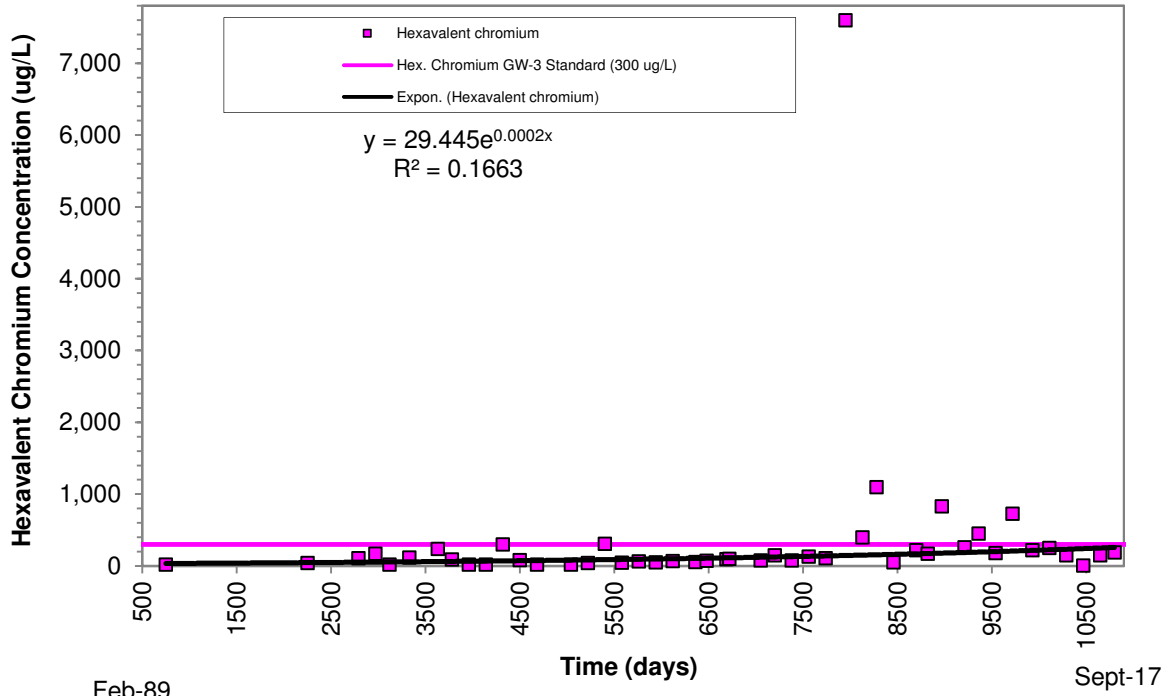




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

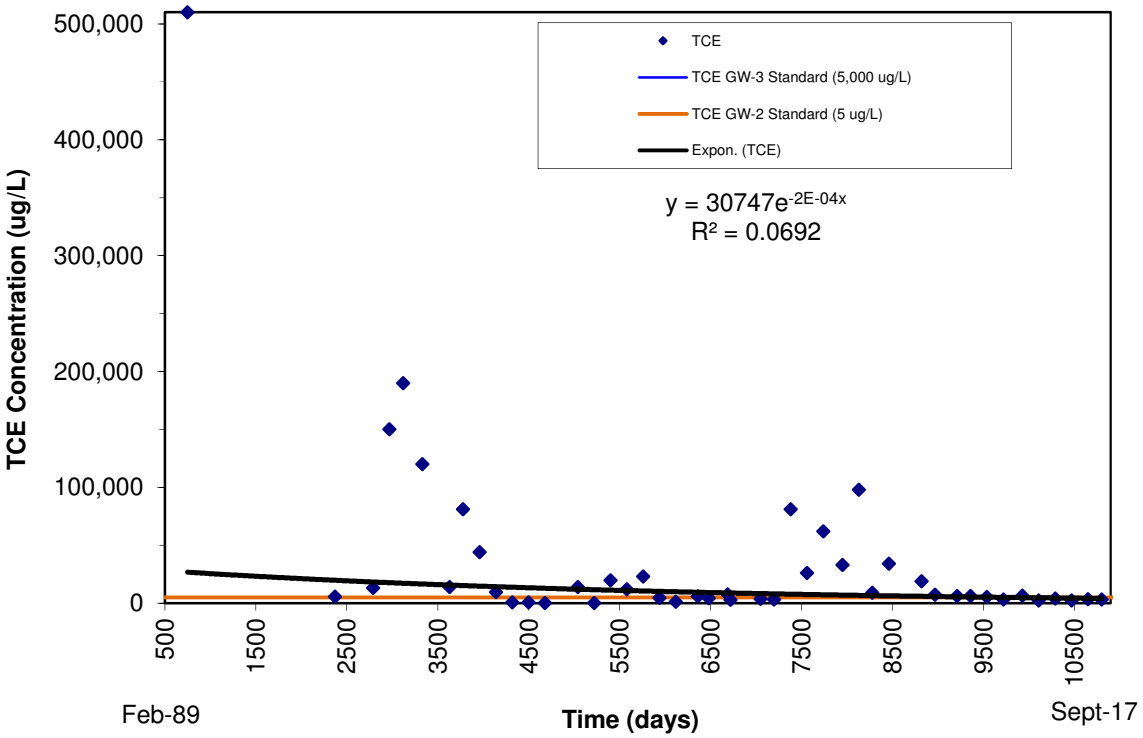
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-1
Conductorlab - Groton, Massachusetts

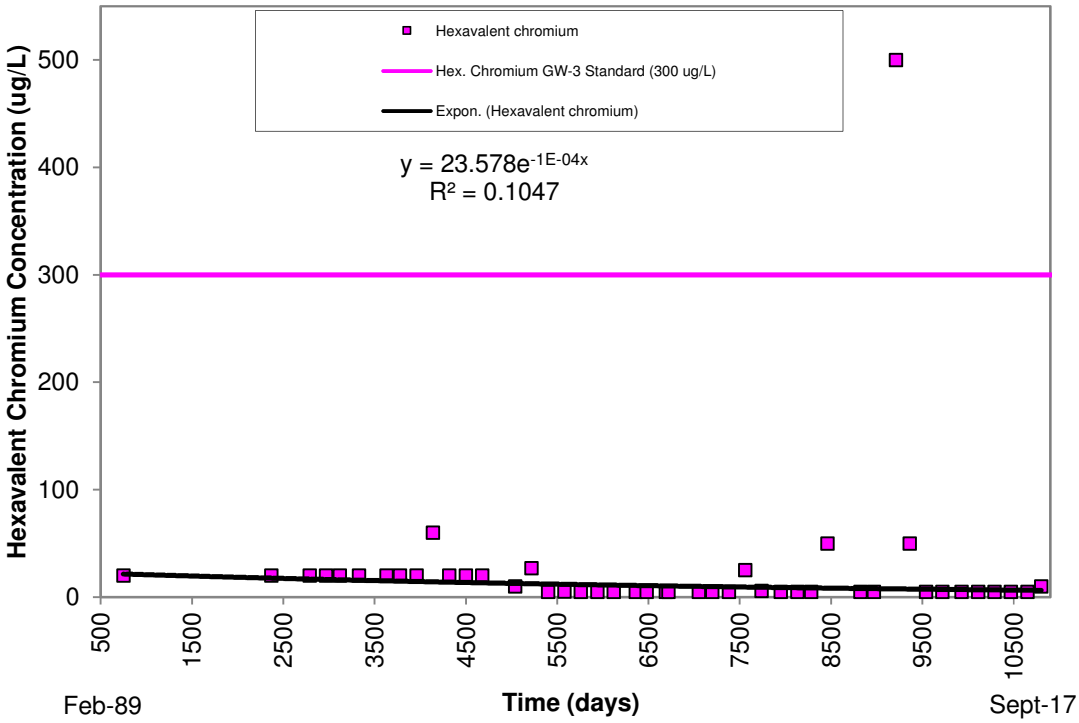




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

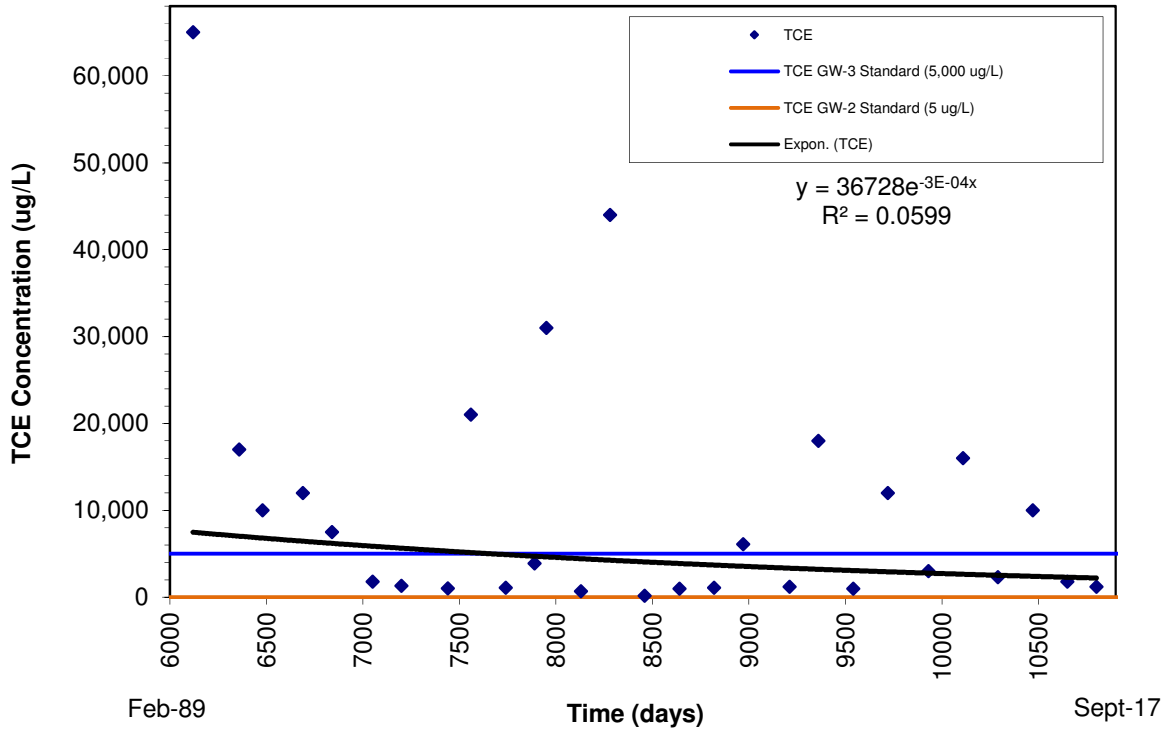
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-1B
Conductorlab - Groton, Massachusetts

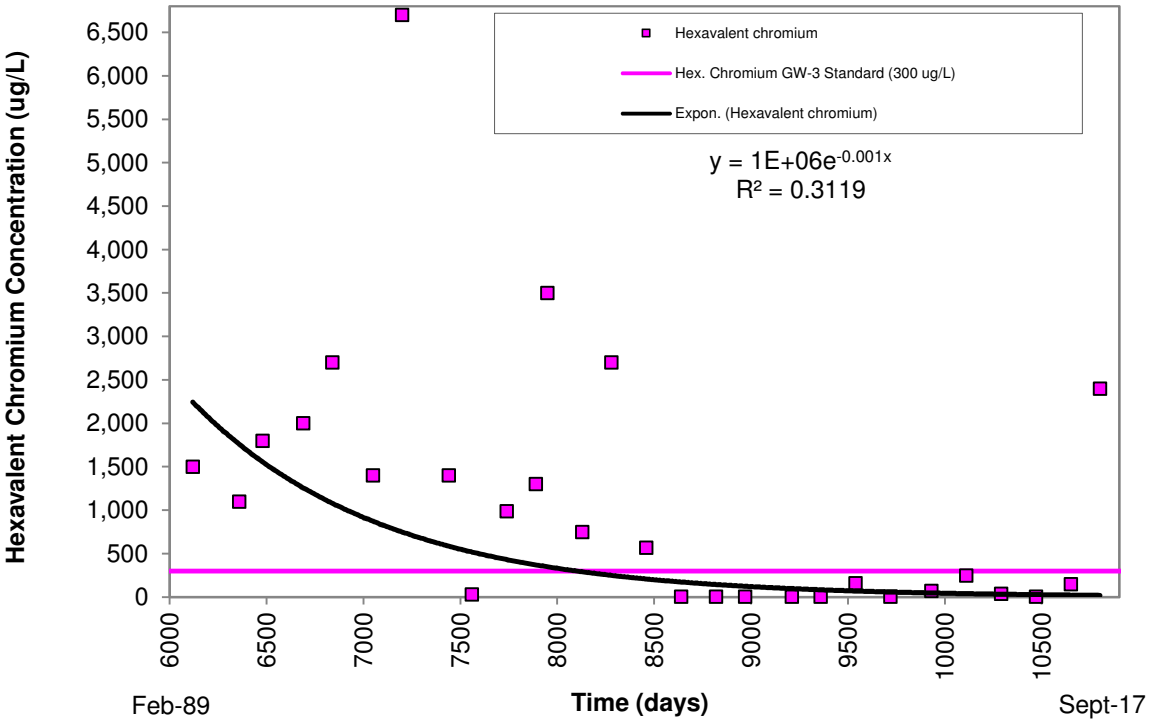




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

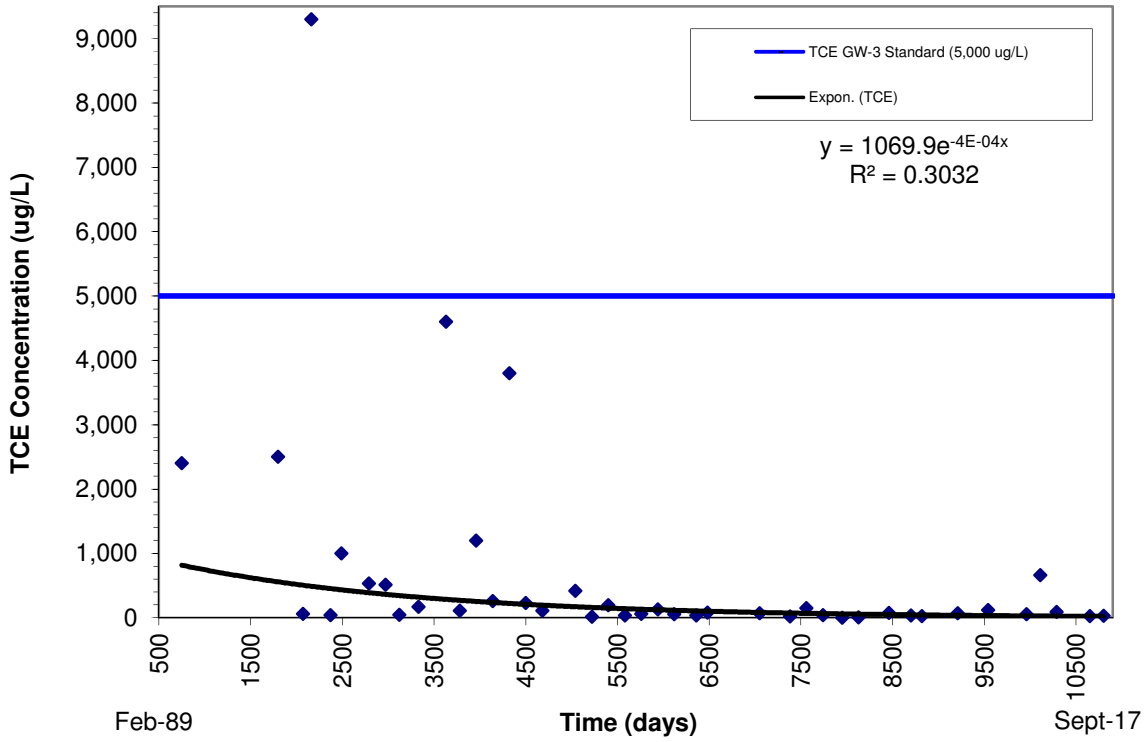
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-2B
Conductorlab - Groton, Massachusetts

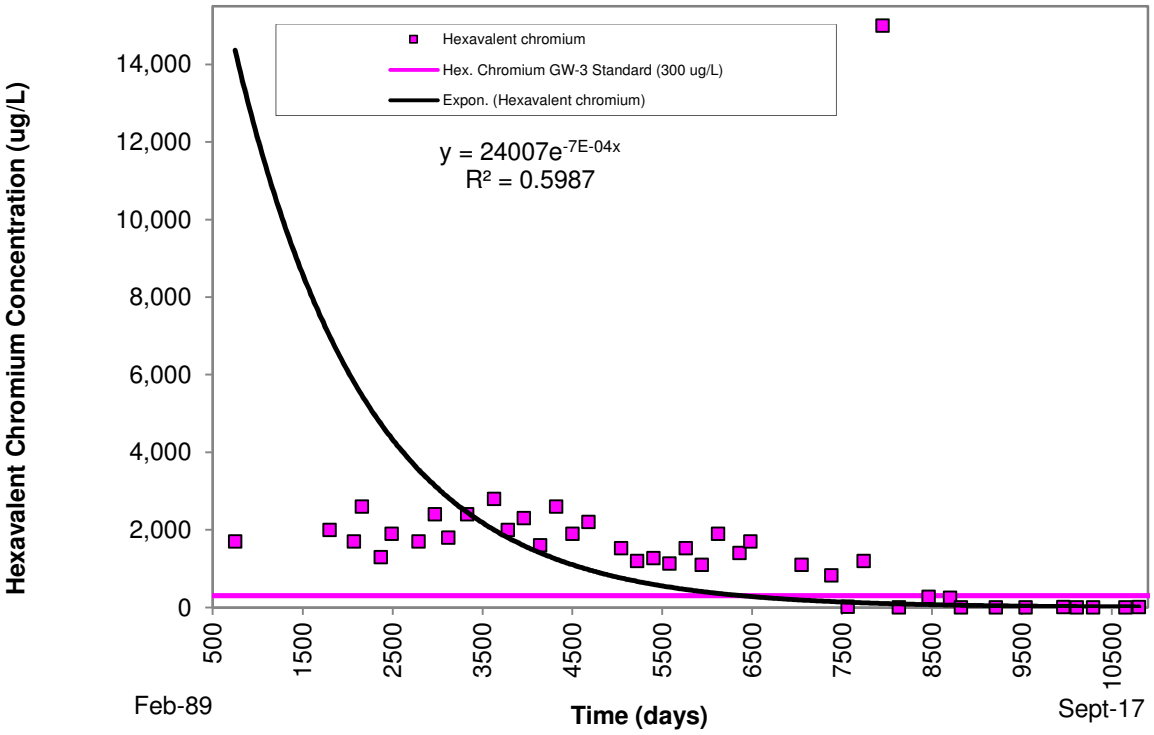




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

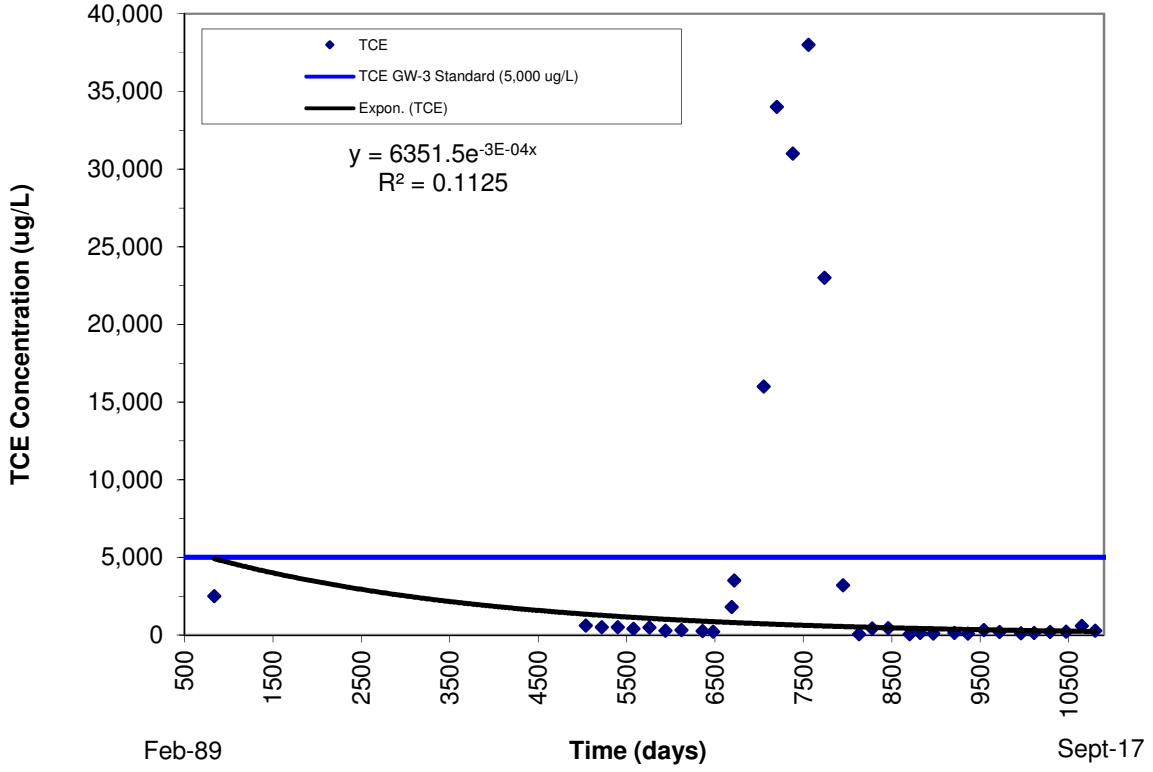
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-3
Conductorlab - Groton, Massachusetts

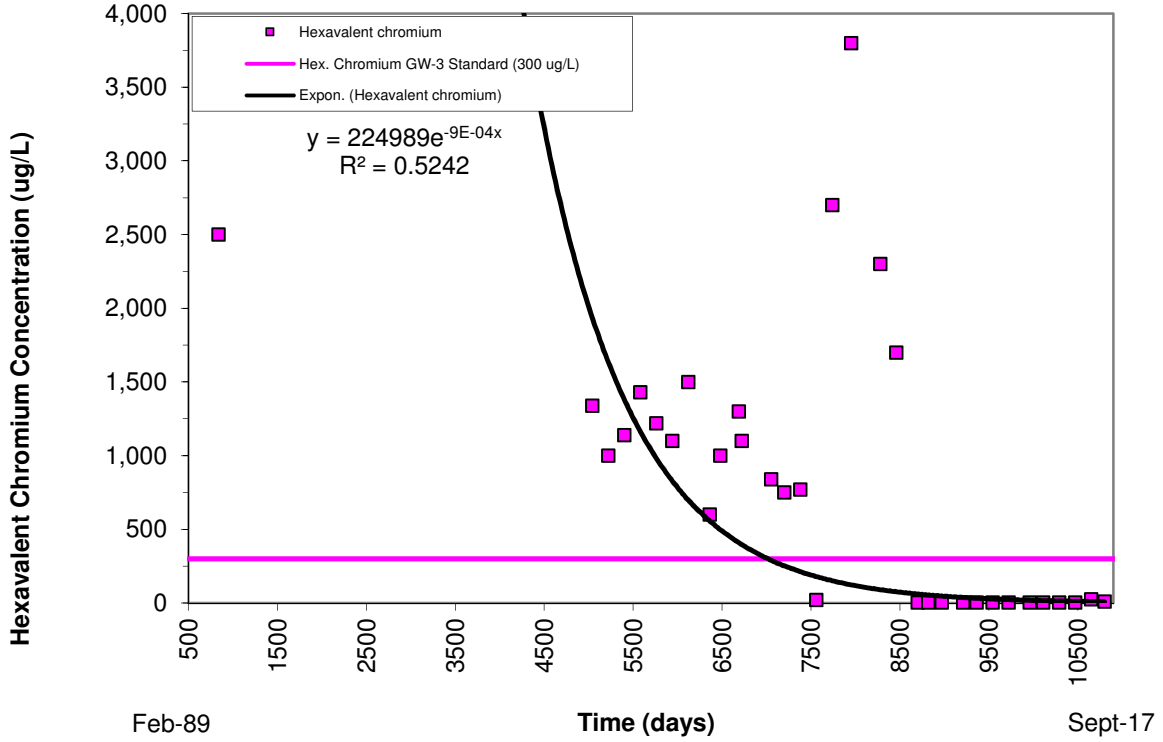




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

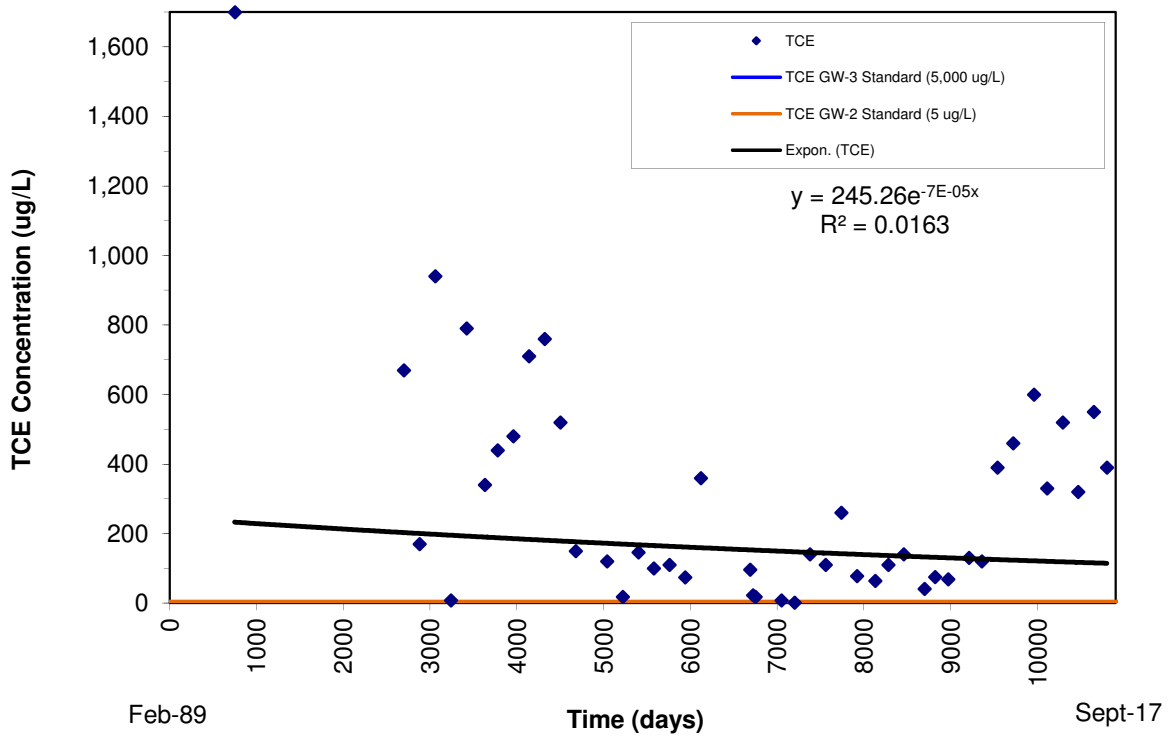
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-3B
Conductorlab - Groton, Massachusetts

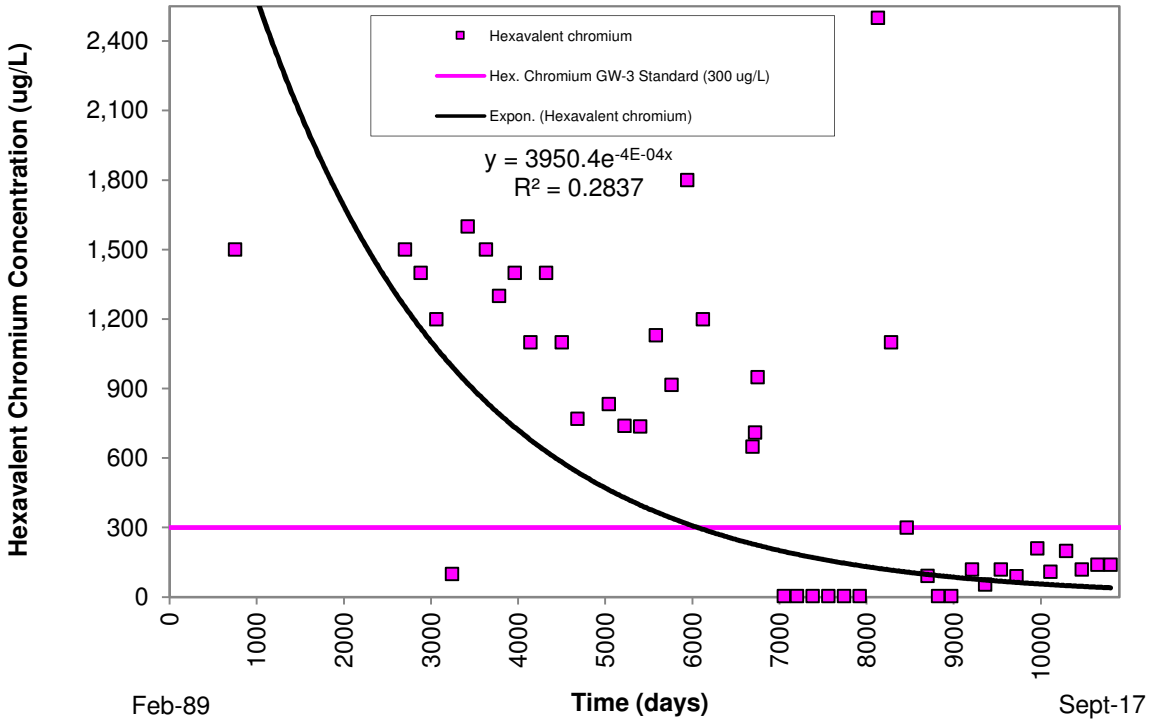




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

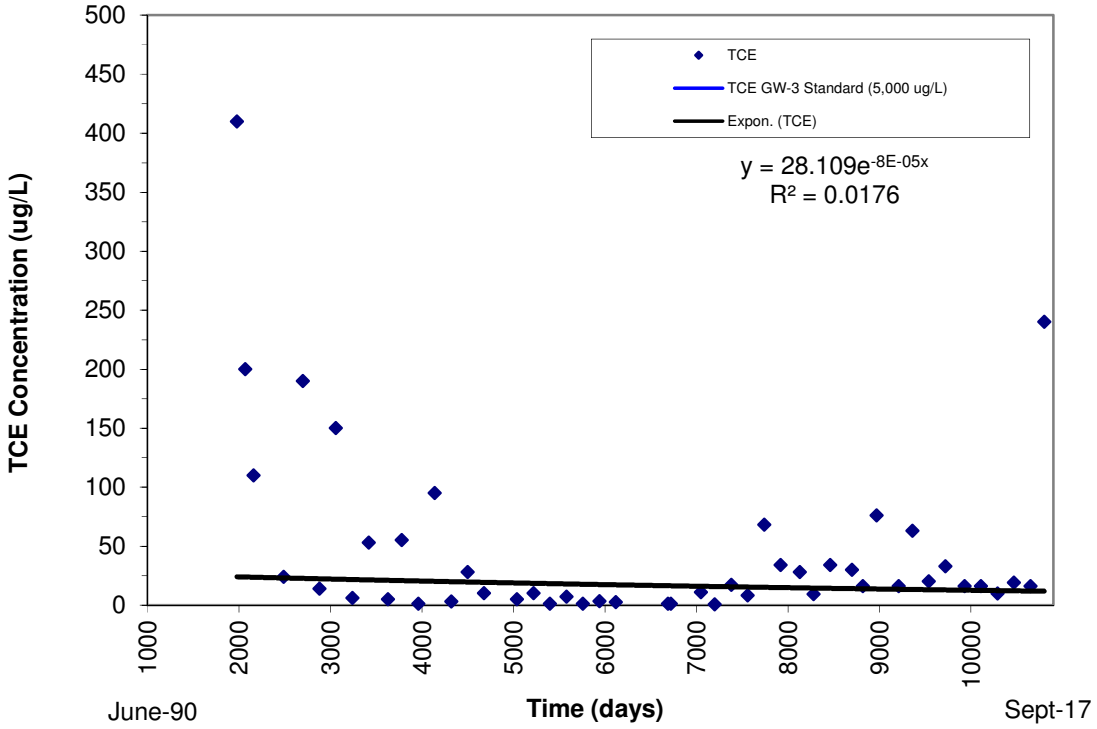
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-4I
Conductorlab - Groton, Massachusetts

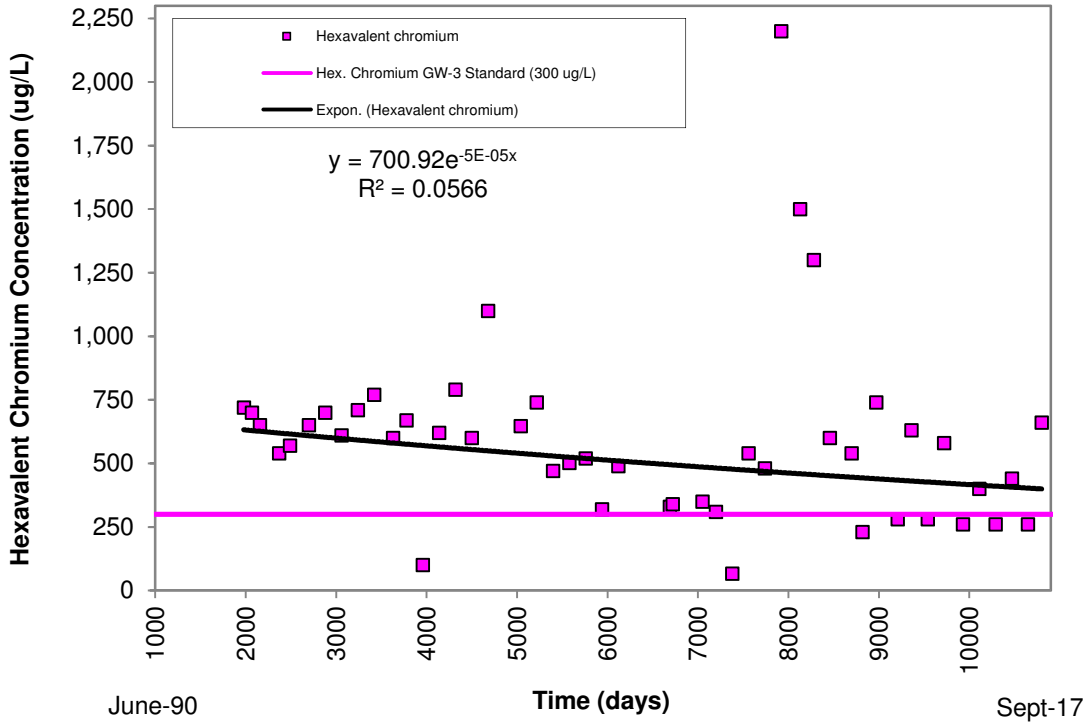




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

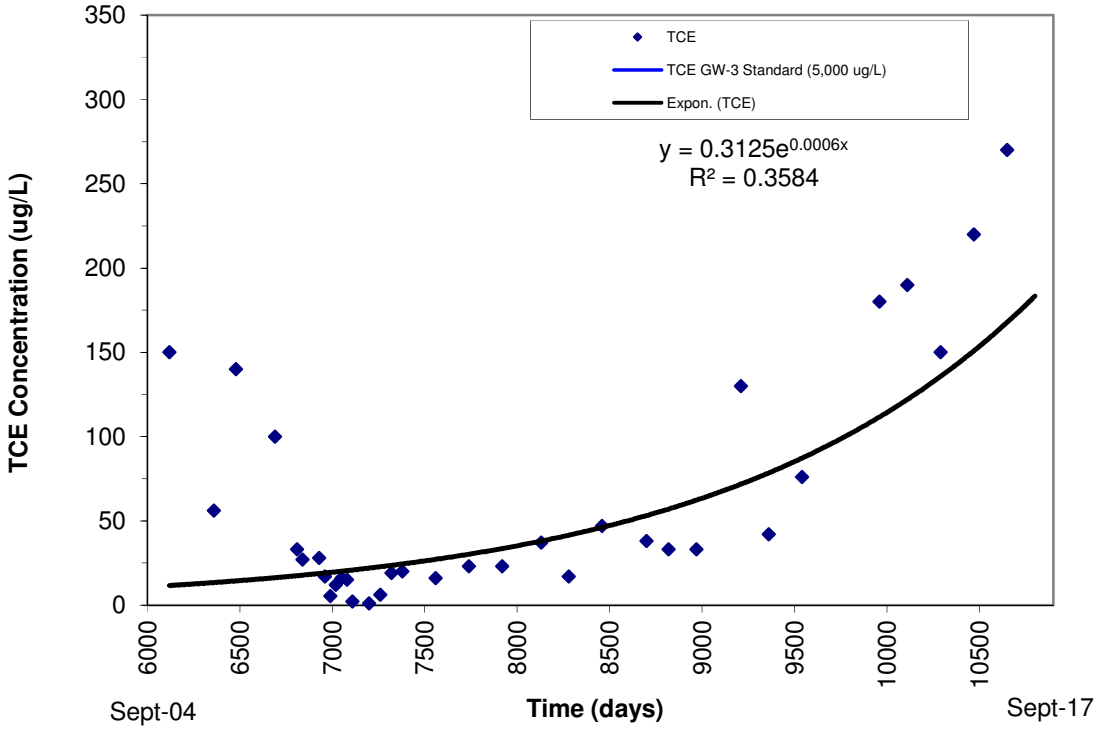
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL OSW-7
Conductorlab - Groton, Massachusetts

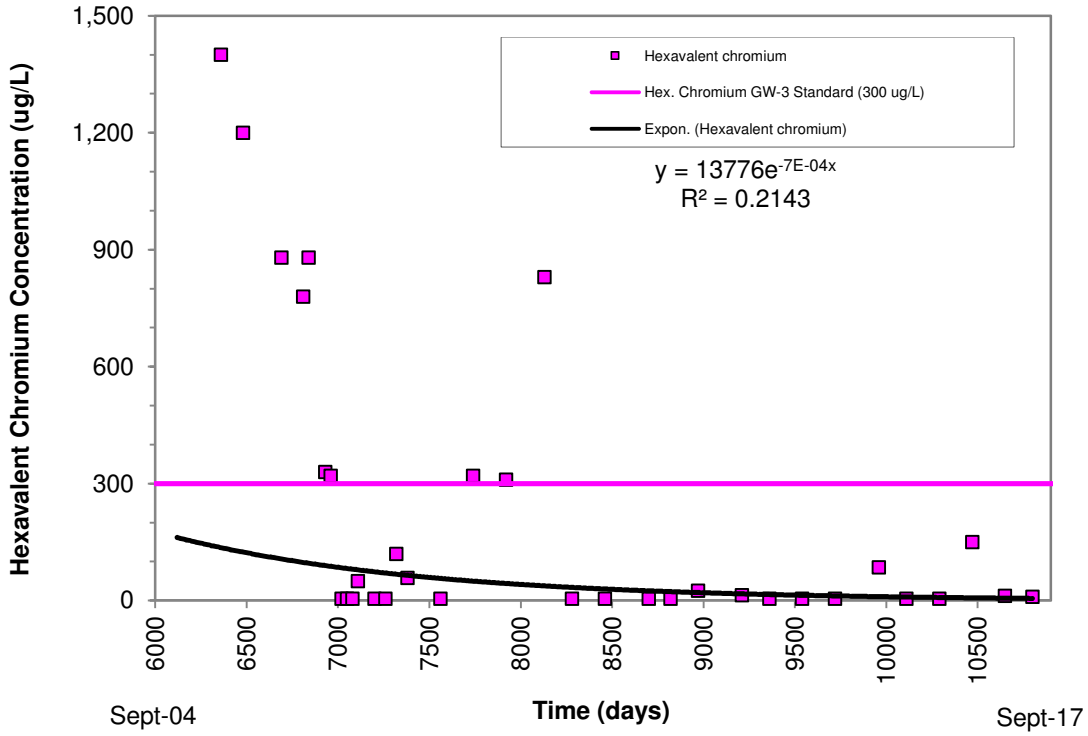




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

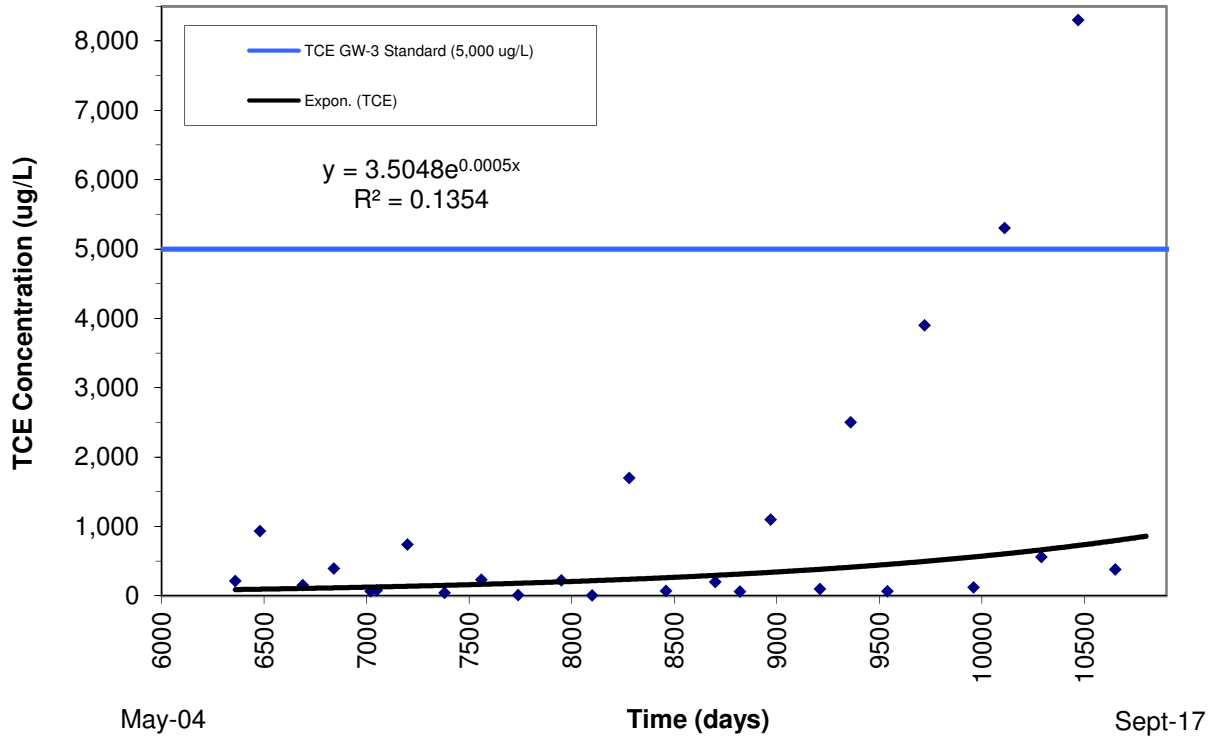
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
ON-PROPERTY MONITORING WELL PP-2
Conductorlab - Groton, Massachusetts

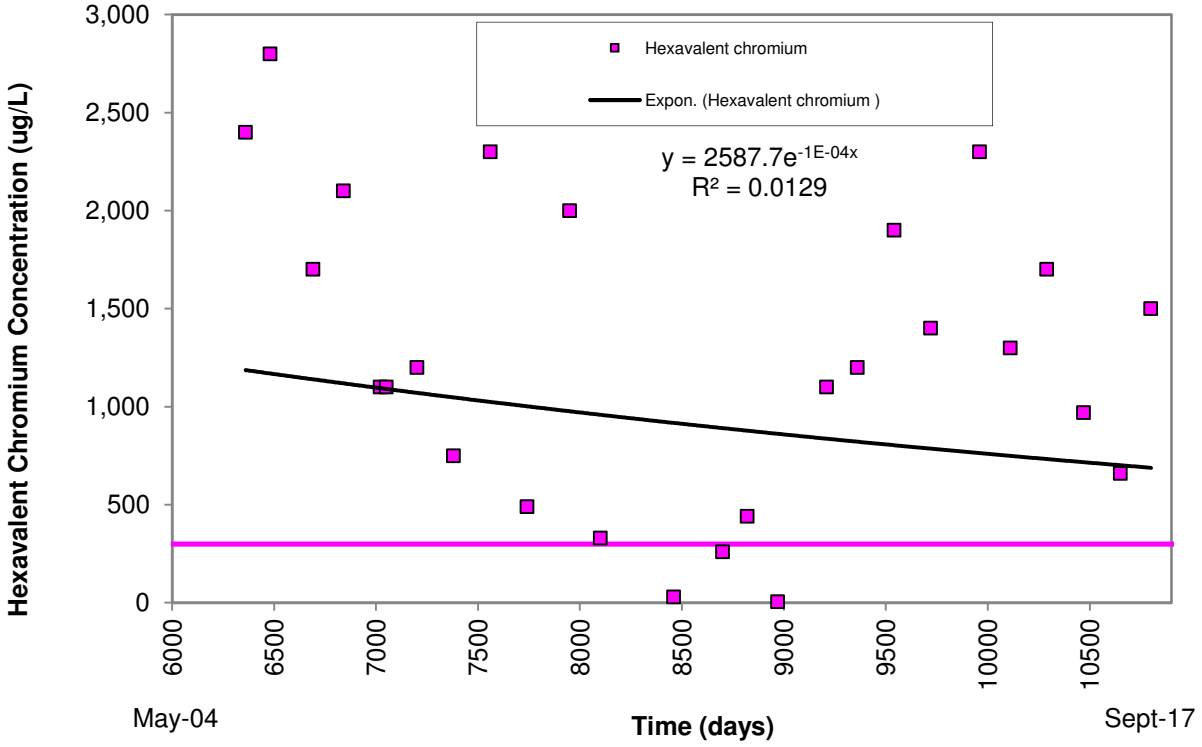




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

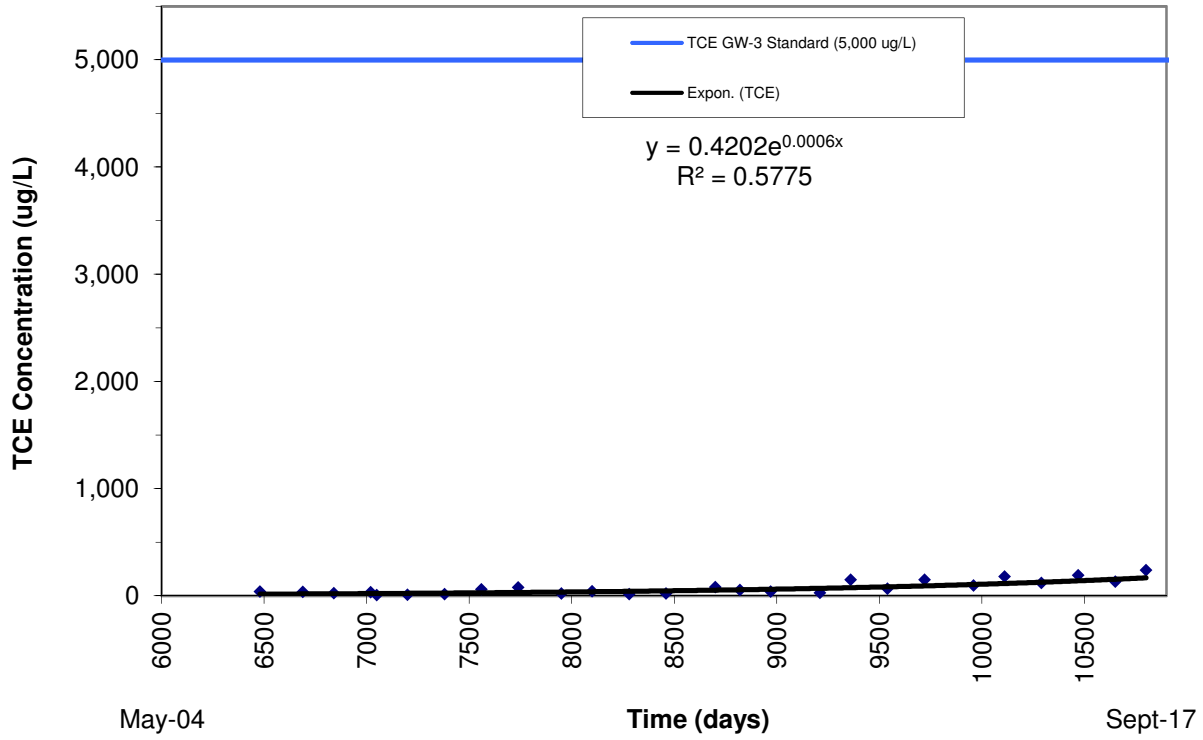
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL PP-3
Conductorlab - Groton, Massachusetts

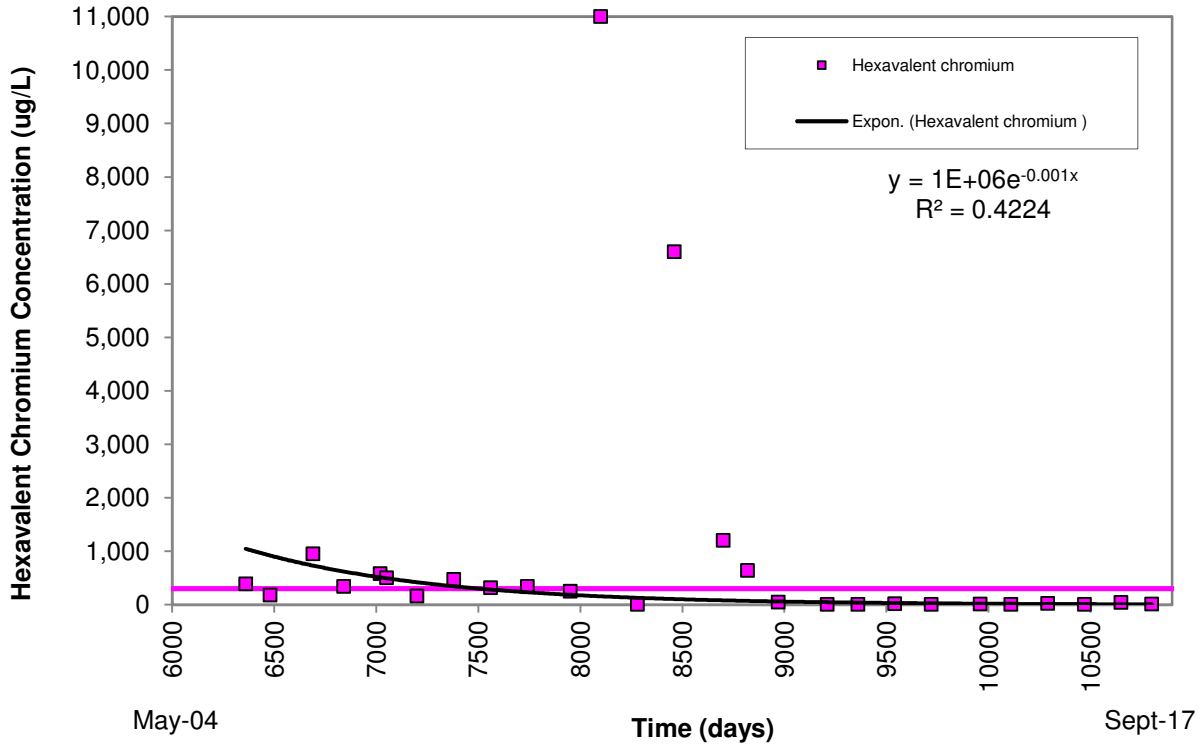




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

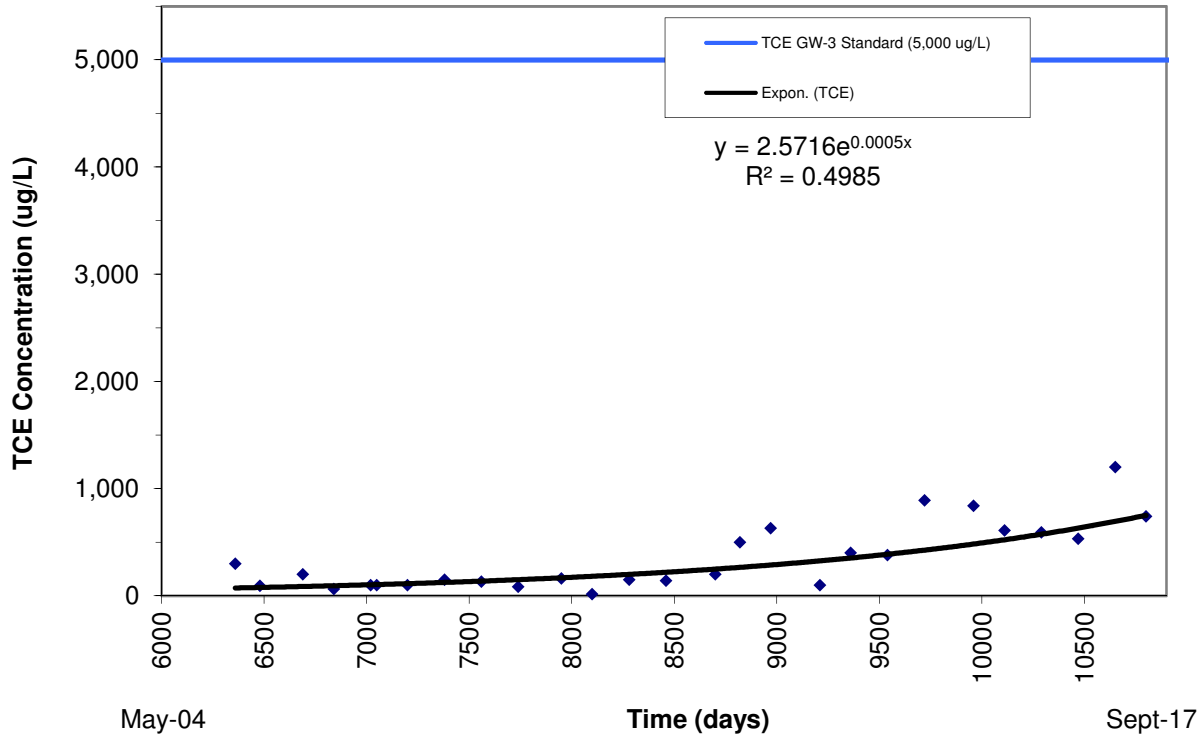
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL PP-4A
Conductorlab - Groton, Massachusetts

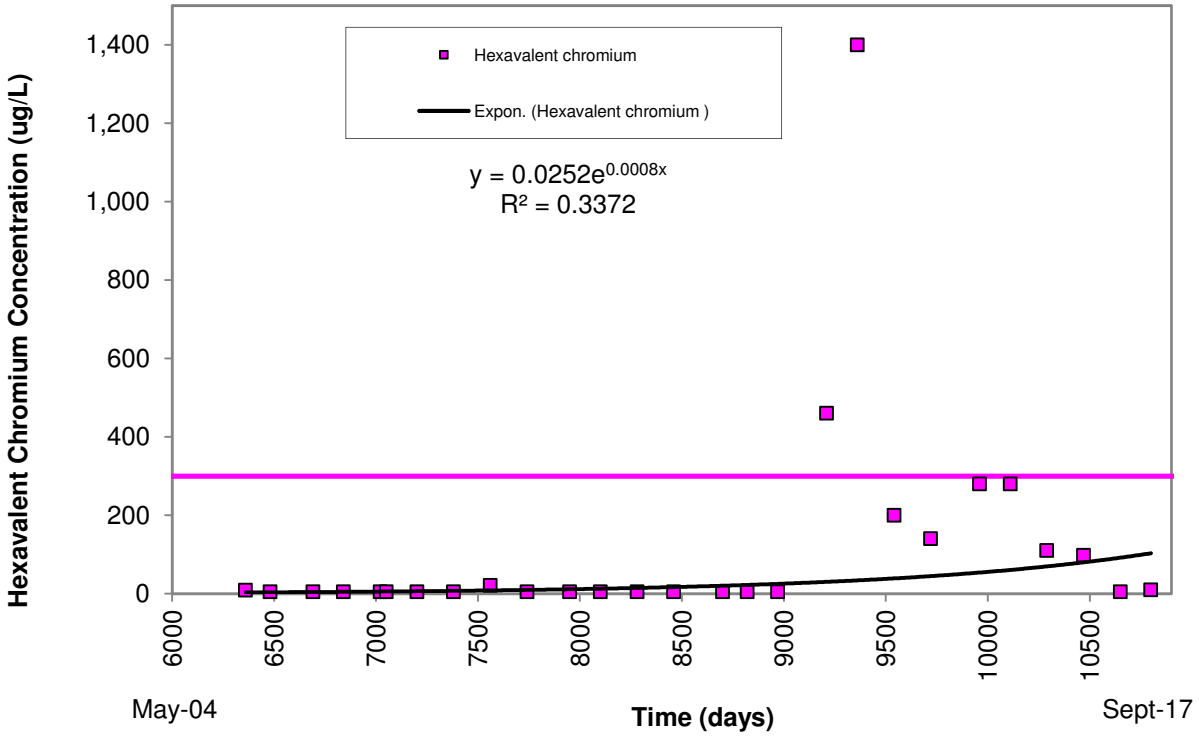




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

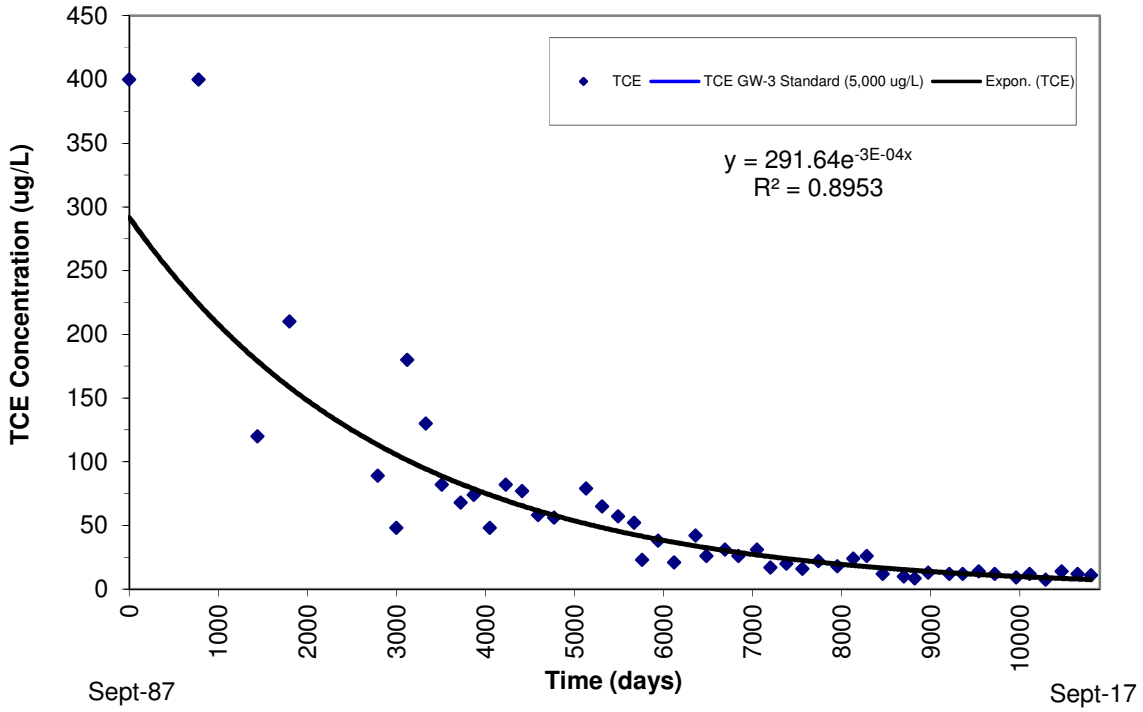
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL PP-4B
Conductorlab - Groton, Massachusetts

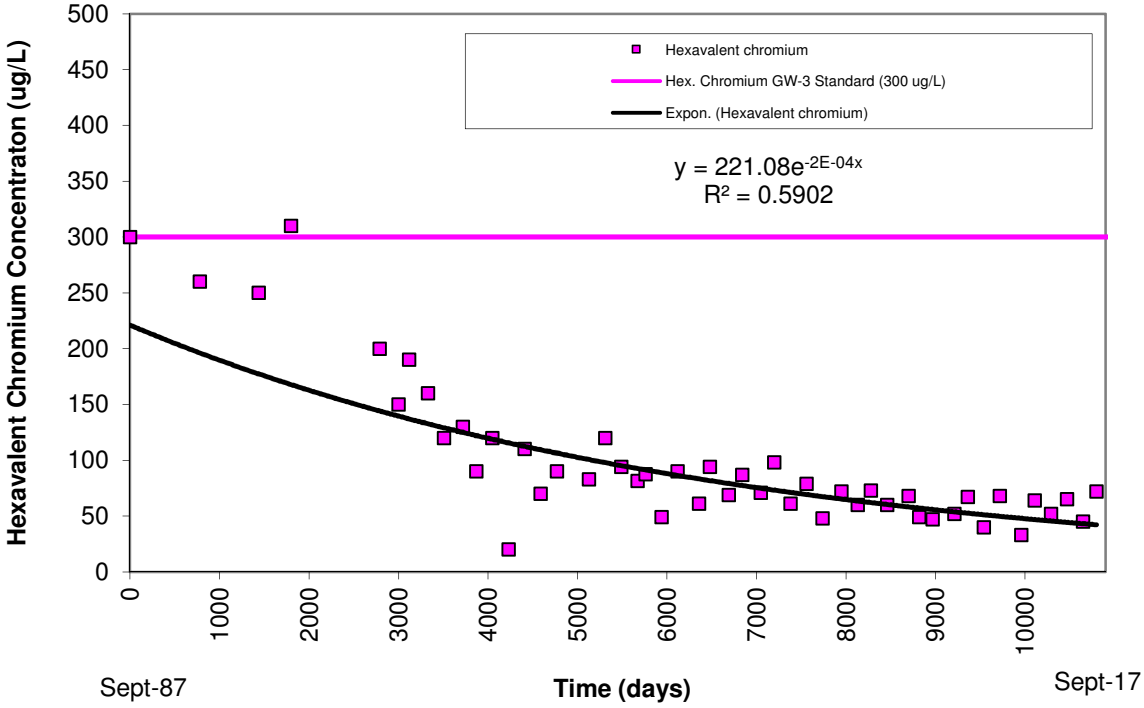




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

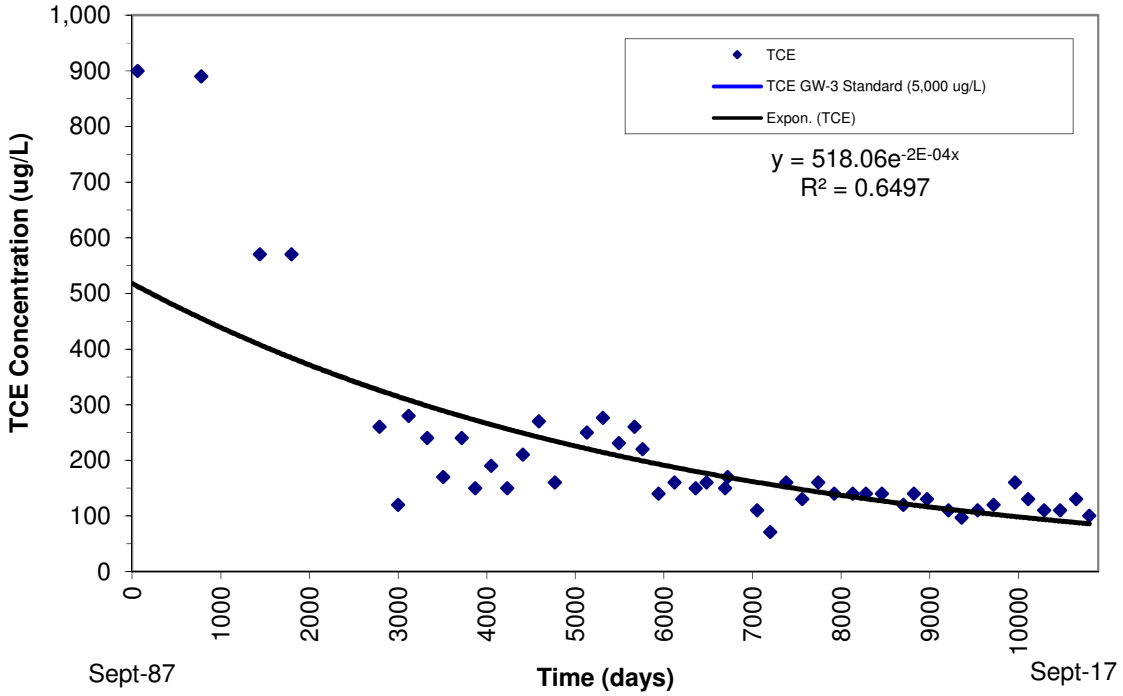
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-17
Conductorlab - Groton, Massachusetts

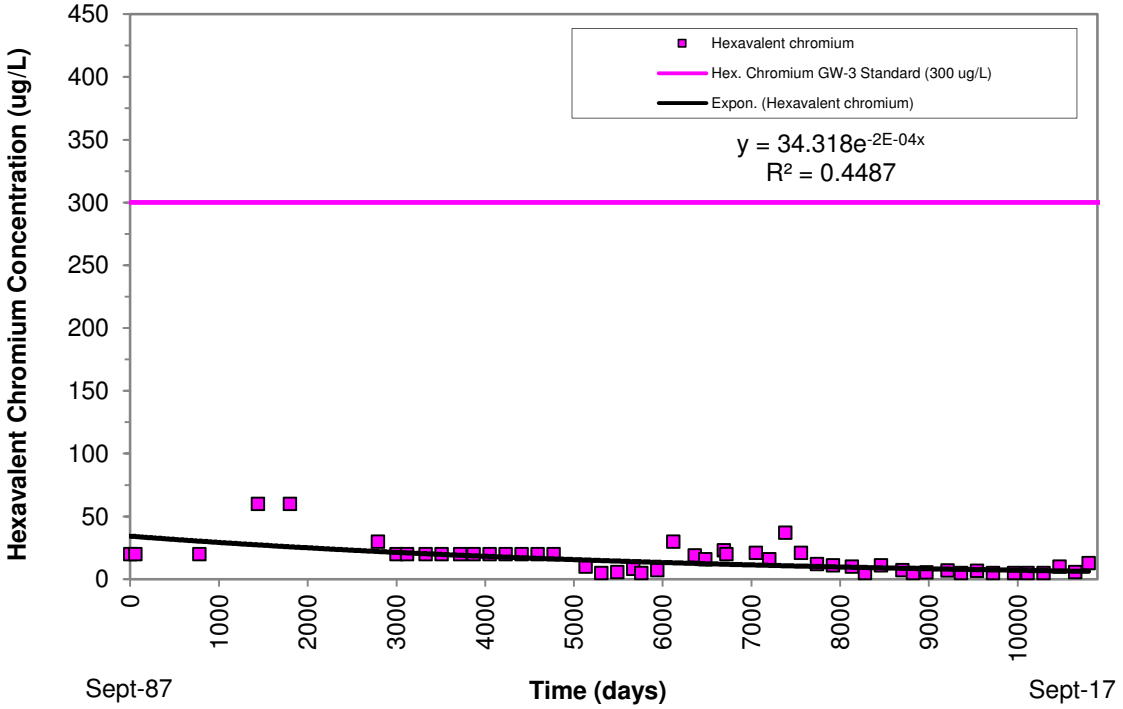




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

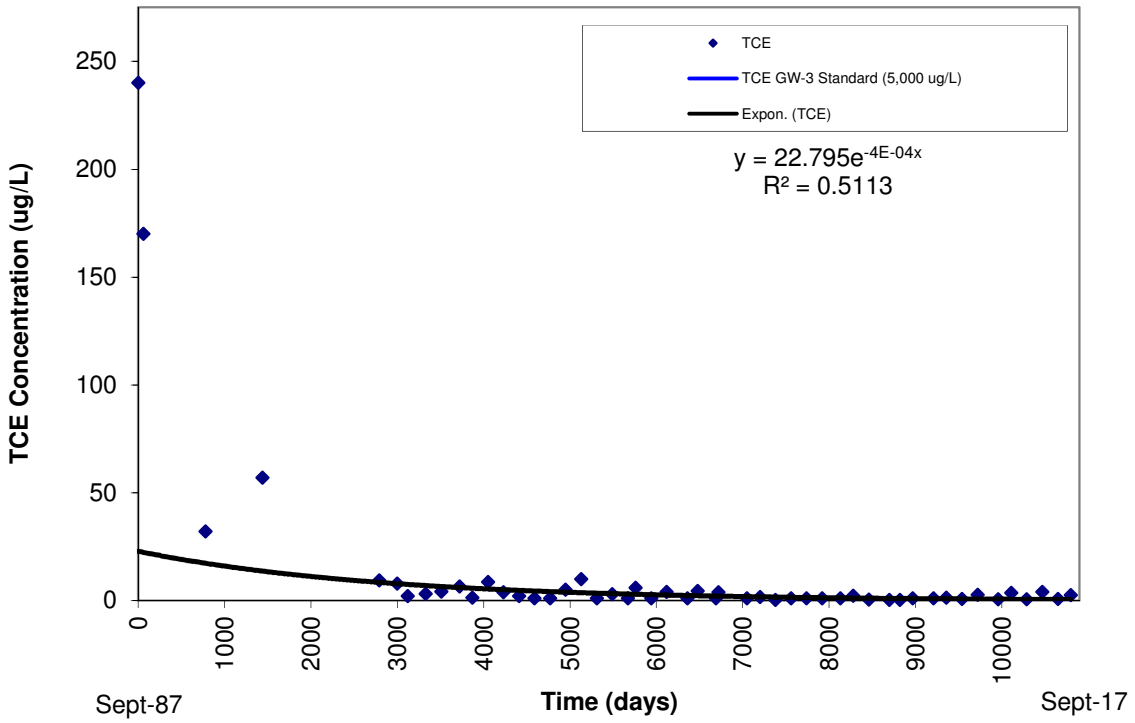
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-17B
Conductorlab - Groton, Massachusetts

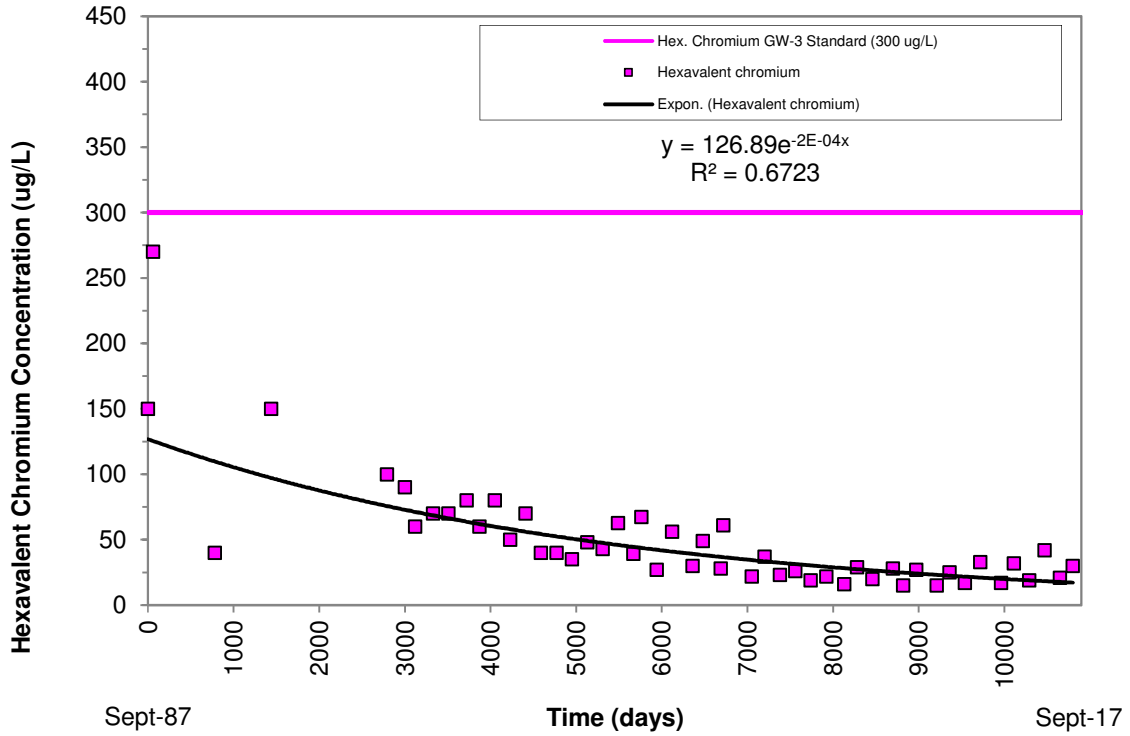




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

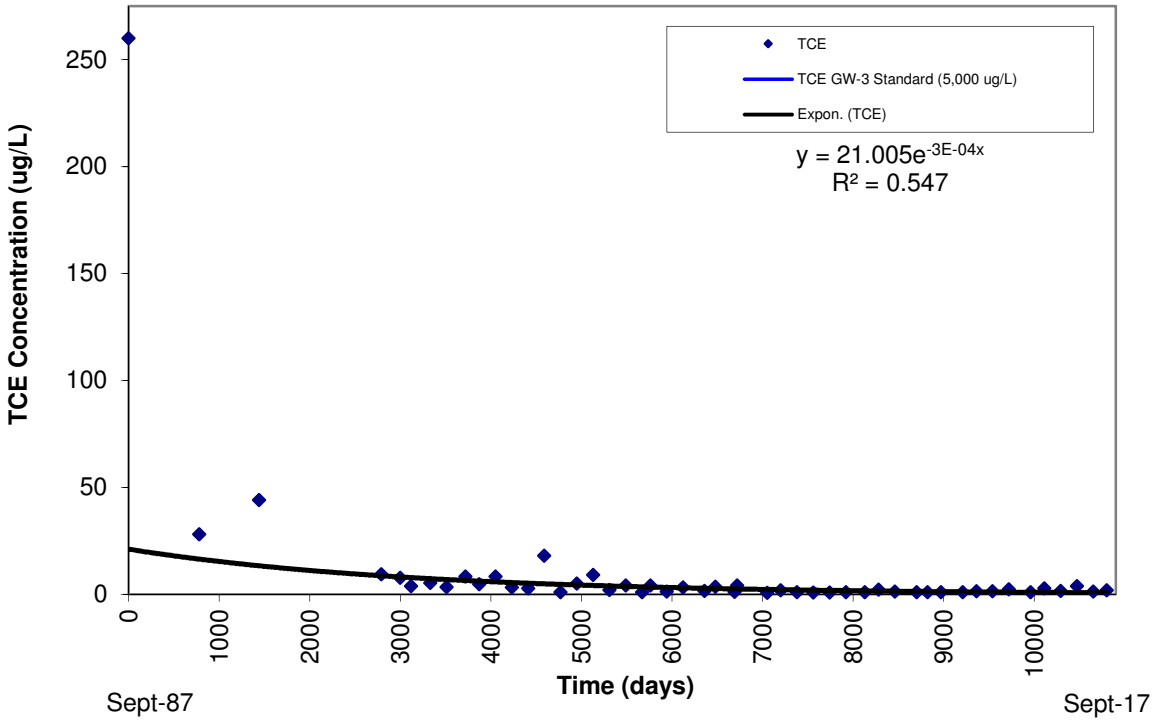
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-19
Conductorlab - Groton, Massachusetts

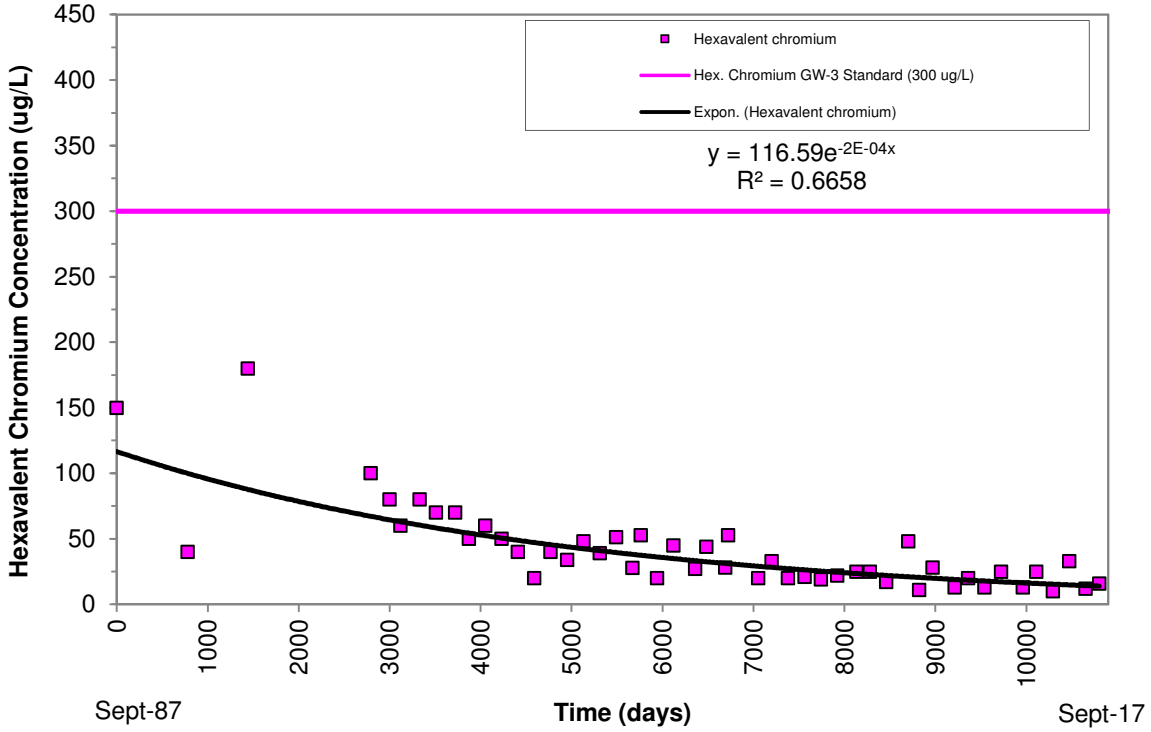




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

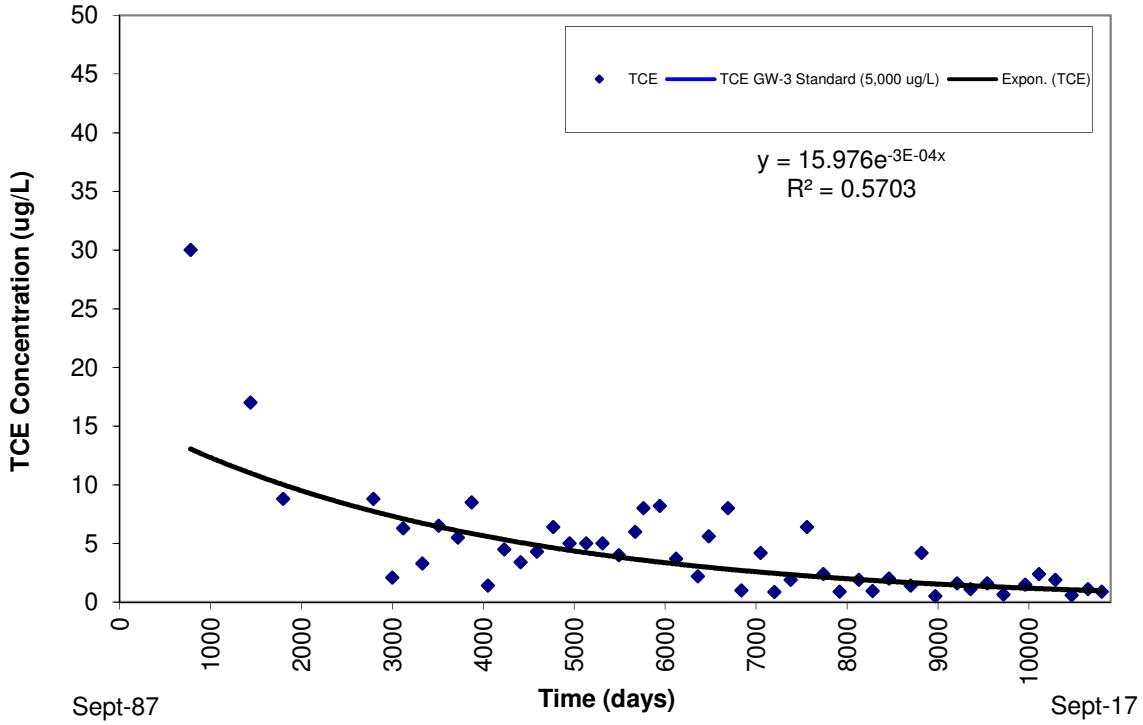
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-19B
Conductorlab - Groton, Massachusetts

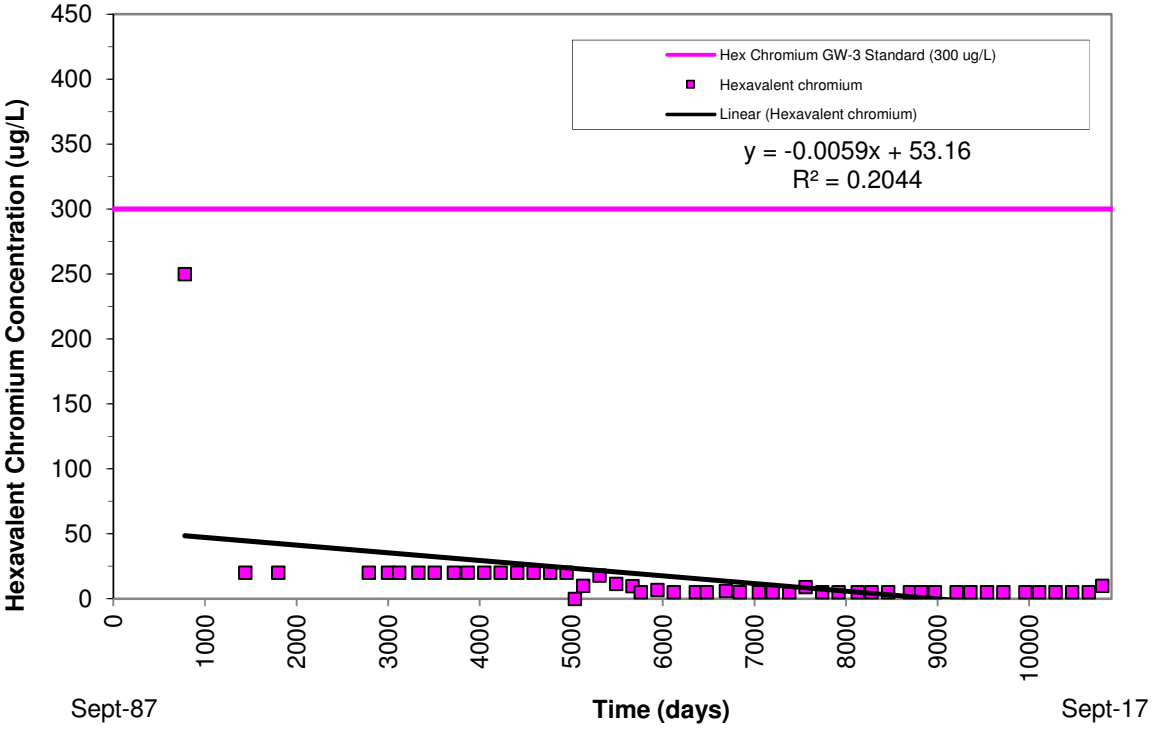




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

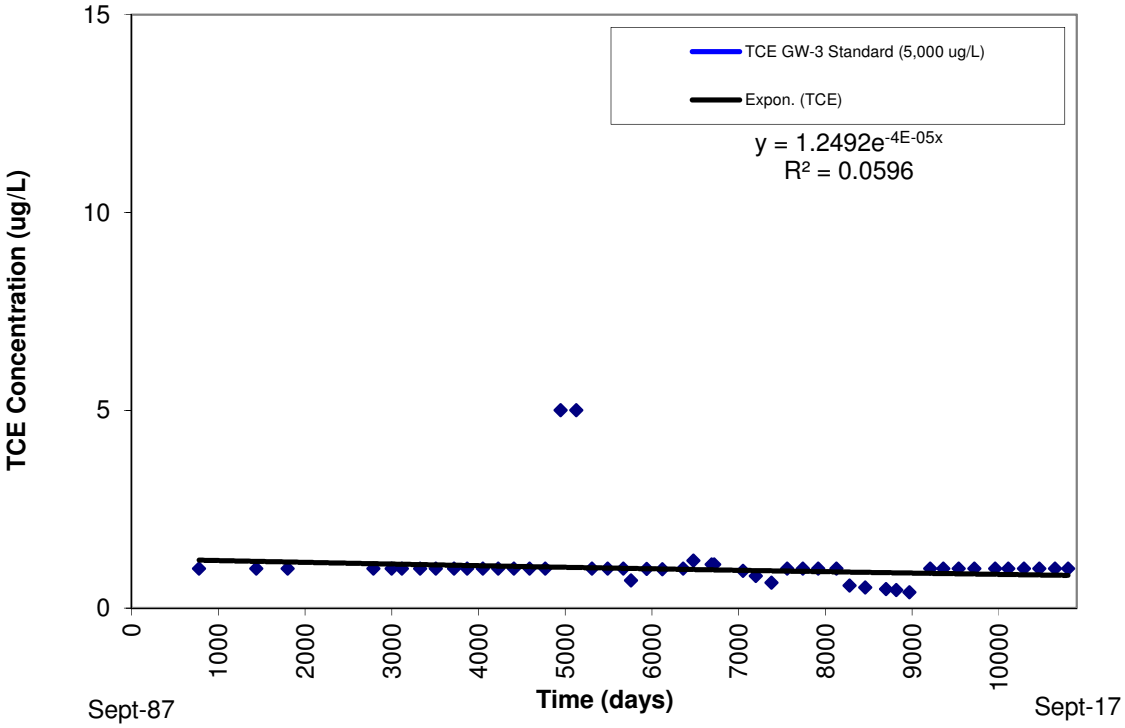
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-20
Conductorlab - Groton, Massachusetts

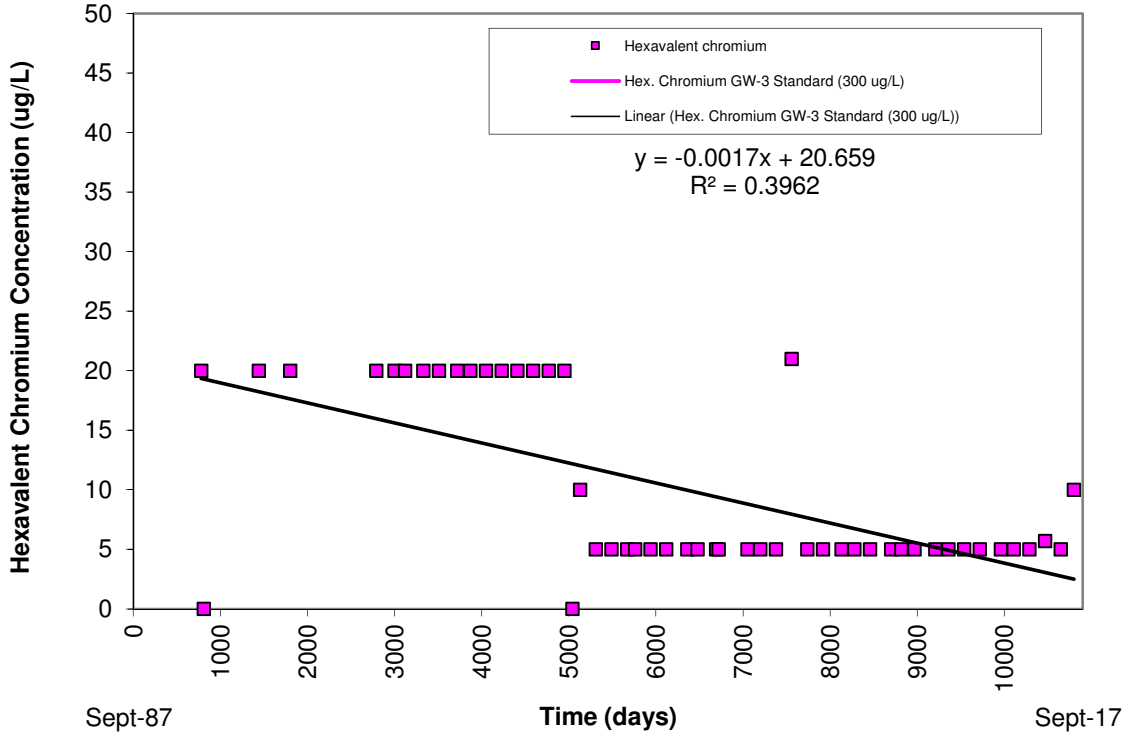




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

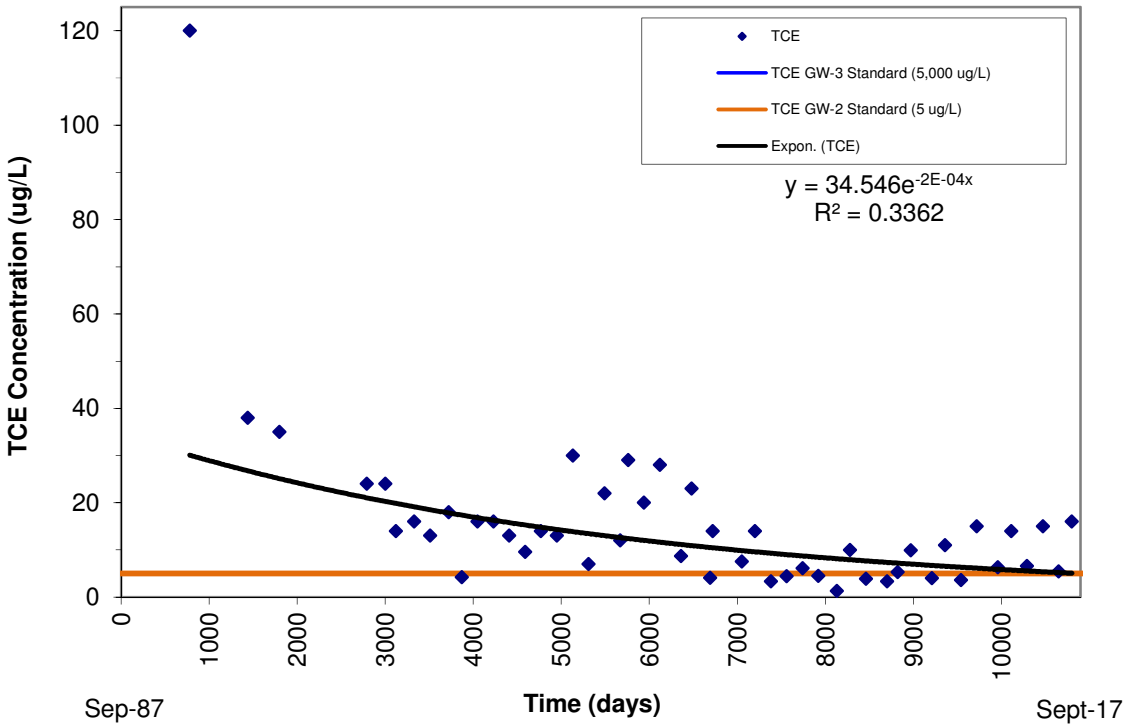
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-20B
Conductorlab - Groton, Massachusetts

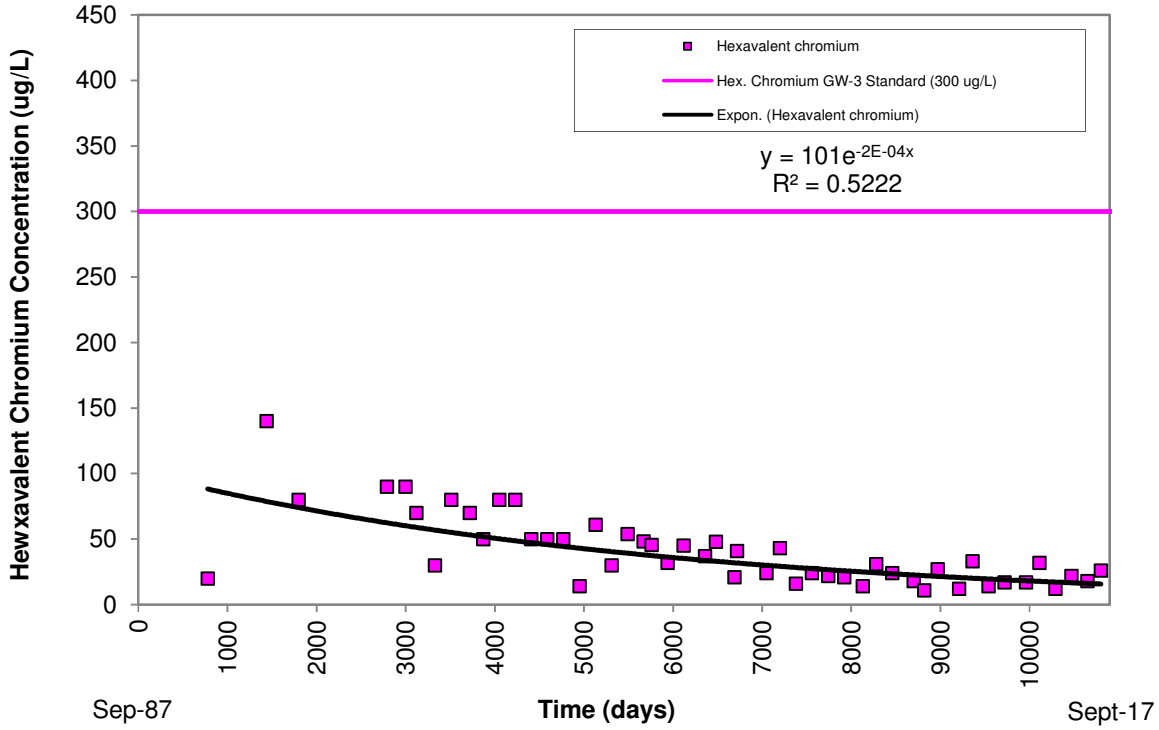




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

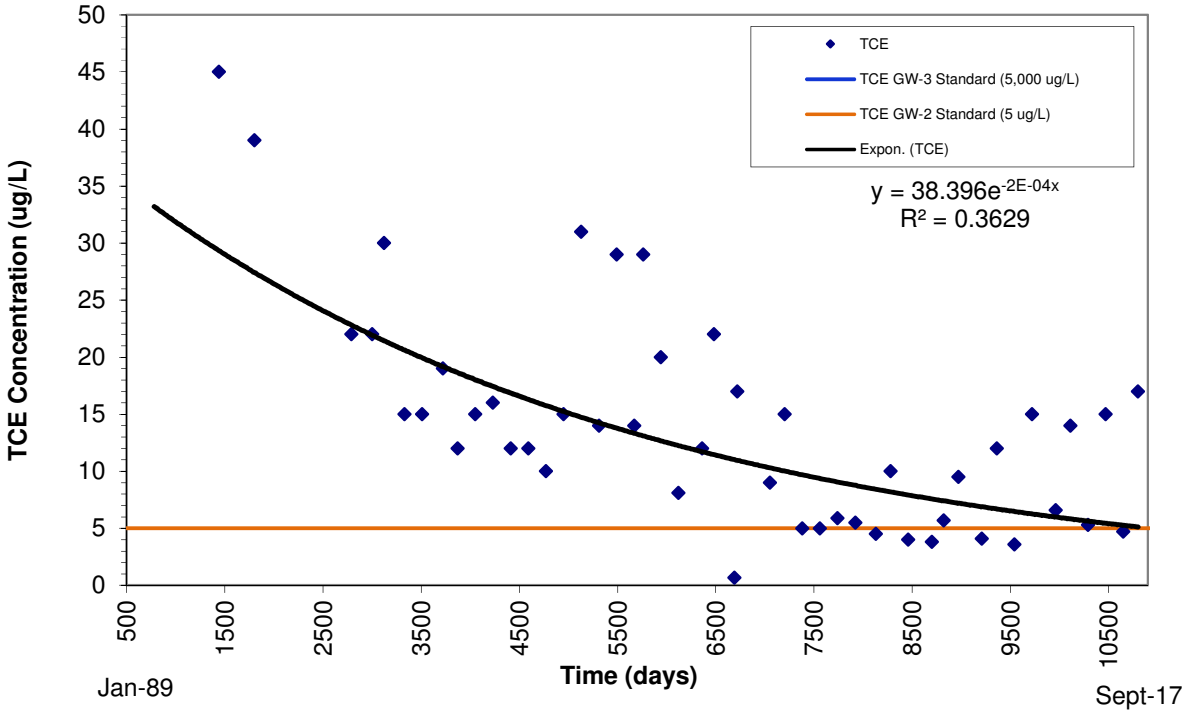
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-22
Conductorlab - Groton, Massachusetts

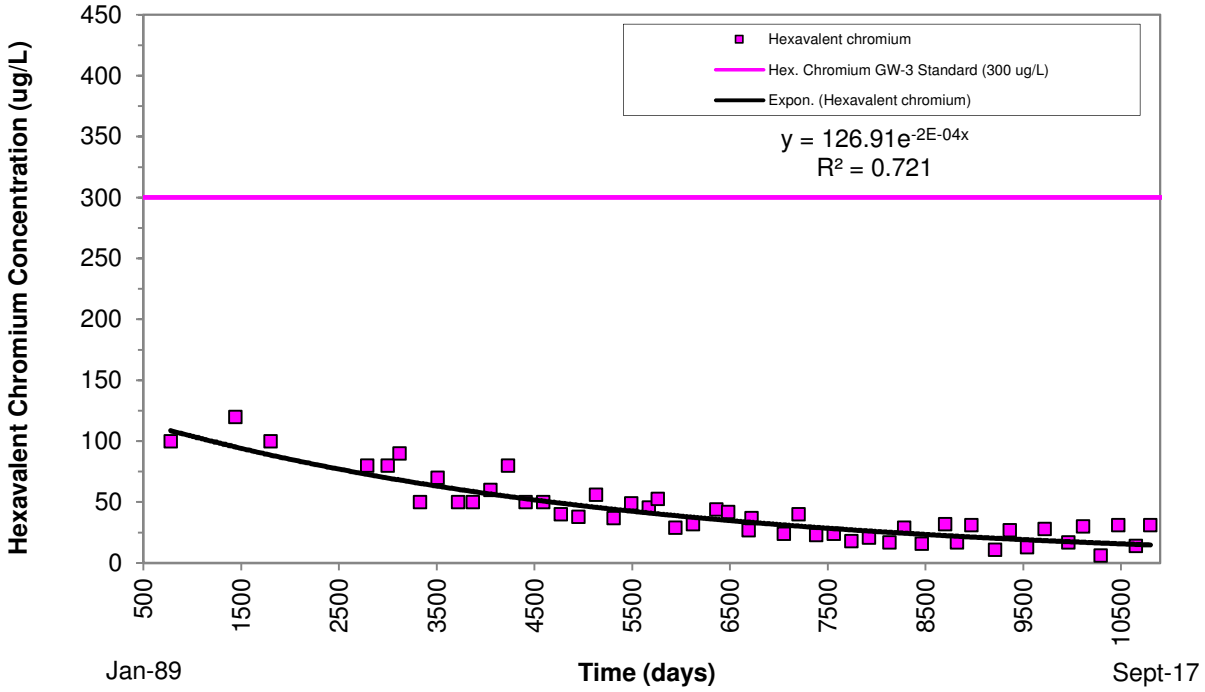




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

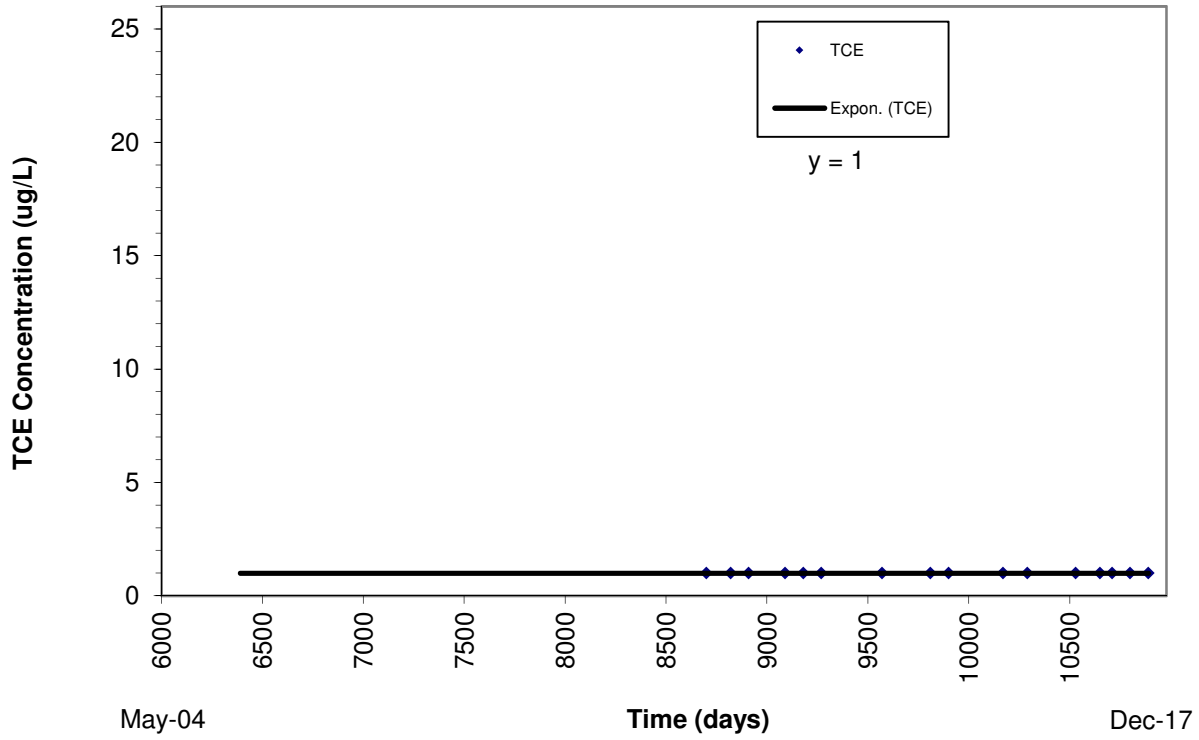
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY MONITORING WELL CLW-22B
Conductorlab - Groton, Massachusetts

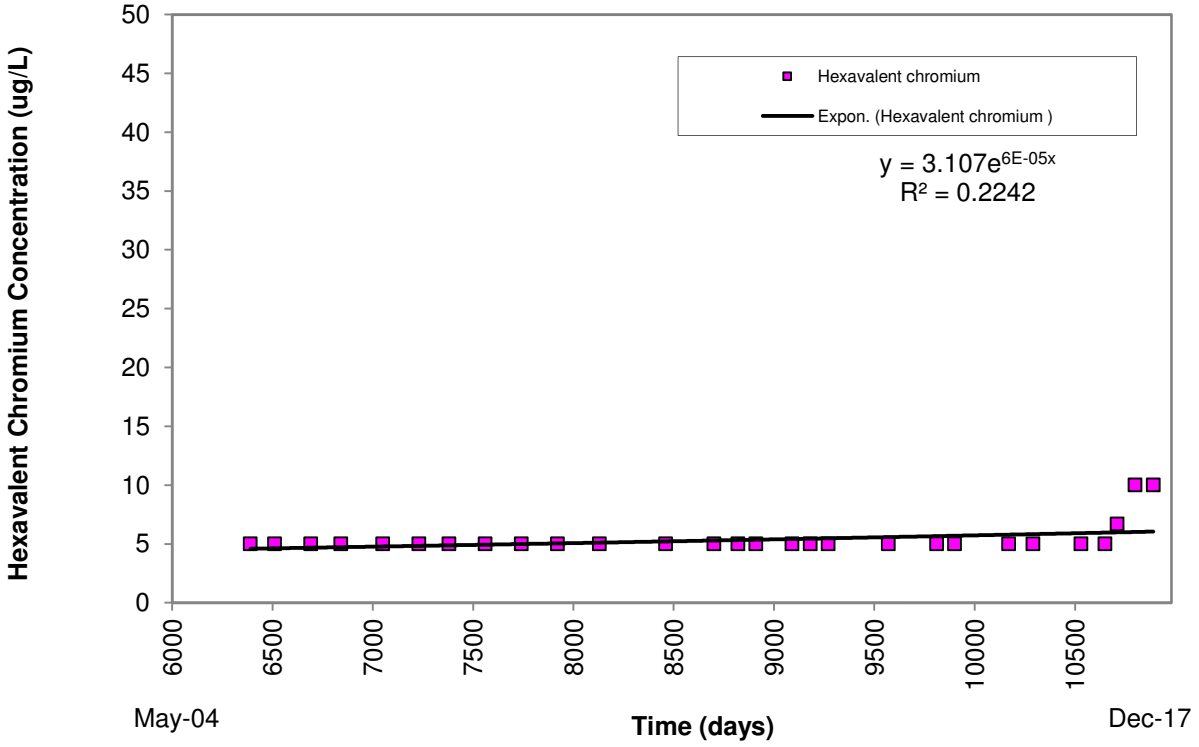




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.
Groundwater standards: TCE GW-2 = 5 ug/L; GW-3 = 5,000 ug/L; Hexavalent chromium GW-3 = 300 ug/L.

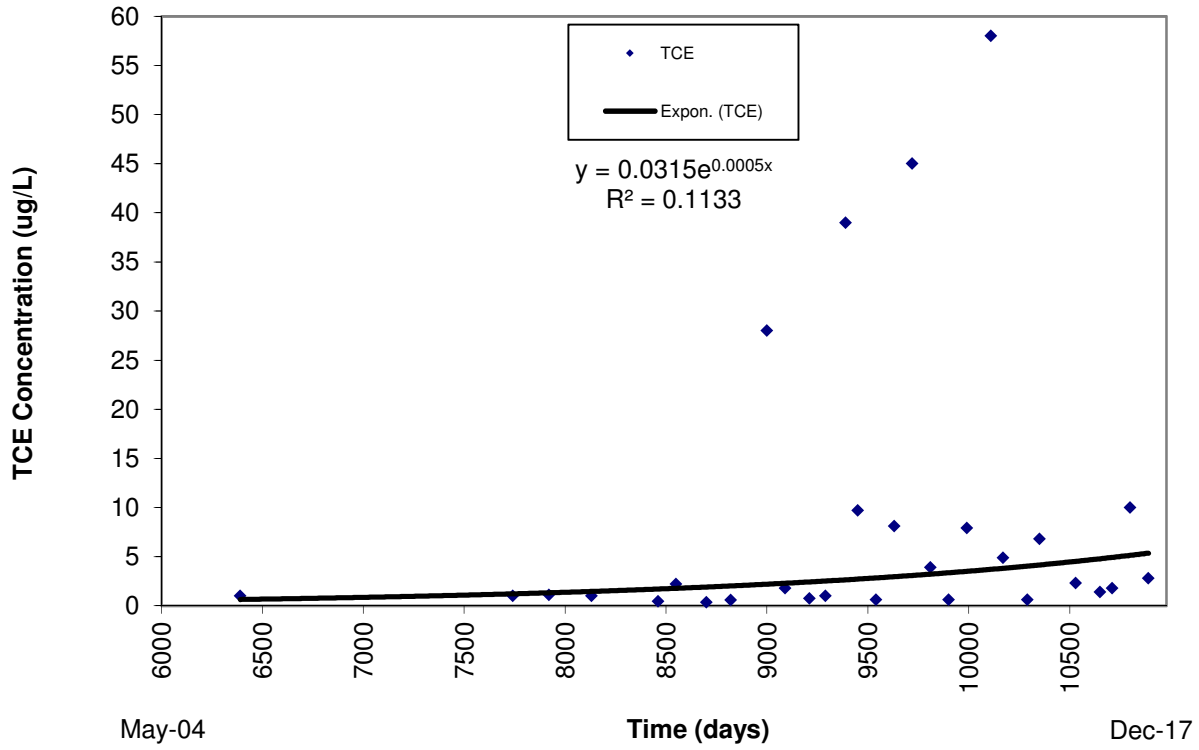
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY SURFACE WATER SAMPLE CSW-2
Conductorlab - Groton, Massachusetts

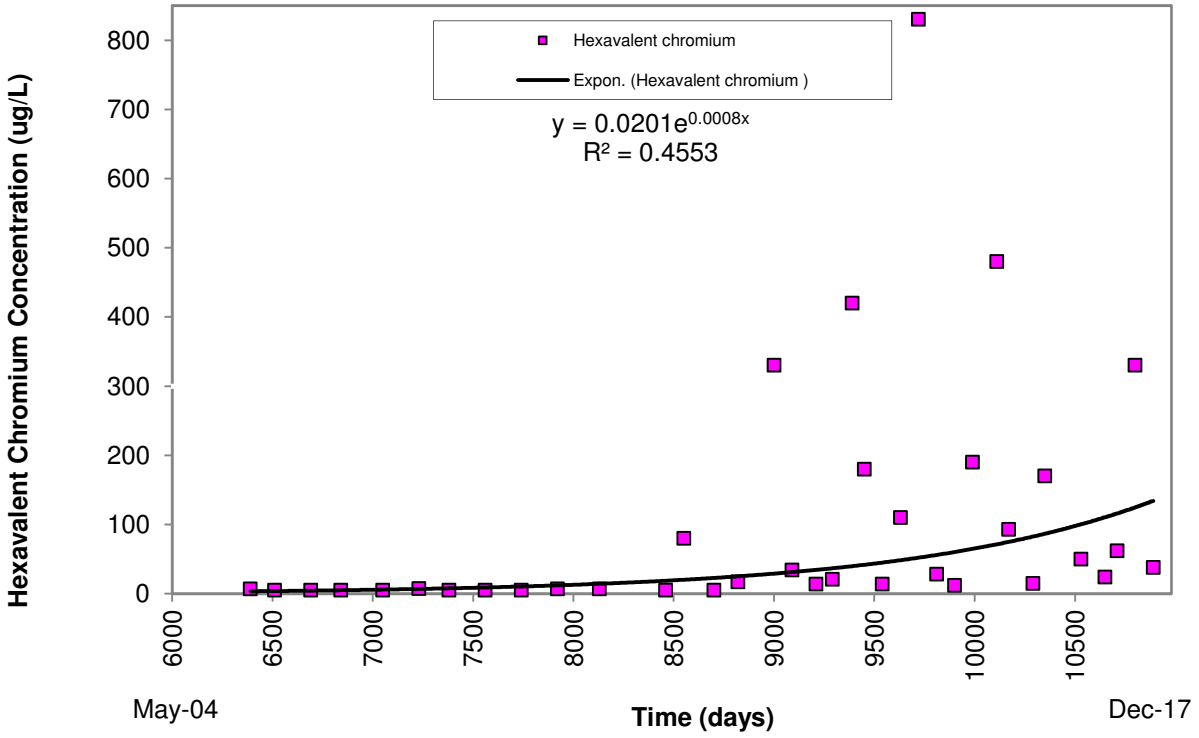




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.

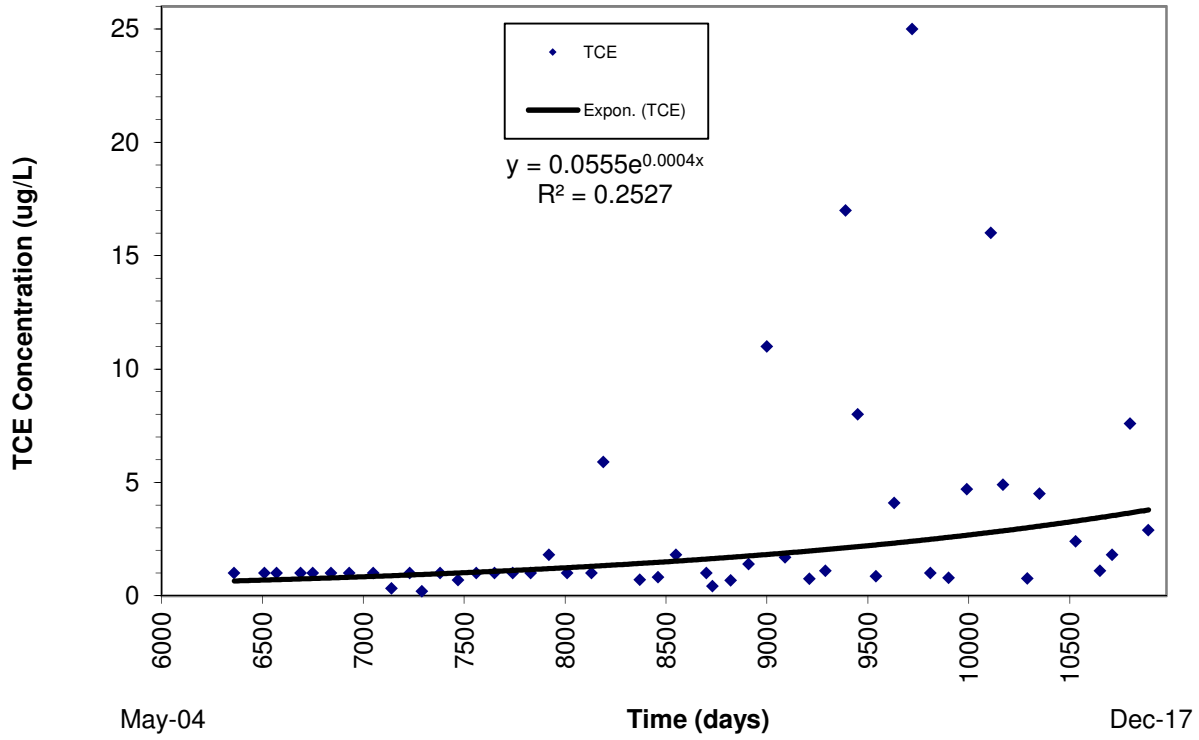
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY SURFACE WATER SAMPLE CSW-3
Conductorlab - Groton, Massachusetts

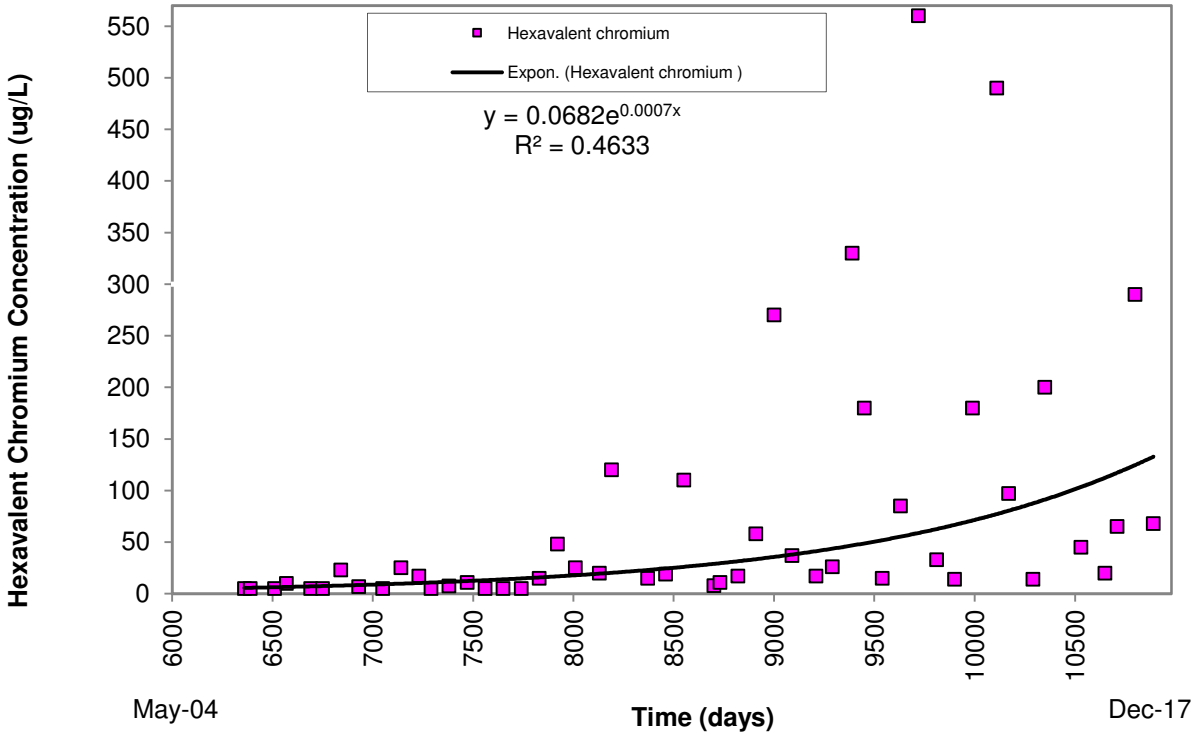




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.

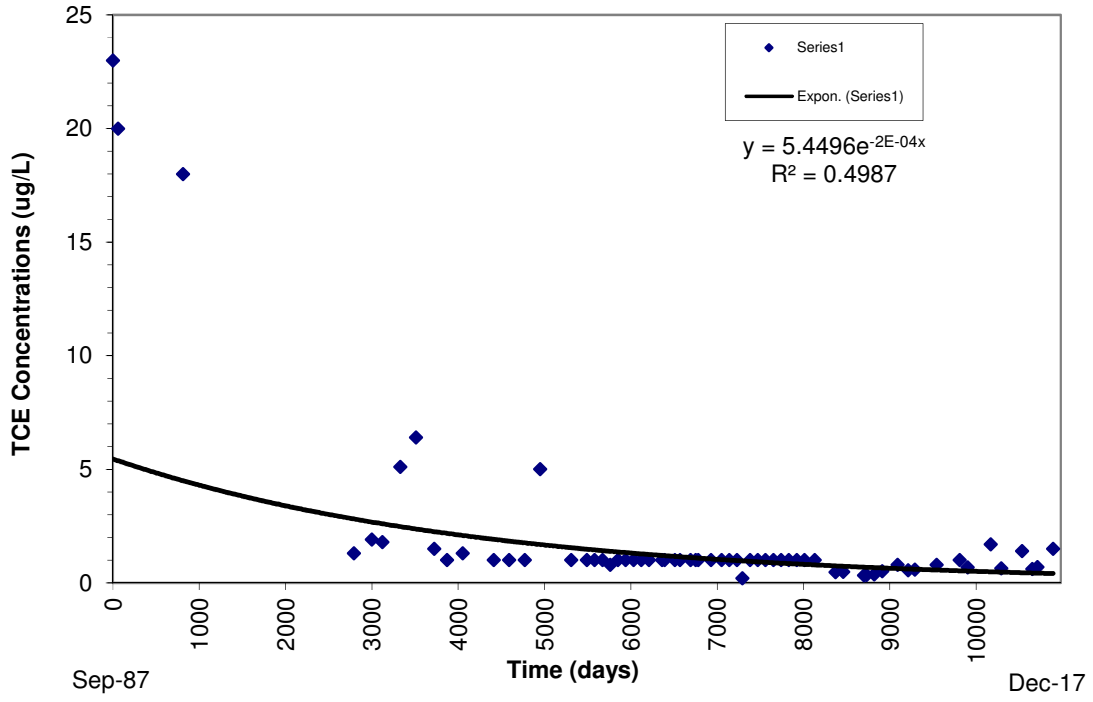
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY SURFACE WATER SAMPLE CSW-3A
Conductorlab - Groton, Massachusetts

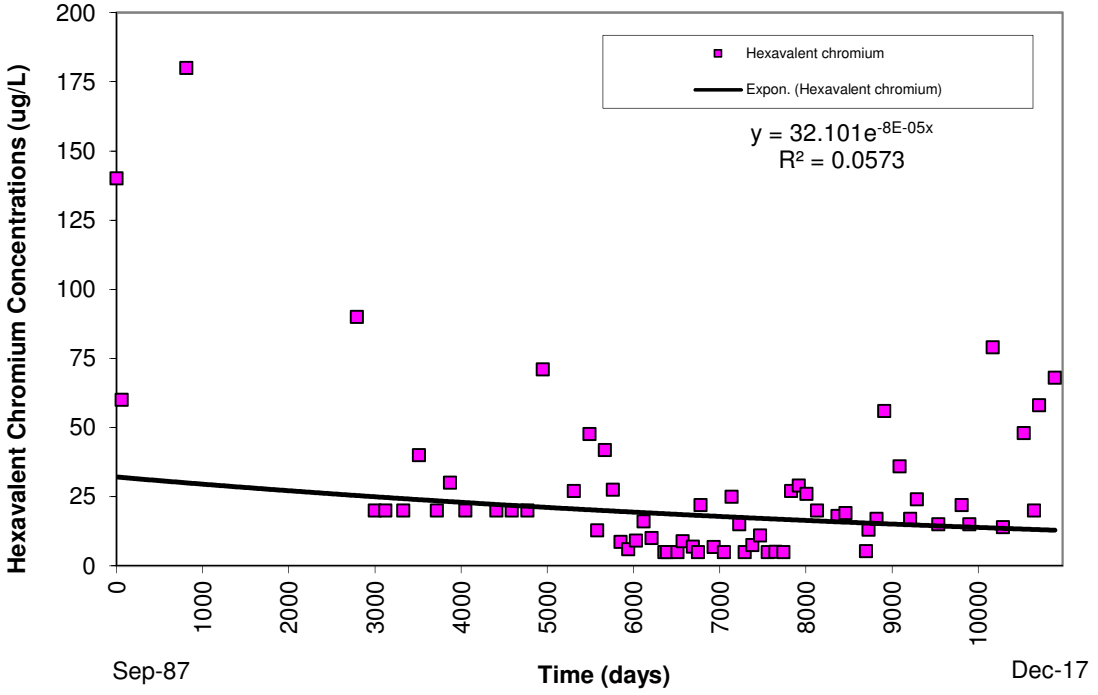




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.

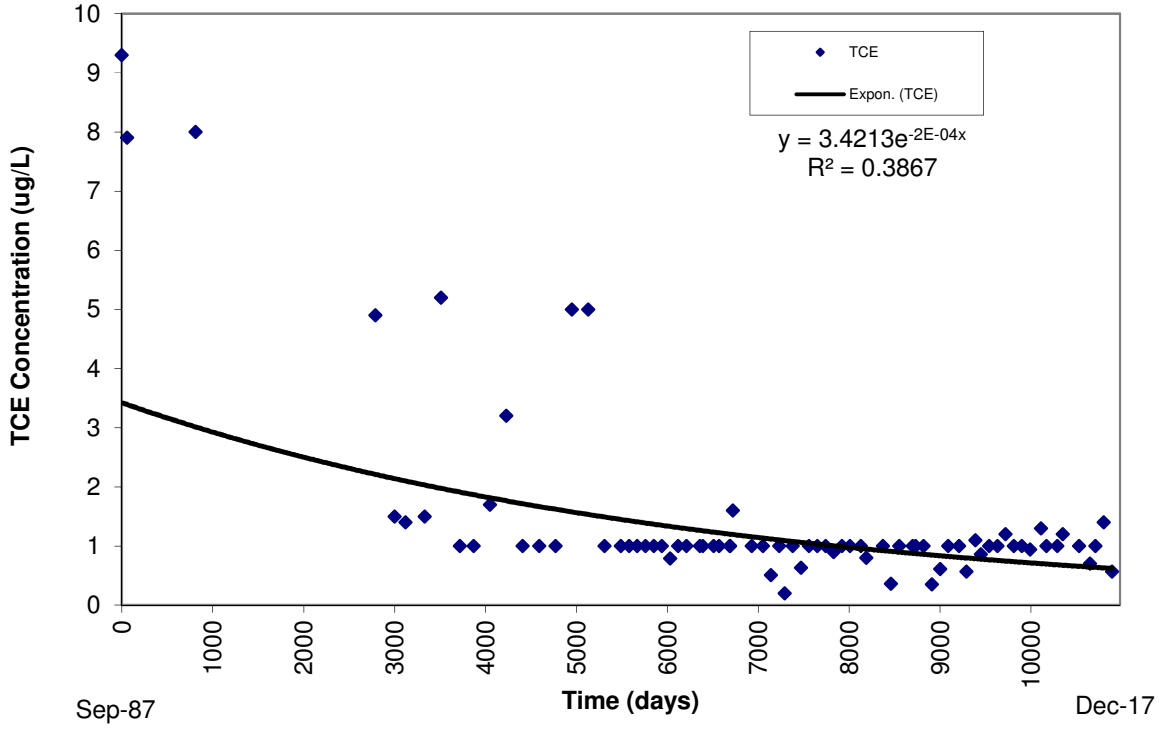
TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY SURFACE WATER SAMPLE CSW-4
Conductorlab - Groton, Massachusetts

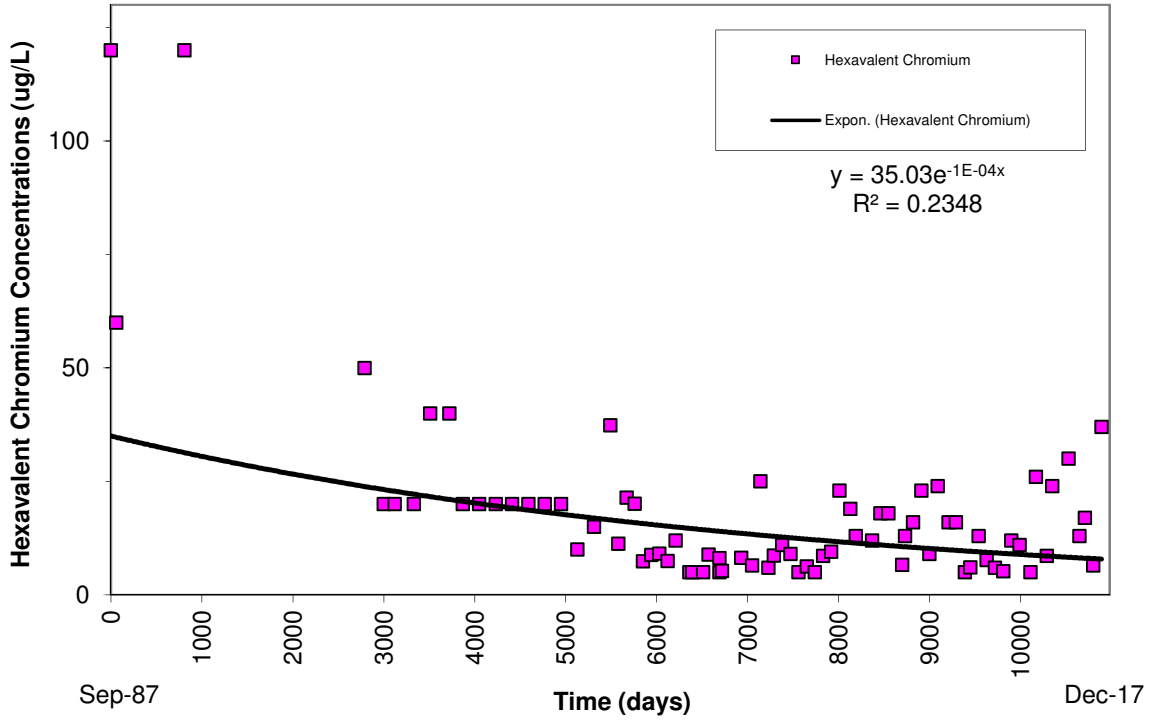




Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.

TCE and Hexavalent Chromium Groundwater Concentrations vs. Time
OFF-PROPERTY SURFACE WATER SAMPLE CSW-5
Conductorlab - Groton, Massachusetts





Notes:
Day 0 is equivalent to Sept 87 and one month is assumed to be 30 days.