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August 18, 2016
File No. 01.0024065.17

Ms. Gloria Toro
Puerto Rico Environmental Quality Board
Land Pollution Branch
Cruz A. Matos Environmental Agencies Building
1375 Ponce de Leon Ave.
San Juan, Puerto Rico 00926-2604

Re: Semi-Annual Project Progress Report
January 2016 (Q1) through June 2016 (Q2)
HP Inc. Voluntary Remediation Project
San German, Puerto Rico

Dear Ms. Toro:

GZA GeoEnvironmental, Inc., on behalf of HP Inc. (formerly Hewlett-Packard Company), is submitting the semi-annual Project Progress Report for the San German voluntary remediation project (reporting period January 2016 (Q1) through June 2016 (Q2)). During this reporting period evaluation continued of the Intrinsic Biodegradation Study as a remedial strategy for the subject site. Implementation of the Intrinsic Biodegradation Study commenced in late October 2010.

Please contact the undersigned or Mr. Paul Paschke (HP Inc.) at 970-898-0573 or paul.paschke@hp.com, if you have any questions.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

John A. Colbert
Senior Project Manager

Karen Kinsella
Consultant/Reviewer

Charles A. Lindberg
Senior Principal

Attachment: January 2016 (Q1) through June 2016 (Q2) Project Progress Report

cc: Díaz, Lorena Rodríguez; Puerto Rico Environmental Quality Board
Aviles, Jesse; United States Environmental Protection Agency Region II
Morales, Jorge; Puerto Rico Industrial Development Company
Meléndez, Joel; Puerto Rico Industrial Development Company
Fornés, Karen; Puerto Rico Industrial Development Company
Paschke, Paul; HP Inc.
File

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JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP INC.
VOLUNTARY REMEDIAL ACTIONS
SAN GERMAN, PUERTO RICO

PREPARED ON BEHALF OF:
HP Inc.
Fort Collins, Colorado

PREPARED BY:
GZA GeoEnvironmental, Inc.
Norwood, Massachusetts

August 2016
File No. 01.0024065.17

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1.0 INTRODUCTION

This Semi-Annual Project Progress Report is submitted in support of HP Inc.'s (HP - formerly Hewlett-Packard Company) Voluntary Soil and Groundwater Remediation project at the Former Digital Equipment Corporation[1] facility in San German, Puerto Rico (the "Site"). Refer to Figure 1 for a Locus Plan and to Figure 2 for a Site Plan. HP has retained GZA GeoEnvironmental, Inc. (GZA) to manage this project. The work performed is in accordance with the Intrinsic Biodegradation (IB) Study Work Plan[2] ("IB Work Plan") previously submitted to the Environmental Quality Board of Puerto Rico (EQB) and the United States Environmental Protection Agency (EPA). The October 2015 revision to the IB Work Plan included implementation of an Enhanced Reductive Dechlorination (ERD) pilot test that was initiated during this reporting period.

Groundwater sampling was performed in accordance with the Quality Assurance Project Plan (QAPP) (Revision 4, Voluntary Remediation Project, San German, dated April 2015 and revised October 2015) developed for the HP Voluntary Soil and Groundwater Remediation Project. EQB concurred with the IB Study Work Plan in a letter dated November 2, 2015. Pertinent project analytical data have been validated by a Puerto Rico-certified chemist. Please note that the findings, opinions, conclusions, and recommendations presented in this report are subject to the Limitations provided in Appendix A. On March 30, 2016, EQB provided comments on the Semi-Annual Project Progress Report: July (Q3) through December (Q4) 2015. Responses to these comments are included in Appendix B.

2.0 REPORTING PERIOD

This progress report covers the period from January 1, 2016 (beginning of first quarter 2016) through June 30, 2016 (end of second quarter 2016).

3.0 REMEDIAL SYSTEM DESCRIPTION

A Groundwater Containment and Treatment System (GWCTS) was installed and operated at the site, beginning in October 1995. In accordance with the IB Work Plan, operation of this system was discontinued on November 1, 2010, with EQB's concurrence as described in their letter dated October 29, 2010.

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[1] Hewlett-Packard Company and Compaq Computer Corporation merged in 2003 and Compaq Computer Corporation had acquired Digital Equipment Corporation in 1998. Hewlett-Packard Company changed its name to HP Inc. in November 2015.

[2] GZA, October 14, 2015, Revised Intrinsic Biodegradation Study Work Plan – Revision 1, Hewlett-Packard, Voluntary Remedial Actions, San German, Puerto Rico.

The objective of the IB study is to evaluate whether IB of the residual chlorinated volatile organic compounds (cVOCs) in groundwater can continue to reduce dissolved concentrations while maintaining a condition of no significant risk to human or environmental receptors.

4.0 KEY SITE ACTIVITIES FOR REPORTING PERIOD

In mid-March 2016 and in accordance with the IB Work Plan, GZA and On-Site Environmental, Inc. (On-Site) personnel obtained water level readings and conducted low-flow groundwater quality sampling. Additional information on these activities is described in Section 7.0 of this progress report. GZA and On-Site also initiated the ERD pilot test. Additional information on the pilot test is described below.

4.1 IB WORK PLAN - ERD PILOT TEST IMPLEMENTATION

On March 4, 2016, On-Site personnel arrived at the site to locate utilities in the location of the proposed injection wells. During utility clearance, sanitary sewer, water, stormwater, and an unknown utility (likely electrical) were noted and marked out by On-Site using a combination of ground penetrating radar and a magnetic pipe locator tool. The well locations were adjusted in the field based on the utility locations.

Between March 7, 2016 and March 9, 2016, On-Site installed three injection wells (IW-1, IW-2 and IW-3) using hollow stem augers. Prior to drilling, the first 5 feet were pre-cleared using hand tools. The borings were pre-drilled with 4.25 inch inner diameter (ID) augers before the 6.25 inch ID augers were advanced due to difficult drilling conditions previously observed at the Site. No split spoon samples were collected due to the availability of soil descriptions from nearby wells and soil was classified based on soil cuttings. The boring logs from the injection wells are provided in Appendix C.

On-Site developed the newly installed injection wells between March 10, 2016 and March 15, 2016. Each well was gauged prior to well development. A small diameter submersible pump was then lowered into the wells, activated and moved up and down to produce a surging effect. Development in this manner continued until visible fines were no longer observed in the well's purge water. Following the development of the wells, On-Site began mobilizing their equipment to the Site in preparation for the ERD injection event. Between March 21, 2016 and April 1, 2016, On-Site personnel began injecting the Anaerobic Biochem ERD substrate at a concentration of 20% by volume. An effective injection rate[3] of approximately 1 gallon per minute (gpm) was observed in IW-2 and IW-3 which are screened in the saprolite. After injecting approximately 80 gallons of ERD substrate in IW-1, an effective injection rate of less than 0.1 gpm was observed. Injection into IW-1 was then stopped to observe the infiltration rate. Between March 21, 2016 and April 1, 2016, fluid levels in the well had dropped to 15.8 feet below the top of PVC. This fluid level was still 3.5 feet higher than the observed static groundwater conditions, indicating the well still had not returned to steady state conditions. Based on these observations, there

[3] "Effective injection rate" is defined as the total quantity of fluid divided by the total time spent injecting.

appears to be an infiltration rate of approximately 0.001 gallons per minute in IW-1. Table 1 summarizes the daily and total injection volumes for each of the injection wells.

5.0 KEY PROJECT DOCUMENTS FOR REPORTING PERIOD

Key project documents generated during this reporting period are presented below.

AUTHOR	TITLE	DATE
GZA	Semi-Annual Project Progress Report (No. 42) July 2015 (Q3) through December 2015 (Q4)	2/9/2016

6.0 OPERATION AND MAINTENANCE ACTIVITIES

This section discusses operation and maintenance (O&M) activities performed during this reporting period.

6.1 GWTS O&M

The GWTS was not in operation during this reporting period. Various housekeeping/monitoring activities were conducted as needed. These activities include observation and photo-documentation of the GWTS surrounding area, removal of trash and debris from the GWTS area, and observation of the GWTS for abnormal conditions. Additionally, PRIDCO personnel regularly maintain the landscaped areas at the Site.

6.2 WASTE MANAGEMENT

Approximately 900 gallons of purge water and groundwater were generated during the March 2016 well development and groundwater sampling events. This water was treated on March 17 and 18, 2016 using liquid-phase carbon and was discharged to the GWTS's equalization tank for temporary storage.

On March 18, 2016, GZA collected a treated water sample from the equalization tank and analyzed it for VOCs. No VOCs were detected in the sample above the laboratory detection limits. No discharge occurred to the sanitary sewer during this reporting period.

6.3 PRASA DISCHARGE AUTHORIZATION MONITORING

As noted above, groundwater purged from monitoring wells and purge water from the development of the injection wells during the March 2016 Site activities were treated with liquid-phase carbon and stored in the equalization tank. A treated purge water sample was collected following water treatment. Quarterly reports will continue to be submitted to PRASA to maintain the permit (AUA-E-06-313-018)

should the groundwater treatment system need to be restarted or should additional groundwater generated from sampling events need to be processed. The most recent discharge to the sanitary sewer occurred on July 13, 2016 and will be documented in our next semi-annual report to EQB.

7.0 IB WORK PLAN IMPLEMENTATION

On October 26, 2010, implementation of the IB Work Plan began with the baseline groundwater gauging and sampling conducted October 26 through 29, 2010 and November 1, 2010. On November 1, 2010, the GWCTS was deactivated. This work was performed in accordance with the IB Work Plan and EQB's concurrence letter dated October 29, 2010. Groundwater monitoring wells were gauged for groundwater elevations and sampled for laboratory and/or field analyses to meet the principal objectives of:

(i) Evaluating whether dissolved cVOC concentrations at the Site continue to decline;
(ii) Assessing the relative proportion of trichloroethene (TCE) to its daughter compounds, and quantifying other biologically-sensitive parameters, to confirm biodegradation is occurring along expected degradation pathways; and,
(iii) Evaluating the potential for off-Site migration of impacted groundwater via evaluation of groundwater elevation/flow contours and perimeter well monitoring.

This section discusses the data collected during this reporting period and the associated preliminary findings.

Thirty-one monitoring wells were used to monitor groundwater during this reporting period on March 10, 11, 15 and 16, 2016 for cVOCs and IB screening parameters in accordance with the revised IB Work Plan and QAPP Revision 4, dated October 14, 2015. The results of the March 2016 groundwater sampling event are presented in Tables 2 and 3. Table 4 summarizes the wells sampled during the March 2016 groundwater sampling event as compared to those scheduled to be sampled per the IB Work Plan.

With the exception of well BR-308, which is a deep six-inch diameter bedrock well, the monitoring wells consist of two-inch-diameter screens and casings that have been installed in the fill/alluvium, saprolite, and bedrock units. Each monitoring well is covered by a road box or a stand pipe to protect it from vehicular traffic. A lockable well plug is installed at the top of each monitoring well casing within the road box or stand pipe.

The sentinel groundwater monitoring wells installed north of the Site in February 2012 (GZ-601L and GZ-601R) were included in the gauging event conducted in March 2016 and GZ-601R was sampled. Recently installed monitoring wells, GZ-701L and GZ-701R (north of GZ-507R), GZ-703R (southern portion of the Site), GZ-702U and GZ-702R (west of GZ-513R) were included in the March 2016 gauging and sampling event. Additionally, newly installed injection wells IW-1 (east of OW-101) and IW-2 and IW-3 (east of OW-307) were included in the March 2016 sampling event.

7.1 GROUNDWATER ELEVATION MONITORING

During this reporting period, groundwater elevations were gauged in accordance with the revised IB Work Plan. The elevation data was collected on March 7, 2016. These data, along with previous data dating back to January 2011 are presented in Table 5.

The groundwater elevations in the well network were measured using a water level indicator, except for six wells on the adjacent Puerto Rico Power Authority (PREPA) property (GZ-507R, GZ-508R, GZ-509R, GZ-510R, GZ-512R, and GZ-513R). Prior to abandoning the screens in these wells, as required under the PREPA access agreement, pressure transducers were installed to allow for continued water level monitoring. Transducer measurements could not be obtained from GZ-512R and GZ-513R because the wires and connectors have corroded and are not repairable. These transducers were originally installed in 2003 and recently have not been providing data consistent with the adjacent monitoring well gauging data. Due to the consistent groundwater flow directions observed post GWTS shutdown and questions regarding the reliability of the data being provided by the transducers, data from these transducers will no longer be collected.

Bedrock groundwater elevation contours for the most recent monitoring round (March 7, 2016) are presented on Figure 3[4]. These data show that, under non-pumping conditions, groundwater generally flows west to north-west toward the adjacent property owned by PREPA. When extraction wells W-1 and W-8 were active, there were localized areas of bedrock groundwater capture associated with these extraction wells, as depicted in the March 19, 2010 progress report for the period of July through December 2009.

7.2 MARCH 2016 GROUNDWATER SAMPLING

During the March 2016 sampling round, select wells were sampled for cVOCs and a subset of these wells were sampled for specific IB parameters[5]. The groundwater cVOC concentrations are used to monitor cVOC distribution and temporal trends, and the cVOC concentrations plus IB parameters are used to evaluate the evidence for IB at the Site. Analyses conducted for each well were in general accordance with Table 3 of the IB Work Plan. Refer to Table 4 for the list of wells that were sampled and Figure 2 for the locations of these wells.

Groundwater sampling was conducted employing low-flow techniques in accordance with Revision 4 of the QAPP (dated October 2015.) This sampling event took four days to complete (March 10, 11, 15 and 16, 2016.) The groundwater elevation at each well was measured using a water level indicator prior to well purging. The well was then purged at a rate that limited drawdown until the low-flow parameters

[4] Pressure transducer readings collected from monitoring wells GZ-507R, GZ-508R, GZ-509R and GZ-510R were considered in the development of bedrock groundwater elevation contours but were not used directly. The groundwater elevation readings collected from the newly installed wells in this area were preferentially used in the interpretation of groundwater flow patterns.

[5] The "VOCs & IB Parameters" include cVOCs and dissolved iron, methane, ethane, ethene, TOC, and the field parameters DO, ORP, and pH. The "VOCs" set includes cVOCs, and the field parameters DO, ORP, and pH.

(temperature, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), and specific conductance (SC)) stabilized. If a well was purged dry, it was allowed to recharge and was sampled upon recharge or the next day. Trip blanks and/or field blanks were collected each day of sampling. An equipment blank was not collected since dedicated tubing and/or pumps were used at all well locations. Four field duplicates and two matrix spikes/matrix spike duplicates were collected on March 15, 2016. Field blanks, trip blanks, duplicates, matrix spikes, and matrix spike duplicates were analyzed for cVOCs only. Temperature blanks were included in each cooler, but were only used to aid the laboratory in measuring the temperature of the cooler upon arrival.

Purge water generated from the groundwater sampling event was temporarily stored and secured in 55-gallon drums and was processed on Site through the liquid-phase carbon drum.

Groundwater samples were submitted to TestAmerica of Tampa, Florida, and were analyzed for cVOCs by EPA Method 8260B; dissolved iron by EPA Method 6010B; methane, ethane, and ethene by EPA Method RSK-175; and total organic carbon (TOC) by SM 5310B. The analytical results for cVOCs were certified by a Puerto Rico-certified chemist and were validated by GZA as required by QAPP Revision 4.

7.3 GROUNDWATER MONITORING RESULTS

Laboratory analytical results for groundwater samples collected in March 2016 are summarized in Table 2 (cVOCs) and Table 3 (IB Parameters). These tables also provide results from recent analyses for each well[6], including the March 2016 results. Concentrations for TCE in fill, TCE in saprolite/bedrock, *cis*-1,2-dichloroethene (1,2-DCE) in fill, 1,2-DCE in saprolite/bedrock, vinyl chloride (VC) in fill, and VC in saprolite/bedrock are shown in Figures 4A through 4F, respectively. The laboratory analytical reports for the March 2016 sampling events are provided in Appendix D.

The cVOC concentrations for March 2016 are, with a few exceptions which are discussed below, generally lower than or comparable to the previous groundwater sampling rounds. The data collected during this reporting period have been utilized to assess trends, especially post GWCTS deactivation, as outlined below.

cVOC (Molarity) Temporal Trend

Given that one mole of TCE yields one mole of 1,2-DCE via a reductive dechlorination pathway, comparisons using mass per volume measurements are biased by the mass difference between the two chemical compounds due to the replacement of the heavier chlorine atom with a lighter hydrogen atom (i.e., while one mole of TCE yields one mole of 1,2-DCE, one gram of TCE yields less than one gram of 1,2-DCE via dechlorination). To normalize the data for the purpose of evaluating the TCE to 1,2-DCE

[6] For wells that have been sampled on a semi-annual basis since baseline sampling, twelve rounds of sampling starting with the baseline sampling event are shown in the tables. For the remaining wells and where data is available, at least the four most recent sampling rounds, including the March 2016 sampling event, are shown.

transformation path, GZA converted the data for these compounds from mass per volume (concentrations) to their molar equivalencies.

Graphs showing molarities of TCE, 1,2-DCE, and VC over time for 26 monitoring wells are presented in Appendix E. The molarity trend analysis illustrates the 1,2-DCE dominance at the Site, which is consistent with the reductive dechlorination of TCE.

Because there has been no known release of 1,2-DCE on Site, the most plausible explanation for the 1,2-DCE dominance at the Site is that biodegradation is occurring via a reductive dechlorination pathway[7], converting TCE to 1,2-DCE and liberating a chloride anion. Significantly, while TCE is generally only biodegradable under anaerobic conditions, 1,2-DCE is biodegradable under both aerobic and anaerobic conditions. As a result, it is possible to have decreasing molarity of 1,2-DCE while TCE is concurrently degrading via reductive dechlorination and not reflect 1,2-DCE dominance.

In general, TCE concentrations have exhibited a downward temporal trend consistent with IB. Eight monitoring wells (GZ-503L, GZ-504R, GZ-505R, GZ-506R, OW-101, OW-307, WB-3L, and WB-4L)[8] have not exhibited a general downward temporal trend; however, these wells have concentrations of daughter products 1,2-DCE or 1,2-DCE and VC that suggest IB is ongoing. These wells are discussed below:

- The concentration of TCE at GZ-503L, while relatively low, increased from a low of non-detect in November 2001 to a high of 94 parts per billion (ppb) in April 2014. TCE concentrations increased between the time of the GWCTS shutdown on November 1, 2010 through April 2014; however, TCE levels have generally decreased since April 2014 and are less than the maximum TCE concentration of 130 ppb measured in 2003.
- Historically, the TCE concentrations at GZ-504R, WB-3L, and WB-4L were consistently non-detect or below the Puerto Rico Water Quality Standard (PRWQS) of 5.0 ppb. TCE concentrations at GZ-504R, WB-3L, and WB-4L have generally increased since GWCTS shutdown on November 1, 2010 to 30 ppb, 83 ppb, and 110 ppb, respectively, during the March 2016 sampling event. These three wells will continue to be sampled semi-annually.
- The TCE concentrations at GZ-505R were consistently non-detect or below the PRWQS of 5.0 ppb. TCE concentrations at GZ-505R increased following GWCTS shutdown on November 1, 2010 to a maximum concentration of 140 ppb in October 2014; however, TCE levels have generally stabilized since October 2014. The reported TCE concentration in March 2016 (81 ppb) is similar to the June 2015 value. This well will continue to be sampled semi-annually.
- The concentration of TCE at GZ-506R, while relatively low, increased from a low of 0.87 ppb in November 2005 to 220 ppb in April 2013. However, TCE concentrations at this location have decreased from the maximum value in the April 2013 sampling event to 38 ppb in March 2016.

[7] There is also a co-metabolic pathway; however, that pathway is typically not a significant natural attenuation mechanism.

[8] The concentration of TCE at WB-1U increased from 4.1 ppb in June 2013 to 120 ppb in October 2014; however, this concentration decreased substantially to 40 ppb in June 2015,3 ppb in October 2015 and less than 1 ppb in March 2016. This well will be sampled again in October 2016.

- The concentration of TCE at OW-101, which is screened in the fill, exhibited a general downward temporal trend from 2010 through 2014. OW-101 is currently trending upward, increasing from 1,600 ppb in June 2015 to 3,200 ppb in March 2016; however, 1,2-DCE concentrations are increasing proportionally (Appendix E), consistent with ongoing IB and is still below the historic maximum concentrations.
- The concentration of TCE at OW-307, which is screened in the saprolite, generally increased subsequent to October 2010, reaching a high of 1,250 ppb[9] in the October 2014 sampling event; however, since October 2014, the reported TCE concentrations have consistently declined (360 ppb in June 2015, 260 ppb in October 2015, and 200 ppb in March 2016).

The TCE concentrations in samples from the newly installed injection wells are considerably less than nearby wells OW-101 (3,200 ppb) and OW-307 (200 ppb). IW-1 was screened in fill and installed 37 feet upgradient of OW-101. IW-2 and IW-3 were screened in saprolite and were installed upgradient of OW-307 at distances of 33 and 32 feet, respectively. Wells IW-1, IW-2 and IW-3 had TCE concentrations of 670 ppb, 55 ppb and 31 ppb, respectively. The future semi-annual testing of these wells will serve to evaluate IB in the injection wells at these locations.

Table 6 shows the proposed wells to be sampled during the next sampling event scheduled for October 2016.

Biodegradation Indicator Trend

The March 2016 biodegradation indicator data provide a snapshot of the Site conditions after about five years of the IB Study.

The March 2016 data set for these indicator parameters was tabulated for each hydrogeological unit (fill/alluvium, saprolite, and bedrock - see Table 3). There is no clear trend for any of the parameters on a Site-wide basis. However, several wells do show increasing dissolved iron concentrations, increasing methane concentrations, measureable ethane or ethene, decreasing DO concentrations, decreasing ORP, or favorable pH since the shutdown of the GWCTS. Although TOC remains low in more than half of the wells sampled, IB can proceed by recycling microbial biomass when groundwater TOC is low. The geochemical trends suggest predominantly favorable conditions for intrinsic anaerobic cVOC biodegradation via a reductive dechlorination pathway in the vicinities of those wells.

Many of the bedrock and saprolite wells have favorably low DO concentrations. ORP levels generally increased from the October 2015 sampling event; however, fourteen of the wells presented in Table 3 had favorable ORP (below 50 mV) during the March 2016 sampling round, and the remaining wells sampled were below 100 mV. Injection well IW-1 had favorable a DO concentration and ORP value. Injection wells IW-2 and IW-3 had DO concentrations slightly above 0.5 mg/L and ORP values slightly

[9] Average concentration of the parent and duplicate sample.

above 50 mV. The ERD pilot program was directed at improving reductive dechlorination conditions at these locations; continued monitoring will provide additional data in this regard.

Summary

In general, the data collected to date, specifically the cVOC temporal trends discussed above, are consistent with the occurrence of IB via a reductive dechlorination pathway. Importantly, these data provide primary lines of evidence for cVOC biodegradation at the site. Additionally, a pilot program to evaluate enhanced biodegradation at certain key locations is in progress.

7.4 DEVIATIONS FROM QAPP REVISION 4

QAPP Revision 4 was followed with no exceptions noted.

7.5 DATA VALIDATION

In accordance with Revision 4 of the QAPP, select groundwater analytical data (cVOCs) were certified by a Puerto Rico-certified chemist and were validated by a GZA chemist. GZA performed the data validation in accordance with the EPA Region II Data Validation Standard Operating Procedures (SOPs) (located on the EPA Region II webpage at *http://www.epa.gov/region02/qa/documents.htm*). The criteria for accepting, rejecting, or qualifying data are included in these SOPs. The IB results do not require certification of validation based on the QAPP. Only the target cVOCs were reviewed as part of data validation. Overall, the quality assurance/quality control (QA/QC) results met the limits established by the QAPP with the exception of some minor deficiencies discussed in Appendix F. The minor deficiencies would not affect the usability of the data evaluated in this data validation.

7.6 CONCLUSIONS

As described in more detail in Sections 7.1 and 7.3 above, the groundwater appears to generally flow north-west across the Site. Semi-annual groundwater gauging and data evaluation will be conducted over the next reporting period.

Consistent with previous observations, the biodegradation indicators yield data which support the conclusion that cVOC biodegradation is occurring at the Site. The majority of wells sampled for cVOCs during this reporting period show lower or comparable TCE concentrations relative to previous results. Additionally, certain other indicator parameters are consistent with the occurrence of IB at the site via a reductive dechlorination pathway.

The pilot ERD injection program was conducted in accordance with the IB work plan, and the upcoming semi-annual sampling will be used to evaluate the efficacy of ERD injections at the site. The low permeability of the soils observed at IW-1 indicate that conventional gravity-driven injections may not be effective for the fill/alluvium unit in this portion of the Site. Since the low groundwater elevation is

believed to be a significant contributing factor to the low infiltration rate observed in IW-1, additional groundwater gauging of the injection wells was conducted on July 13, 2016 to confirm static groundwater conditions. Evaluation of the ERD pilot test's efficacy will continue over the next several years.

8.0 PLANNED ACTIVITIES FOR NEXT REPORTING PERIOD

The planned activities for the next reporting period (January through June 2016) are summarized below.

- Selected monitoring wells will be sampled for cVOCs, dissolved iron, methane, ethane, ethene, TOC, and the field parameters DO, ORP, and pH using low-flow methodology during the next semi-annual monitoring round in October 2016 as shown in Table 6;
- Groundwater elevations will be measured in October 2016;
- Well WB-2L's protective traffic cone was destroyed and was be replaced by On Site personnel on July 13, 2016;
- HP will continue to monitor the ERD pilot test as proposed in the IB Work Plan – Revision 1, submitted on October 14, 2015, through 2016;
- KB-1 bacterial mixture injection will occur in October 2016, in accordance with the IB Work Plan – Revision 1;
- Drums containing soil cuttings from the injection well installations will be disposed in the next reporting period. Disposal characterization sampling occurred on July 13, 2016; and,
- Treated groundwater and purge water was discharged to the sanitary sewer under PRASA discharge permit (AUA-E-06-313-018) on July 13, 2016.

TABLES

TABLE 1
SUMMARY OF ERD PILOT TEST INJECTION VOLUMES
HP Voluntary Remediation Project
San German, Puerto Rico

Well ID	3/21/2016	3/22/2016	3/23/2016	3/24/2016	3/28/2016	3/29/2016	3/30/2016	3/31/2016	4/1/2016	Total
IW-1	80	0	0	0	0	0	0	0	0	80
IW-2	60	665	600	600	500	300	430	360	150	3665
IW-3	30	470	700	200	80	480	200	40	75	2275
Total	170	1135	1300	800	580	780	630	400	225	6020

Notes:

1. All units are gallons.
2. After the initial application of 80 gallons of fluid, very low infiltration rates were observed in IW-1. No additional fluid was add to the well in order to assess the fluid infiltration rate. Between March 22, 2016 and April 1,2016, Approximately 10.5 gallons of fluid was injected (an effective injection rate of 0.001 gallons per minute).

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Chloroethane	Chloroform	1,1- Dichloroethane (DCA)	1,1-Dichloroethene	1,2-Dichloropropane	Chloromethane
Fill and Alluvium Wells											
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	70	100	NE	57	NE	7.0	5.0	NE
GZ-501U	10/27/2010	<1.0	<1.0	1.2	<1.0	<1.0	0.29 JB	<1.0	<1.0	<1.0	<1.0
	4/18/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2011	<1.0	<1.0	0.39 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/11/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/18/2012	<1.0	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	10/29/2014	<1.0	<1.0	0.88 J	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
GZ-503U	10/27/2010	<1.0	<1.0	8.3	<1.0	<1.0	0.27 JB	<1.0	<1.0	<1.0	<1.0
	4/18/2011	0.54 J	<1.0	22	0.42 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/24/2011	0.28 J	<1.0	9.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/12/2012	<1.0	<1.0	13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/17/2012	<1.0	<1.0 U	8.3	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	4/24/2013	0.26 J	<1.0	8.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/30/2013	0.23 J	<1.0	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/15/2014	0.60 J	<1.0	24	0.71 J	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/28/2014	1.5	<1.0	15	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
GZ-504U	10/26/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/24/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/12/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/15/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/23/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/28/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/2/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/20/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/11/2016	<1.0	<1.0	<1.0	<1.0	<5.0	29	<1.0	<1.0 UJ	<1.0	<4.0 UJ
GZ-506U	10/27/2010	0.26 J	<1.0	12	<1.0	<1.0	0.42 JB	<1.0	<1.0	<1.0	<1.0
	4/19/2011	0.77 J	<1.0	0.29 J	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0
	10/24/2011	3.3	<1.0	3.6	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0 UJ
	4/10/2012	2.5	<1.0	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/16/2012	2.9	<1.0	1.0 J	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0
	4/24/2013	2.7	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/30/2013	1.8	<1.0	0.48 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/16/2014	1.3	<1.0	0.55 J	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	10/29/2014	2.6	<1.0	0.94 J	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
GZ-511U	6/3/2003	**65**	**2.0**	37	1.0	<1.0	0.59 J	0.33 J	0.99 J	<1.0	<1.0
	10/28/2010	**95**	**0.87 J**	69	1.2	<1.0	<1.0	<1.0	0.31 J	<1.0	<1.0
	10/17/2012	**30**	**0.49 J**	20	0.29 J	<1.0 UJ	0.33 J	<1.0	<1.0	<1.0	<1.0 UJ
	10/29/2014	**50**	<1.0	25	0.69 J	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
GZ-515U	6/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/20/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/20/2011 DUP	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/25/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/11/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/17/2012	<1.0	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	4/24/2013	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/29/2013	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/15/2014	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/28/2014	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
GZ-519U	10/29/2010	**99**	<1.0	52	1.9	<1.0	6.2	<1.0	1.4	<1.0	<1.0
	4/20/2011	**57**	<1.0	23	0.83 J	<1.0	5.9	<1.0	1.1	<1.0	<1.0
	10/26/2011	**110 J**	**0.45 J**	65 J	2.3 J	<1.0	4.5 J	<1.0	2.0 J	<1.0	<1.0 UJ
	4/10/2012	**57**	<1.0	26	0.83 J	<1.0	3.5	<1.0	0.79 J	<1.0	<1.0
	10/15/2012	**88**	**0.38 J**	60 J	2.0 J	<1.0	4.6 J	0.42 J	1.6 J	<1.0	<1.0
	4/23/2013	**87**	<1.0	33	0.96 J	<1.0 UJ	4.0	0.23 J	1.5	<1.0	<1.0
	10/30/2013	**96**	**0.49 J**	53	1.7	<1.0	3.5	0.31 J	1.4	<1.0	<1.0 UJ
	4/16/2014	**110**	<1.0	44	1.2	<5.0	2.7	<1.0	1.1	<1.0	<1.0 UJ
	10/29/2014	**130**	<1.0	63	2.3	<5.0 UJ	3.8	<1.0	1.2	<1.0	<4.0 UJ
	6/2/2015	**130 J**	<1.0	**75**	2.9	<5.0 UJ	2.7	<1.0	1.9	<1.0	<4.0
	10/20/2015	**84**	<1.0	33	1.5	<5.0	1.6	<1.0	1.0 J	<1.0	<4.0
	3/15/2016	**140**	<1.0	68	2.8	<5.0	2.5	<1.0	1.9	<1.0	<4.0

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Chloroethane	Chloroform	1,1- Dichloroethane (DCA)	1,1-Dichloroethene	1,2-Dichloropropane	Chloromethane
Fill and Alluvium Wells											
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	70	100	NE	57	NE	7.0	5.0	NE
GZ-702U	4/17/2014	<1.0	<1.0	0.35 J	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/30/2014	2.9	<1.0	4.6	<1.0 UJ	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	6/3/2015	0.66 J	<1.0	0.85 J	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	10/19/2015	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	3/11/2016	3.2	<1.0	2.5	<1.0	<5.0	<1.0	<1.0	<1.0 UJ	<1.0	<4 UJ
IW-1	3/16/2016	**670**	**12**	**320**	98	<5.0	8.0	0.68 J	**17**	<1.0	<4
OW-101	6/25/2010	**1100**	<100	**760**	**210**	<100	<100	<100	<100	<100	<100
	4/21/2011	**990**	**2.6**	**830**	89	<1.0	<1.0	1.0	**20 J**	<1.0	<1.0 UJ
	10/27/2011	**830**	<20	**600**	**160**	<20	<20	<20	**15 J**	<20	<20
	4/10/2012	**700**	<20	**550**	88	<20	<20	<20	**8.2 J**	<20	<20
	10/18/2012	**36**	<20	**950**	**120**	<20	<20	<20	**9.2 J**	<20	<20
	4/23/2013	**1100**	<20 UJ	**920**	56	<20	<20	<20	**11 J**	<20	<20
	10/30/2013	**980 J**	**11 J**	**1,300 J**	**230**	<20	<20	<20	**17 J**	<20	<20 UJ
	4/16/2014	**520**	**13**	**730**	**120**	<25	<5.0	<5.0	**9.2**	<5.0	<5.0
	10/28/2014	**330**	**12**	**270**	51	<10.0	<2.0	<2.0	4.3	<2.0	<8.0
	6/2/2015	**1600 J**	**13**	**1300**	**200**	<10 UJ	<2.0	<2.0	**19**	<2.0	<8.0
	10/20/2015	**2000**	**7.5 J**	**1400**	**200**	<50	<10	<10	**14 J**	<10	<40
	3/15/2016	**3200**	<5.0	**1800**	32	<25	<5.0	<5.0	**11**	<5	<20
OW-105	10/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0	0.30 JB	<1.0	<1.0	<1.0	<1.0
	10/27/2010 DUP	0.34 J	<1.0	<1.0	<1.0	<1.0	0.29 JB	<1.0	<1.0	<1.0	0.47 J
	4/20/2011	0.60 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/24/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/10/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/17/2012	<1.0	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	10/29/2014	1.7	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0 UJ
OW-304U	10/26/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/19/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/2011	<1.0	<1.0	0.68 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/12/2012	0.35 J	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/17/2012	0.92 J	<1.0 UJ	1.4	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	4/23/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/30/2013	0.32 J	**0.32 J**	1.5	<1.0	0.79 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	4/17/2014	<1.0	<1.0	1.3	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/29/2014	0.81 J	<1.0	1.4	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
OW-305I	6/25/2010	**150**	**120**	**290**	10	<10	<10	<10	<10	<10	<10
	4/19/2011	**230**	**240**	**420**	17	<10	<10	<10	<10	<10	<10
	10/26/2011	**48**	**95**	**220**	14	<5.0 UJ	<5.0	<5.0	1.9 J	<5.0	<5.0 UJ
	4/11/2012	**100**	**65**	**280**	12	<10	<10	<10	<10	<10	<10
	10/17/2012	**27**	**52 J**	**200**	9.2	<5.0 UJ	<5.0	<5.0	<5.0	<5.0	<5.0 UJ
	4/23/2013	**220**	**100 J**	**530**	17	<1.0	<1.0	0.46 J	2.0	<1.0	<1.0
	10/29/2013	**54 J**	**91 J**	**280**	14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	10/29/2013 DUP	**39 J**	**63 J**	**190 J**	9.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	4/15/2014	**46**	**81**	**610**	17	<50	<10	<10	<10	<10	<10 UJ
	10/28/2014	**12**	**99**	**390**	14	<5.0	<1.0	<1.0	1.9	<1.0	<4.0
OW-305U	10/29/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/20/2011	<1.0	**2.0**	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
	10/26/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/12/2012	0.46 J	**2.0**	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/18/2012	4.1	<1.0 UJ	3.9	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	4/24/2013	0.17 J	<1.0	0.23 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/29/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/15/2014	**25**	**0.93 J**	51	0.87 J	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	10/29/2014	4.4	<1.0	28	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
OW-402U	10/29/2010	**22**	<1.0	17	0.37 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/20/2011	**12**	<1.0	9.5	0.40 J	<1.0	0.98 J	<1.0	<1.0	<1.0	<1.0
	10/25/2011	**13**	<1.0	5.2	<1.0	<1.0	<1.0	<1.0	<1.0	0.27 J	<1.0
	4/10/2012	**24**	<1.0	13	0.39 J	<1.0	0.23 J	<1.0	<1.0	<1.0	<1.0
	10/15/2012	**15**	<1.0	6.7 J	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0
	4/23/2013	**29**	<1.0	11	0.42 J	<1.0 UJ	0.43 J	<1.0	<1.0	<1.0	<1.0
	10/31/2013	**14**	<1.0	31	0.89 J	<1.0	0.16 J	<1.0	<1.0	<1.0	<1.0
	4/16/2014	**39**	<1.0	17	0.55 J	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ
	10/29/2014	**84**	<1.0 UJ	42	1.6 J	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0 UJ
	6/2/2015	**53 J**	<1.0	22	0.89 J	<5.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0
	10/20/2015	**59**	<1.0	21	1.1	<5.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0
	3/15/2016	**62**	<1.0	19	1.2	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	3/15/16 DUP	**61**	<1.0	19	0.98 J	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0

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SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Chloroethane	Chloroform	1,1- Dichloroethane (DCA)	1,1-Dichloroethene	1,2-Dichloropropane	Chloromethane
Fill and Alluvium Wells											
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	*70*	100	NE	57	NE	7.0	5.0	NE
OW-404U	9/9/2009	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/25/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/15/2012	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0
	10/15/2012 DUP	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0
	10/27/2014	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	6/3/2015	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	10/19/2015	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	3/15/2016	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
WB-1U[3,4]	6/25/2010	1.1	<1.0	0.76 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/18/2011	1.0	**0.30 J**	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/19/2011	0.92 J	<1.0	1.9	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0
	10/25/2011	2.9	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/12/2012	4.2	<1.0	4.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/16/2012	3.3	<1.0	2.6 J	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0
	6/4/2013	4.1	<2.0 UJ	7.0	<2.0	<2.0 UJ	<2.0	<2.0	<2.0	<2.0 UJ	<2.0 UJ
	10/29/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/15/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/27/2014	**120**	<1.0	**150**	2.9	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	6/3/2015	**36 J**	<1.0	32	<1.0	<5.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0
	6/3/2015 DUP	**40**	<1.0	32	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	10/19/2015	**7.6**	<1.0	3	<1.0	<5.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0
	3/15/2016	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
WB-2U	3/8/2004	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/26/2010	<1.0	<1.0	<1.0	<1.0	<1.0	0.27 JB	<1.0	<1.0	<1.0	<1.0
	10/15/2012	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0
	10/27/2014	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	6/3/2015	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	10/19/2015	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0
	3/15/2016	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<4.0

Notes:
1. All units are micrograms per liter (ug/L).
2. Wells were not sampled due to the wells being dry or having insufficient volumes of water.
3 . On April 18, 2011, only one vial could be collected for VOCs at WB-1U before it went dry. The lab inadvertantly ran the additional vials collected for dilutions on April 19, 2011 as an additional sample.
4. Inadvertantly, no sample was collected from WB-1U during the April 2013 sampling event. The sample was, therefore, collected on June 4, 2013.
5. **Bold** values indicate the reference concentration exceeds the applicable Puerto Rico Water Quality Standards (PRWQS) or USEPA Maximum Contaminant Level (MCL) if no PRWQS is available. MCLs are indicated in *italics* .
6. "--" = analyte not tested for; "J" = the concentration reported was at or below the reporting limit; "B" = the analyte in question was detected in the associated laboratory blank; "UJ" = the analyte was detected above the reported sample quantitation limit; however, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample; "E" = the reported value exceeds the calibration range; "<" = the compound was not detected above the method quantification limit shown; "NS" = no sample was taken because the well was dry or inaccessible; "NE" = no groundwater quality standard established; "DUP" = duplicate sample.

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Tetrachloroethene (PCE)	Bromoform	Chloroform	Dichlorodifluoromethane	1,1- Dichloroethane (DCA)	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	1,2-Dichlorobenzene	1,1,1-Trichloroethane (TCA)	1,1,2-Trichloroethane	Chloromethane	MTBE
Saprolite Wells																		
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	*70*	100	5.0	43	57	NE	NE	3.8	7.0	5.0	420	200	5.0	NE	NE
DEC-204O	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	4/20/2011	0.98 J	<1.0	<1.0	<1.0	3.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2011	0.31 J	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/12/2012	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/16/2012	0.48 J	<1.0	<1.0 UJ	<1.0 UJ	2.2	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/23/2013	0.44 J	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2013	0.46 J	<1.0	<1.0	<1.0	1.9	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.46 J	<1.0	<1.0	--
	4/16/2014	0.56 J	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	0.11 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/28/2014	0.68 J	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
GZ-501L	10/27/2010	**8.9**	**0.67 J**	24	0.36 J	<1.0	<1.0	0.28 JB	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2010 DUP	**8.0**	**0.70 J**	21	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.30 J	--
	4/18/2011	**9.4**	**0.86 J**	23	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/18/2011 DUP	**9.3**	**1.0**	23	0.25 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/24/2011	4.7	**0.51 J**	12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	0.22 J	<1.0	<1.0	<1.0 UJ	--
	4/11/2012	3.8	<1.0	7.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.21 J	<1.0	<1.0	<1.0	--
	10/17/2012	**6.7**	<1.0 UJ	5.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.20 J	<1.0	<1.0	<1.0 UJ	--
	4/25/2013	**12**	**0.26 J**	7.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.16 J	<1.0	<1.0	<1.0 UJ	--
	10/29/2013	**21**	**0.36 J**	11	<1.0	0.40 J	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.27 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**22**	<1.0	13	<1.0	0.68 J	<1.0	<1.0	<1.0	<1.0	<1.0	0.41 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2014	**30**	<1.0	17	<1.0	1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<4.0	--
	6/3/2015	**38**	<1.0	35	<1.0	2.3	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/20/2015	**35**	**0.80 J**	<1.0	1.9 J	<1.0	<1.0 UJ	<5.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	3/11/2016	**36**	<1.0	27	<1	1.8	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
GZ-502L	10/28/2010	**60**	**1.5**	**92**	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.79 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/21/2011	**46**	**1.3 J**	**70**	1.1 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.66 J	<1.0	<1.0	<1.0	<1.0	<2.0 UJ	--
	10/26/2011	**26**	**0.96 J**	48	0.68 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.43 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/11/2012	**14**	**0.57 J**	28	0.36 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/18/2012	**11**	**0.51 J**	19	0.31 J	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/24/2013	**9.2**	**0.55 J**	15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.16 J	<1.0	<1.0	<1.0	--
	10/29/2013	**10**	**0.61 J**	14	0.30 J	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.39 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**13**	**0.56 J**	22	0.27 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.34 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2014	**14**	**0.83 J**	17	0.55 J	0.57 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.51 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
GZ-503L	10/29/2010	**12**	**0.73 J**	15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/20/2011	**13**	**0.81 J**	13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2011	**22**	**0.93 J**	24	0.34 J	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	0.27 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/11/2012	**26**	**0.93 J**	30	0.41 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.31 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/17/2012	**26**	**1.5 J**	27	0.61 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.27 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/24/2013	**51**	**2.5**	45	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.60 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2013	**58**	**4.7**	55	2.2	0.35 J	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.44 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**94**	**7.0**	**90**	4.2	1.8	<1.0	<1.0	<1.0	<1.0	<1.0	0.81 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/28/2014	**75**	**7.7**	**81**	4.0	1.9	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	0.78 J	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	6/3/2015	**61**	**6.8**	**78**	3.7	1.9	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	0.75 J	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/20/2015	**68**	**11**	**73**	4.1	2.4 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.73 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/11/2016	**46**	**6.7**	45	2.8	2.3	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
GZ-504L	10/27/2010	0.92 J	<1.0	2.8	<1.0	<1.0	<1.0	0.32 JB	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.39 J	--
	10/15/2012	3.1	<1.0	20 J	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/24/2013	**7.1**	**0.26 J**	41	0.44 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.24 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2013	**5.3**	<1.0	32	0.30 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**5.4**	<1.0	28	0.34 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.17 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2014	**6.0**	<1.0	29	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	6/3/2015	1.7	<1.0	3.8	<1.0	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/19/2015	**5.4**	<1.0	25	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/11/2016	0.64 J	<1.0	2.4	<1.0	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
GZ-505L	6/28/2010	<1.0	**1.2**	16	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/18/2011	<1.0	**1.1**	9.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/24/2011	<1.0	**1.2**	6.5	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/11/2012	0.27 J	**0.50 J**	6.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/17/2012	<1.0	**0.47 J**	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/24/2013	0.98 J	**0.48 J**	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2013	0.76 J	**0.62 J**	4.5	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	<1.0	<1.0	3.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/28/2014	<1.0	<1.0	3.6	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
GZ-601L	4/12/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/16/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/25/2013	<1.0	<1.0 UJ	0.22 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	2.3
	10/30/2013	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/17/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.38 J
	10/30/2014	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0
GZ-701L	4/17/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	0.58 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2014	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0
	6/3/2015	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/19/2015	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/11/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
IW-2	3/16/2016	**55**	**3.2**	**130**	2.1	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
IW-3	3/16/2016	**31**	<1.0	42	<1.0	1.4 J	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Tetrachloroethene (PCE)	Bromoform	Chloroform	Dichlorodifluoromethane	1,1- Dichloroethane (DCA)	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	1,2-Dichlorobenzene	1,1,1-Trichloroethane (TCA)	1,1,2-Trichloroethane	Chloromethane	MTBE
Saprolite Wells																		
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	*70*	100	5.0	43	57	NE	NE	3.8	7.0	5.0	420	200	5.0	NE	NE
OW-1	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	4/19/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	10/24/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/11/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/16/2012	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/28/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
OW-101L	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	4/20/2011	**37**	**0.95 J**	39	0.66 J	0.47 J	<1.0	<1.0	<1.0	<1.0	<1.0	0.25 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/26/2011	**11**	**27**	**82**	1.3 J	1.3 J	<2.0	<2.0	<2.0 UJ	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--
	4/10/2012	4.0	**19**	**80**	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.38 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/18/2012	2.8	**11 J**	**92**	1.1	<1.0	<1.0	<1.0	<1.0 UJ	0.31 J	<1.0	0.60 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/23/2013	**5.8**	**3.8**	**140**	1.5	<1.0	<1.0	<1.0	<1.0	0.34 J	<1.0	0.76 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2013	<1.0	**2.4**	**81**	0.98 J	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.58 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/16/2014	3.2	**0.85 J**	**70**	0.91 J	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	0.60 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/28/2014	3.6	**0.54 J**	**76**	1.1	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	0.63 J	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	6/2/2015	3.7 J	<1.0	38	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	10/20/2015	2.7 J	<1.0	52	0.73 J	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/2016	3.2	<1.0	54	0.90 J	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/16 DUP	3.8	<1.0	55	0.84 J	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
OW-102	10/28/2010	<1.0	<1.0	7.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/17/2012	3.8	<1.0 UJ	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/23/2013	2.1	<1.0 UJ	1.3	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/31/2013	1.0	<1.0	0.43 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/16/2014	2.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/16/2014 DUP	1.7	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/29/2014	3.5	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
OW-301	6/24/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/21/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/26/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/11/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/16/2012	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/25/2013	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/30/2013	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/16/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/28/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
OW-304L	6/24/2010	**5700 J**	<200	**910 J**	<200	<200	<200	<200	<200 UJ	<200	<200	<200	<200	<200	<200	<200	<200	--
	4/21/2011	**4000**	**67**	**710**	2.7	**5.2**	<1.0	0.64 J	<1.0	6.3	**9.1**	**15 J**	<1.0	<1.0	<1.0	1.0	<1.0 UJ	--
	10/27/2011	**2000**	**33 J**	**530**	<50	<50	<50	<50	<50 UJ	<50	<50	<50	<50	<50	<50	<50	<50	--
	10/27/11 DUP	**1800**	**29 J**	**520**	<50	<50	<50	<50	<50 UJ	<50	<50	<50	<50	<50	<50	<50	<50	--
	4/12/2012	**1500**	**15 J**	**530**	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	--
	10/16/2012	**1200**	**12 J**	**410**	<20 UJ	<20	<20	<20	<20	<20	<20	5.1 J	<20	<20	<20	<20	<20	--
	4/25/2013	**1700**	<50 UJ	**530**	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50 UJ	--
	10/31/2013	**1200**	**15**	**550**	1.8	1.3	<1.0	0.17 J	<1.0	5.8	<1.0	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/17/2014	**1600**	**33**	**590**	5.3 J	3.5 J	<10	4.3 J	<10	12	<10	**10**	<10	<10	<10	<10	4 J	--
	4/17/2014 DUP	**1600**	**28**	**510**	3.5 J	3.4 J	<10	<10	<10	7.1 J	**4.6 J**	6.7 J	<10	<10	<10	<10	<10	--
	10/29/2014	**810**	**20**	**420**	<5.0	<5.0	<5.0	<5.0	<25.0	5	<5.0	5.6	<5.0	<5.0	<5.0 UJ	<5.0	<20.0	--
	6/2/2015	**850 J**	**21**	**350**	<5.0	<5.0 UJ	<5.0 UJ	<5.0	<25	5.3	<5.0	4.8 J	<5.0	<5.0	<5.0	<5.0	<20	--
	10/20/2015	**580**	**8.3**	**260**	**1.8**	0.83 J	<1.0	<1.0	<5.0	4.3	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/2016	**530 J**	**17**	**300**	1.6 J	<2.0 UJ	<2.0	<2.0	<10 UJ	4.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<8.0	--
OW-307	10/29/2010	**31**	<1.0	49	0.57 J	<1.0	<1.0	<1.0	0.66 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/21/2011	**100**	**22**	**170**	2.2	<1.0	<1.0	<1.0	0.63 J	<1.0	<1.0	0.27 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/25/2011	**380**	**4.4 J**	**260**	3.9 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
	4/10/2012	**640**	**6.1 J**	**550**	6.5 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
	4/10/2012 DUP	**640**	**7.6 J**	**560**	6.5 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
	10/18/2012	**710**	**4.4 J**	**540**	9.2 J	<10	<10	<10	<10 UJ	<10	<10	<10	<10	<10	<10	<10	<10 UJ	--
	10/18/2012 DUP	**730**	**3.5 J**	**540**	8.7 J	<10	<10	<10	<10 UJ	<10	<10	<10	<10	<10	<10	<10	<10 UJ	--
	4/23/2013	**300**	**9.3 J**	**280**	3.6	<1.0	<1.0	<1.0	<1.0 UJ	0.41 J	<1.0	0.64 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/23/2013 DUP	**360**	**9.7 J**	**340**	3	<1.0	<1.0	<1.0	<1.0 UJ	0.38 J	<1.0	0.73 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/31/2013	**480**	**12**	**540**	6.6 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
	4/16/2014	**930**	**1.9 J**	**500**	7.3	<5.0	<5.0	<5.0	<5.0 UJ	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 UJ	--
	10/29/2014	**1,400 J**	<5.0	**840 J**	10	<5.0	<5.0	<5.0	<25.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 UJ	<5.0	<20.0	--
	10/29/2014 DUP	**1,100 J**	<4.0	**640 J**	10	<4.0	<4.0	<4.0	<20.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<16.0 UJ	--
	6/2/2015	**360**	<5.0	**280**	3.8 J	<5.0 UJ	<5.0	<5.0	<25	<5 UJ	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	--
	10/19/2015	**260**	**5.9**	**200**	3.6	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	0.94 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	10/19/2015 DUP	**260**	**6**	**200**	3.6	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	0.75 J	<1.0	<1.0	<1.0	<1.0	1.0 J	--
	3/15/2016	**200**	<1.0	**140**	1.9	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
OW-401	6/3/2003	**10**	**0.58 J**	9.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.49 J	1.2	<1.0	<1.0	<1.0	<1.0	--
	10/28/2010	**29**	**1.3**	53	0.79 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.38 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/18/2012	4.1	<1.0 UJ	8.2	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/28/2014	2.3	<1.0	37	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--

TABLE 2
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Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Tetrachloroethene (PCE)	Bromoform	Chloroform	Dichlorodifluoromethane	1,1- Dichloroethane (DCA)	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	1,2-Dichlorobenzene	1,1,1-Trichloroethane (TCA)	1,1,2-Trichloroethane	Chloromethane	MTBE
Saprolite Wells																		
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	*70*	100	5.0	43	57	NE	NE	3.8	7.0	5.0	420	200	5.0	NE	NE
OW-402L	10/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	4/20/2011	**36**	<1.0	29	0.40 J	2.6	<1.0	<1.0	0.69 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/25/2011	**48**	<1.0	43	0.55 J	**6.7**	<1.0	<1.0	2.1	<1.0	<1.0	0.36 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/10/2012	**54**	**0.76 J**	**80**	0.94 J	**12**	<1.0	0.24 J	1.3	<1.0	<1.0	0.79 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/15/2012	**42**	**0.95 J**	**91 J**	1.3 J	**12**	<1.0	0.26 J	1.6	0.52 J	<1.0	0.88 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/23/2013	**36**	**0.71 J**	**80**	1.1	**11**	<1.0	0.25 J	1.2	0.50 J	<1.0	0.77 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2013	**33**	**0.81 J**	**77**	1.3	**10**	<1.0	0.28 J	1.2	<1.0	<1.0	0.83 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/16/2014	**34**	**0.38 J**	49	0.68 J	**12**	<1.0	0.34 J	0.77 J	0.49 J	<1.0	0.52 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/29/2014	**28**	**0.92 J**	50	0.98 J	**5.6**	<1.0	<1.0	<5.0	0.90 J	<1.0	0.61 J	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
OW-403L	10/29/2010	**1400**	<100	**89 J**	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	--
	4/21/2011	**520**	<10	64	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
	10/26/2011	**370 J**	<10	**150 J**	<10	2.6 J	<10 UJ	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10 UJ	--
	4/10/2012	**210**	<10	**96**	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
	10/16/2012	**140**	**1.7 J**	**74**	1.1 J	1.2 J	<2.0	<2.0	3.6	<2.0	<2.0	0.60 J	<2.0	<2.0	<2.0	<2.0	<2.0	--
	10/16/2012 DUP	**150**	**1.5 J**	**73**	1.2 J	1.4 J	<2.0	<2.0	1.7 J	0.57 J	<2.0	0.56 J	<2.0	<2.0	<2.0	<2.0	<2.0	--
	4/23/2013	**120**	**2.1**	**71**	0.87 J	1.1	<1.0	<1.0	4.4	0.76 J	<1.0	0.62 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2013	**85**	**3.6**	55	0.88 J	0.98 J	<1.0 UJ	<1.0	5.9	0.81 J	<1.0	0.64 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/30/2013 DUP	**89 J**	**3.6 J**	58 J	0.84 J	1.1	<1.0 UJ	<1.0	5.9	0.87 J	<1.0	0.73 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/16/2014	**66**	**2.0**	47	0.53 J	1.1	<1.0	<1.0	4.7 J	0.92 J	<1.0	0.47 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/29/2014	**57**	**2.5**	36	0.65 J	0.87 J	<1.0	<1.0	9.4	0.99 J	<1.0	0.64 J	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
	10/29/2014 DUP	**59**	**2.8**	37	0.51 J	0.91 J	<1.0	<1.0	9.4	1.1	<1.0	0.56 J	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
OW-404L	9/9/2009	2.9	<1.0	7.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	6/25/2010	0.92 J	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/15/2012	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2014	4.4	<1.0 UJ	10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0 UJ	--
OW-405	6/24/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	10/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/17/2012	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	0.29 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/29/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
OW-407	6/3/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.8 B	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/16/2012	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/28/2014	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
OW-408	6/24/2010	**10**	<1.0	68	17	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	10/16/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	4/25/2013	**27**	**41 J**	**230**	17	<1.0	<1.0	0.65 J	<1.0	<1.0	<1.0	0.88 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/30/2013	1.0	**3.1**	**75**	19	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/16/2014	1.7	**1.8**	40	11	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/28/2014	3.1	**3.0**	62	19	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	1.7	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
WB-1L	10/29/2010	**60**	<5.0	**110**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
	4/18/2011	**56**	<1.0	**110**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/25/2011	**65**	<5.0	**79**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
	4/12/2012	**80**	<5.0	**130**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
	10/15/2012	**69**	<5.0	**110 J**	1.5 J	<5.0	<5.0	<5.0 UJ	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
	4/24/2013	**73**	**0.57 J**	**120**	1.2	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2013	**81**	**0.60 J**	**120**	1.5	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.55 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**76**	<1.0	**110**	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.51 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2014	**130**	**0.83 J**	**150**	2.4	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	0.65 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	6/3/2015	**170**	<1.0	**190**	3.4	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/19/2015	**170**	**3.6**	**200**	2.7	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	0.78 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	10/19/2015 DUP	**190**	**3.1**	**190**	2.4	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/2016	**170**	**4.2**	**210**	3.4	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<4.0	--
WB-2L	6/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/18/2011	**24**	**0.84 J**	44	0.46 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.35 J	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	10/25/2011	**27**	**0.94 J**	50	0.62 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.32 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/11/2012	**29**	**0.89 J**	**81**	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.42 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/15/2012	0.97 J	<1.0	2.0 J	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/24/2013	**17**	**0.36 J**	38	0.41 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.25 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2013	**18**	**0.88 J**	**89**	1.2	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.52 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	3.0	<1.0	6.9	**s**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014 DUP	3.0	<1.0	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2014	**17**	**0.53 J**	62	0.99 J	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	0.51 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	6/3/2015	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/19/2015	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	**2.6**	**17**	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/2016	**10**	<1.0	42	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Tetrachloroethene (PCE)	Bromoform	Chloroform	Dichlorodifluoromethane	1,1- Dichloroethane (DCA)	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	1,2-Dichlorobenzene	1,1,1-Trichloroethane (TCA)	1,1,2-Trichloroethane	Chloromethane	MTBE
Saprolite Wells																		
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	*70*	100	5.0	43	57	NE	NE	3.8	7.0	5.0	420	200	5.0	NE	NE
WB-3L	10/27/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.37 JB	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/17/2012	**10**	**0.90 J**	13	0.70 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/24/2013	**21**	**0.98 J**	25	1.0	0.80 J	<1.0	<1.0	<1.0	<1.0	<1.0	0.29 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2013	**29**	**1.9**	40	1.4	1.3	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.37 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**59**	**2.9**	**75**	2.6	3.7	<1.0	<1.0	<1.0	<1.0	<1.0	0.48 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/28/2014	**63**	**3.1**	**74**	3.0	4.7	<1.0	<1.0	<5.0	<1.0	<1.0	0.63 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	6/3/2015	**74**	**3.4 J**	**90**	3.0	**5.3**	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	0.92 J	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	6/3/2015 DUP	**77**	**4.3 J**	**94**	3.0	**5.7**	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<4.0	--
	10/19/2015	**79**	**5.2**	**83**	3.3	4.6	<1.0	<1.0	<5.0	<1.0	<1.0	0.71 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/2016	**75**	**7.6**	**98**	3.6	4.7 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.77J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/16 DUP	**83**	**7.6**	**83**	3.4	4.7 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.75J	<1.0	<1.0	<1.0	<1.0	<4.0	--
WB-4L	6/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/17/2012	2.9	<1.0 UJ	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	--
	4/24/2013	**12**	**0.34 J**	6.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/29/2013	**27**	**0.41 J**	17	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.30 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	4/15/2014	**63**	**0.45 J**	38	0.42 J	0.33 J	<1.0	<1.0	<1.0	<1.0	<1.0	0.41 J	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/28/2014	**79**	<1.0	39	0.66 J	0.65 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.64 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	6/2/2015	**85 J**	<1.0	48	<1.0	0.93 J	<1.0 UJ	<1.0	<5.0	<1.0	<1.0	0.80 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	10/19/2015	**92**	<1.0	48	<1.0	1.2	<1.0	<1.0	<5.0	<1.0	<1.0	0.85 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	10/19/2015 DUP	**89**	<1.0	45	0.71 J	1.1	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/2016	**110**	<1.0	56	<1.0	1.4 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.87 J	<1.0	<1.0	<1.0	<1.0	<4.0	--
	3/15/16 DUP	**110**	<1.0	56	<1.0	1.4 J	<1.0	<1.0	<5.0	<1.0	<1.0	0.89 J	<1.0	<1.0	<1.0	<1.0	<4.0	--

Notes:

1. All units are micrograms per liter (ug/L).
2. Wells OW-1 (in April 2011) and OW-408 (in June 2009, October 2010, and October 2012) were not sampled due to insufficient volume of water.
3. **Bold** values indicate the reference concentration exceeds the applicable Puerto Rico Water Quality Standard (PRWQS) or USEPA Maximum Contaminant Level (MCL) if no PRWQS is available. MCLs are indicated by *italics* .
4. "--" = analyte not tested for; "J" = the concentration reported was at or below the reporting limit; "B" = the analyte in question was detected in the associated laboratory blank; "UJ" = the analyte was detected above the reported sample quantitation limit; however, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample; "<" = the compound was not detected above the method quantification limit shown; "NS" = no sample was taken because the well was dry or inaccessible; "NE" = no groundwater quality standard established; "DUP" = duplicate sample.

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Tetrachloroethene (PCE)	Chloroform	Dichlorodifluoromethane	1,1- Dichloroethane (DCA)	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Methylene chloride	1,1,2-Trichloroethane	MTBE
Bedrock Wells																
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	70	100	5.0	57	NE	NE	3.8	7.0	420	63	46	5.0	NE
BR-308	6/25/2010	**14**	**0.40 J**	26	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	0.29 J	<1.0	<1.0	<5.0	<1.0	--
	10/28/2010	4.9	<1.0	10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.25 J	<1.0	<1.0	<5.0	<1.0	--
	10/18/2012	4.5	<1.0 UJ	14	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/28/2014	**12**	<1.0	33	0.53 J	0.94 J	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	--
DEC-203R	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	4/19/2011	<1.0	<1.0	<1.0	<1.0	0.46 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2011	0.34 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/12/2012	0.32 J	<1.0	<1.0	<1.0	0.28 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/16/2012	0.48 J	<1.0	<1.0	<1.0	0.28 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/28/2014	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
GZ-504R	10/28/2010	1.9	<1.0	7.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/19/2011	3.7	**0.46 J**	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/25/2011	1.7	<1.0	5.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.54 J	0.23 J	<5.0 UJ	<1.0	--
	10/25/11 DUP	1.8	<1.0	5.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.55 J	0.27 J	<5.0 UJ	<1.0	--
	4/11/2012	1.5	<1.0	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.54 J	0.28 J	<5.0	<1.0	--
	10/15/2012	1.5	<1.0	3.3 J	<1.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	0.44 J	0.28 J	<5.0	<1.0	--
	4/24/2013	4.6	<1.0	4.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.39 J	<1.0	<5.0	<1.0	--
	10/30/2013	**6.5**	<1.0	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.21 J	<1.0	<5.0	<1.0	--
	4/15/2014	**14**	<1.0	7.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.17 J	<1.0	<1.0	<5.0	<1.0	--
	10/30/2014	**21**	<1.0	11	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	6/3/2015	**26**	<1.0	19	<1.0	0.87 J	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	**30**	<1.0	19	<1.0	1.2 J	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	3/11/2016	**30**	<1.0	15	<1.0	0.92 J	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	--
GZ-505R	6/28/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/17/2012	**61**	<1.0	43	0.55 J	0.32 J	<1.0	<1.0	<1.0	<1.0	0.48 J	<1.0	<1.0	<5.0	<1.0	--
	4/24/2013	**68**	<1.0	**73**	0.69 J	0.65 J	<1.0	<1.0	<1.0	<1.0	0.62 J	<1.0	<1.0	<5.0	<1.0	--
	10/30/2013	**59**	<1.0	**87**	0.80 J	0.58 J	<1.0	<1.0	<1.0	<1.0	0.75 J	<1.0	<1.0	<5.0	<1.0	--
	4/15/2014	**91**	<1.0	**84**	0.66 J	1.0	<1.0	<1.0 UJ	<1.0	<1.0	0.73 J	<1.0	<1.0	<5.0	<1.0	--
	10/28/2014	**140**	<1.0	**97**	1.0	2.1	<1.0	<5.0	<1.0	<1.0 UJ	1.5	<1.0	<1.0	<5.0	<1.0	--
	6/2/2015	**92**	<1.0	**100**	1.1	1.4 J	<1.0	<5.0	<1.0 UJ	<1.0	1.5	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	**130**	<1.0	**82**	0.87 J	2.7	<1.0	<5.0	<1.0	<1.0	1.4	<1.0	<1.0	<5.0	<1.0	--
	3/15/2016	**81**	<1.0	**100**	<1.0	1.2 J	<1.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<5.0	<1.0	--
GZ-506R	10/29/2010	1.5	<1.0	0.98 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/19/2011	1.0	<1.0	5.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
	10/27/2011	**26**	<1.0	5.1	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/12/2012	**88**	<1.0	16	<1.0	0.26 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/16/2012	**130**	<5.0	28 J	<5.0 UJ	<5.0	<5.0 UJ	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	--
	4/25/2013	**220**	**0.29 J**	56	0.91 J	1.3	0.42 J	<10.0	0.59 J	<1.0	0.36 J	<1.0	<1.0	<5.0	<1.0	--
	10/31/2013	**94**	0.24 J	56	0.88 J	0.68 J	0.31 J	0.96 J	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/17/2014	**120**	<1.0	52	0.83 J	0.76 J	0.28 J	0.72 J	0.65 J	0.20 J	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/29/2014	**64**	**1.2**	50	0.80 J	<1.0	<1.0	<5.0	0.71 J	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	6/2/2015	**54 J**	<1.0	45	0.68 J	<1.0 UJ	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/20/2015	**64**	<1.0	36	0.68 J	**0.60 J**	<1.0	<5.0	0.71 J	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	--
	3/15/2016	**38**	<1.0	18	<1.0	<1.0 UJ	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
GZ-601R	4/12/2012	**42**	**1.6**	38	0.29 J	<1.0	<1.0	<1.0	0.84 J	<1.0	0.51 J	<1.0	<1.0	<5.0	<1.0	33
	10/16/2012	**11**	**1.1**	40	0.36 J	<1.0	<1.0	<1.0 UJ	0.85 J	<1.0	0.90 J	<1.0	<1.0	<5.0	<1.0	160 J
	4/25/2013	1.7	**1.1 J**	43	0.28 J	<1.0	<1.0	<1.0	0.83 J	<1.0	0.71 J	<1.0	<1.0	<5.0	<1.0	130
	10/30/2013	0.69 J	**1.0**	44 J	0.44 J	<1.0	<1.0	<1.0	0.82 J	<1.0	0.84 J	<1.0	<1.0	<5.0	<1.0	--
	4/17/2014	2.4	**0.58 J**	32	0.27 J	<1.0	<1.0	<1.0	0.67 J	<1.0	0.60 J	<1.0	<1.0	<5.0	<1.0	110
	10/30/2014	**11**	**0.92 J**	27	<1.0 UJ	<1.0	<1.0	<5.0	0.73 J	<1.0	0.8 J	<1.0	<1.0	<5.0	<1.0	92
	6/3/2015	2.3	<1.0	23	<1.0	<1.0	<1.0	<5.0 UJ	0.72 J	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	2.7	<1.0	23	<1.0	<1.0 UJ	<1.0	<5.0	0.73 J	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	3/11/2016	0.86 J	**0.86 J**	24	<1.0	<1.0	<1.0	<5.0 UJ	0.66 J	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	--
GZ-701R	4/17/2014	<1.0	<1.0	<1.0	<1.0	<1.0	0.29 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/30/2014	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0
	6/3/2015	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	3/11/2016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	--
GZ-702R	10/30/2014	**74**	**1.1**	13	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	<1.0	0.72 J	<1.0	<1.0	<5.0	<1.0	7.5
	6/3/2015	**80**	<1.0	14	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	**75**	<1.0	12	<1.0	<1.0 UJ	<1.0	<5.0	<1.0	<1.0	0.72 J	<1.0	<1.0	<5.0	<1.0	--
	3/11/2016	**71**	1.3	24	<1.0	<1.0	<1.0	<5.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<5.0	<1.0	--
GZ-703R	4/17/2014	**230**	<2.0	25	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0	<10	<2.0	--
	10/29/2014	**250**	<1.0	29	<1.0	3.3	<1.0	<5.0	<1.0	<1.0	3.5	<1.0	<1.0	<5.0	<1.0	--
	6/2/2015	**230**	<1.0	30	<1.0	2.3 J	<1.0	<5.0	<1.0 UJ	<1.0	3.2	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	**190**	<1.0	34	<1.0	2.5	<1.0	<5.0	<1.0	<1.0	2.5	<1.0	<1.0	<5.0	<1.0	--
	3/15/2016	**170**	<1.0	45	<1.0	2.0 J	<1.0	<5.0	<1.0	<1.0	2.5	<1.0	<1.0	<5.0	<1.0	--
OW-304R	6/24/2010	**1300**	<100	**180**	<100	<100	<100	<100 UJ	<100	<100	<100	<100	<100	<500	<100	--
	6/24/2010 DUP	**1100**	**33 J**	**160**	<100	<100	<100	<100 UJ	<100	<100	<100	<100	<100	<500	<100	--
	4/21/2011	**1700**	**51**	**180**	1.4	2.1	0.57 J	1.3	<1.0	1.3	3.2 J	<1.0	<1.0	<1.0	0.72 J	--
	10/27/2011	**3200**	<100	**290**	<100	<100	<100	<100 UJ	<100	<100	<100	<100	<100	<500	<100	--
	4/12/2012	**2600**	<100	**300**	<100	<100	<100	<100	<100	<100	<100	<100	<100	<500	<100	--
	4/12/2012 DUP	**2600**	<100	**260**	<100	<100	<100	<100	<100	<100	<100	<100	<100	<500	<100	--
	10/16/2012	**1400**	**64 J**	**190 J**	<100 UJ	<100	<100 UJ	<100	<100	<100	<100	<100	<100	27 J	<100	--
	4/25/2013	**1200**	**41 J**	**130**	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250	<50	--
	4/25/2013 DUP	**1200**	**53 J**	**150**	<50	<50	<50	<50	<50	<50	<50	<50	<50	<250	<50	--
	10/31/2013	**1,200 J**	**40**	**340**	1.8	<1.0	0.20 J	1.1	<1.0	2.1	1.3	<1.0	<1.0	<5.0	<1.0	--
	4/17/2014	**1000**	**41**	**130**	2.6 J	3.4 J	<10	<10	3.0 J	**4.2 J**	<10	<10	<10	<50	<10	--
	10/29/2014	**450**	**110**	**390**	3.5 J	<4.0	<4.0	<20.0	<4.0	**4.6**	<4.0	<4.0	<4.0	<20.0	<4.0	--
	6/2/2015	**650 J**	**72**	**120**	<5.0	<5.0 UJ	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	--
	10/20/2015	**43**	**750**	**90**	4.3	<2.0 UJ	<2.0	<10	<2.0	1.3 J	<2.0 UJ	<2.0	<2.0	<10	<2.0	--
	3/15/2016	**1200 J**	**190**	**140**	1.8 J	2.5 J	<2.0	<10 UJ	<2.0	5.6	<2.0	<2.0	<2.0	<10 UJ	<2.0	--

TABLE 2
SUMMARY OF GROUNDWATER TESTING RESULTS - VOCS
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Trichloroethene (TCE)	Vinyl chloride	cis-1,2 Dichloroethene (DCE)	trans-1,2 Dichloroethylene	Tetrachloroethene (PCE)	Chloroform	Dichlorodifluoromethane	1,1- Dichloroethane (DCA)	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Methylene chloride	1,1,2-Trichloroethane	MTBE
Bedrock Wells																
Puerto Rico Water Quality Standards or *MCLs*		5.0	0.25	*70*	100	5.0	57	NE	NE	3.8	7.0	420	63	46	5.0	NE
OW-402R	10/29/2010	**20**	<5.0	27	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	--
	4/20/2011	**24**	<1.0	39	<1.0	3.8 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	--
	10/25/2011	**7.4**	<5.0	46	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25 UJ	<5.0	--
	4/10/2012	**25**	<1.0	55	0.64 J	**5.1**	<1.0	0.86 J	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/15/2012	**25**	<1.0	65 J	0.95 J	**6.6**	0.16 J	1.2	0.36 J	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/23/2013	**26**	<1.0	57	0.83 J	**7.1**	0.22 J	<1.0	0.35 J	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/30/2013	**23**	<1.0	54	0.82 J	**6.3**	0.21 J	0.85 J	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	4/16/2014	**21**	<1.0	37	0.93 J	**5.5**	0.20 J	0.46 J	0.35 J	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/29/2014	**24**	<1.0	40	1.1	**6.4**	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
OW-404R	6/25/2010	**96**	<5.0	**130**	1.5 J	<5.0	<5.0	<5.0 UJ	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	--
	4/19/2011	**63**	<1.0	**100**	1.3 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	--
	10/25/2011	**59**	<5.0	**76**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25 UJ	<5.0	--
	4/12/2012	**69**	<5.0	**110**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25.0	<5.0	--
	10/15/2012	**61**	**1.1**	**100 J**	1.2 J	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	0.42 J	<1.0	<1.0	<5.0	<1.0	--
	4/24/2013	**96**	**0.75 J**	**160**	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	0.70 J	<1.0	<1.0	<5.0	<1.0	--
	10/29/2013	**94**	**1.6**	**120**	1.8	<1.0	<1.0	<1.0	<1.0	<1.0	0.71 J	<1.0	<1.0	<5.0	<1.0	--
	4/15/2014	**97**	**1.3**	**140**	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	0.55 J	<1.0	<1.0	<5.0	<1.0	--
	10/27/2014	**79**	**1.8**	**130**	2.2	<1.0	<1.0	<5.0	<1.0	<1.0	0.91 J	<1.0	<1.0	<5.0	<1.0	--
	10/27/2014 DUP	**76**	**1.8**	**130**	2.5	<1.0	<1.0	<5.0	<1.0	<1.0	0.84 J	<1.0	<1.0	<5.0	<1.0	--
	6/3/2015	**100**	**1.4**	**150**	2.5	<1.0	<1.0	<5.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<5.0	<1.0	--
	10/19/2015	**130**	**1.7**	**120**	2.1	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--
	3/15/2016	**22**	<1.0	**12**	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	--

Notes:

1. All units are micrograms per liter (ug/L).
2. **Bold** values indicate the reference concentration exceeds the applicable Puerto Rico Water Quality Standard (PRWQS) or USEPA Maximum Contaminant Level (MCL) if no PRWQS is available. MCLs are indicated by *italics* .
3. "--" = analyte not tested for; "J" = the concentration reported was at or below the reporting limit; "UJ" = the analyte was detected above the reported sample quantitation limit; however, the

TABLE 3
SUMMARY OF GROUNDWATER TESTING RESULTS - BIODEGRADATION PARAMETERS
HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
Fill/Alluvium Wells												
GZ-501U[2]	10/27/2010	5.2	0.0095 JB	30	0.00034 J	<0.001	<0.001	19	0.98	3.66	-6.6	11.12
	4/18/2011	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/25/2011	4.1	--	--	--	--	--	--	--	2.72	-88.9	10.20
	4/11/2012	6.8	--	--	--	--	--	--	--	4.42	181	9.98
	10/18/2012	5.2	--	--	--	--	--	--	--	--	--	--
	10/29/2014	2.9	--	--	--	--	--	--	--	2.85	57.4	8.22
GZ-503U[2]	10/28/2010	7.3	0.015 J	19	0.00012 J	<0.001	<0.001	5.9	0.23	3.55	101.2	7.6
	4/18/2011	11 B	--	--	--	--	--	--	--	5.7	23	7.95
	10/24/2011	6.6	--	--	--	--	--	--	--	5.31	-48.2	7.73
	4/12/2012	6.9	--	--	--	--	--	--	--	--	--	--
	10/17/2012	6.4	--	--	--	--	--	--	--	7.57	117	7.83
	4/24/2013	7.8	--	--	--	--	--	--	--	--	--	--
	10/30/2013	5.6	--	--	--	--	--	--	--	--	--	--
	4/15/2014	5.5	--	--	--	--	--	--	--	6.11	48.3	7.66
	10/28/2014	6.1	--	--	--	--	--	--	--	2.45	55.7	7.46
GZ-504U	6/24/2010	NS	--	--	--	--	--	--	--	--	--	--
	10/26/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/2011	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/24/2011	NS	--	--	--	--	--	--	--	NS	NS	NS
	4/11/2012	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/15/2012	NS	--	--	--	--	--	--	--	NS	NS	NS
	4/23/2013	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/29/2013	NS	--	--	--	--	--	--	--	NS	NS	NS
	4/15/2014	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/30/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/2/2015	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/20/2015	NS	--	--	--	--	--	--	--	NS	NS	NS
	3/11/2016	--	--	--	--	--	--	--	--	0.7	51.55	7.01
GZ-506U[2]	10/27/2010	2.5	0.025 JB	57	<0.001	<0.001	<0.001	27	0.22	3	62.3	7.13
	4/19/2011	1.3	--	--	--	--	--	--	--	4.11	54	7.04
	10/24/2011	1.3	--	--	--	--	--	--	--	3.0	88.0	7.03
	4/10/2012	1.1	--	--	--	--	--	--	--	5.58	120	7.08
	10/16/2012	1.0	--	--	--	--	--	--	--	4.51	222	7.15
	4/24/2013	1.4	--	--	--	--	--	--	--	--	--	--
	10/30/2013	0.82 J	--	--	--	--	--	--	--	3.35	73	7.14
	4/16/2014	1.0	--	--	--	--	--	--	--	5.33	72.7	7.20
	10/29/2014	0.97 J	--	--	--	--	--	--	--	4.15	71.4	7.16
GZ-511U	10/28/2010	0.91 J	0.016 J	22	0.019	<0.001	<0.001	8.6	0.088	0.33	21.3	7.1
	10/17/2012	0.62 J	--	--	--	--	--	--	--	0.13	92	7.01
	10/29/2014	0.77 J	--	--	--	--	--	--	--	0.78	76.3	6.95
GZ-515U	6/24/2010	7.8	--	--	--	--	--	--	--	--	--	--
	10/26/2010	11	0.011 J	23	0.00032 J	<0.001	<0.001	7.2	4.7	2.48	123.3	6.83
	4/20/2011	10 B	0.016 J	24	0.00020 J	<0.001	0.00011 J	7.7	6.8	0.35	11.3	6.71
	10/25/2011	4.3	0.0065 J	13	0.0037	<0.001	<0.001	3.4	1.7	1.43	56.6	6.81
	4/11/2012	5.2	0.014 J	17	<0.001	<0.001	<0.001	5.2	0.87	2.54	263	6.74
	10/17/2012	4.0	<0.200	13	0.0040	<0.001	<0.001	3.9	0.52	1.38	105	6.79
	4/24/2013	7.4	<0.200	16	<0.001	<0.001	<0.001	5.6	0.39	1.88	46.9	6.75
	10/29/2013	3.3	<0.200	13	<0.001	<0.001	<0.001	3.5	0.94	1.16	81.2	6.70
	4/15/2014	5.8	<0.050	14	0.00030 J	<0.0011	<0.001	5.1	1.7	3.99	89.0	6.82
	10/28/2014	4.4	0.044 J	14	0.023	<0.0011	<0.001	3.6	0.67	0.23	17.5	6.66
GZ-519U	10/29/2010	1.4	0.021 J	100	0.0016	<0.001	<0.001	22	0.023	0.22	82.4	6.99
	4/20/2011	1.7 B	0.021 J	180	0.001	<0.001	<0.001	28	0.45	0.06	-21.5	7.06
	10/26/2011	0.77 J	0.016 J	130	0.0016	<0.001	<0.001	26	0.079	0.10	94.7	7.05
	4/10/2012	0.87 J	0.024 J	140	0.00031 J	<0.001	<0.001	21	0.25	0.11	204	6.97
	10/15/2012	0.81 J	<0.200	160	0.0021	<0.001	<0.001	28	0.042	0.89	206	6.99
	4/23/2013	0.79 J	<0.200	230	<0.001	<0.001	0.0071	32	0.23	0.14	-254	7.03
	10/30/2013	0.58 J	<0.200	150	0.00034 J	<0.001	<0.001	25	0.13	0.04	55.4	7.08
	4/16/2014	1.0	<0.050	140	0.0016	<0.0011	<0.001	22	0.22	0.10	51.2	7.03
	10/29/2014	0.68 J	<0.050	150	0.0012	<0.0011	<0.001	26	0.20	0.29	58.1	7.06
	6/2/2015	0.74 J	<0.050	--	0.0032	<0.0011	<0.001	--	--	0.07	62.6	6.98
	10/20/2015	1.5	<0.050	--	0.00069	<0.0011	<0.001	--	--	0.29	2.2	6.89
	3/15/2016	0.92 J	0.110 J	--	0.0016	<0.0011	<0.001	--	--	0.15	55.9	6.99
GZ-702U	4/17/2014	--	--	--	--	--	--	--	--	2.52	63.0	7.18
	10/30/2014	1.3	--	--	--	--	--	--	--	0.19	65.5	7.15
	6/3/2015	--	--	--	--	--	--	--	--	0.36	35.1	7.29
	10/19/2015	--	--	--	--	--	--	--	--	0.31	34.6	7.93
	3/11/2016	--	--	--	--	--	--	--	--	0.32	25.1	7.11
OW-101[2]	6/25/2010	2.4	--	--	--	--	--	--	--	--	--	--
	10/29/2010	2.3	0.14	22	0.073	<0.001	<0.001	21	<0.010	0.46	-23.1	6.83
	4/21/2011	1.9	0.020 J	26	0.0041	<0.001	<0.001	26	0.028	0.34	179.0	6.85
	10/27/2011	1.7	0.021 J	38	0.140	<0.001	<0.001	24	0.18	0.43	-128.1	6.81
	4/10/2012	1.5	0.030 J	21	0.011	<0.001	<0.001	18	0.047	0.83	158	6.80
	10/18/2012	2.2	0.51	17	0.150	<0.001	<0.001	17	<0.010	--	--	--
	4/23/2013	1.7	<0.200	28	0.036	<0.001	<0.001	29	0.57	3.87	-5.0	6.90
	10/30/2013	1.5	0.12 J	22	0.092	<0.001	<0.001	24	0.026	0.26	-34.5	6.84
	4/16/2014	1.4	0.062	19	0.16	<0.0011	<0.001	17	0.042 J	0.22	-20.7	6.83
	10/28/2014	3.5	0.055	21	0.045	<0.001	0.00081 J	15	0.71	0.77	-6.4	6.94
	6/2/2015	1.7	0.18	--	0.13	<0.0011	<0.001	--	--	0.32	-83.3	6.86
	10/20/2015	2.6	0.022	--	0.26	<0.0011	0.00063 J	--	--	0.08	-17.1	6.82
	3/15/2016	1.7	<0.2	--	0.00079	<0.0011	<0.001	--	--	1.56	21.4	7.46

TABLE 3
SUMMARY OF GROUNDWATER TESTING RESULTS - BIODEGRADATION PARAMETERS
HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
OW-105	10/27/2010	3.8	0.056 B	640	0.044	<0.001	<0.001	45	3.3	0.4	-94	6.75
	4/20/2011	1.4 B	--	--	--	--	--	--	--	3.42	-29	6.97
	10/24/2011	0.79 J	--	--	--	--	--	--	--	0.86	27.7	6.91
	4/10/2012	1.3	--	--	--	--	--	--	--	1.06	-106	6.84
	10/17/2012	0.61 J	--	--	--	--	--	--	--	0.69	137	6.94
	10/29/2014	0.90 J	--	--	--	--	--	--	--	0.16	-2.9	6.78
OW-304U[2]	10/26/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/2011	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/25/2011	3.1	--	--	--	--	--	--	--	0.37	45.1	6.90
	4/12/2012	2.6	--	--	--	--	--	--	--	--	--	--
	10/17/2012	1.7	--	--	--	--	--	--	--	--	--	--
	4/23/2013	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/30/2013	3.0	--	--	--	--	--	--	--	--	--	--
	4/16/2014	1.5	--	--	--	--	--	--	--	--	--	--
	10/29/2014	2.1	--	--	--	--	--	--	--	0.33	52.9	6.93
OW-305U[2]	10/29/2010	4.1	0.0096 J	7.4	0.01	<0.001	<0.001	5.0	0.22	5.00	56.8	7.57
	4/21/2011	4.0	<0.050	4.8	0.00024 J	<0.001	<0.001	1.6	0.75	--	--	--
	10/26/2011	3.3	<0.050	3.6	<0.001	<0.001	<0.001	1.7	0.24	0.94	-86.7	7.34
	4/12/2012	2.6	0.061	14	0.055	<0.001	<0.001	8.0	0.067	--	--	--
	10/18/2012	3.2	<0.200	17	<0.001	<0.001	<0.001	7.5	1.3	--	--	--
	4/24/2013	4.7	<0.200	6.9	<0.001	<0.001	<0.001	6.1	0.34	--	--	--
	10/29/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/15/2014	2.4	0.12	17	0.022	<0.0011	<0.001	9.8	<0.050	0.44	-62.7	7.06
	10/28/2014	5.6	<0.050	18	0.00062	<0.0011	<0.001	10	3.4	1.55	6.9	7.20
OW-305I	6/25/2010	1.8	--	--	--	--	--	--	--	--	--	--
	10/29/2010	2.1	1.0	14	0.56	<0.001	0.0011	9.6	<0.010	0.13	-99.9	6.96
	4/19/2011	0.99 J	--	--	--	--	--	--	--	0.02	-172.8	6.86
	10/26/2011	1.3	--	--	--	--	--	--	--	0.06	-105.4	6.90
	4/11/2012	1.2	--	--	--	--	--	--	--	0.02	116	7.02
	10/17/2012	1.1	--	--	--	--	--	--	--	0.03	-81	6.98
	4/23/2013	1.2	--	--	--	--	--	--	--	0.03	-363	7.02
	10/29/2013	1.0	--	--	--	--	--	--	--	0.03	-48.8	6.98
	4/15/2014	1.1	--	--	--	--	--	--	--	0.58	-59.3	7.01
	10/28/2014	1.2	--	--	--	--	--	--	--	0.17	-29.1	7.09
OW-402U[2]	10/29/2010	1.4	0.016 J	27	0.00021 J	<0.001	<0.001	6.1	0.59	1.66	76.7	6.83
	4/20/2011	3.0 B	0.042 J	26	<0.001	<0.001	<0.001	8.5	0.45	5.01	30.7	6.90
	10/25/2011	2.7	0.015	20	<0.001	<0.001	<0.001	6.2	0.68	1.12	117.1	6.86
	4/10/2012	1.2	0.028 J	21	<0.001	<0.001	<0.001	7.1	0.27	2.72	148	6.74
	10/15/2012	1.7	<0.200	14	<0.001	<0.001	<0.001	5.0	0.41	1.30	241	6.79
	4/23/2013	2.5	<0.200	17	<0.001	<0.001	0.0065	8.1	0.25	4.23	-39.1	6.86
	10/31/2013	1.4	--	54	<0.001	<0.001	<0.001	16	1.6	--	--	--
	4/16/2014	1.1	0.032 J	14	0.0020	<0.0011	<0.001	8.5	0.55	0.84	34.9	6.77
	10/29/2014	2.4	<0.050	48	0.00079	<0.0011	<0.001	22	3.5	2.30	100.6	6.84
	6/2/2015	--	--	--	--	--	--	--	--	1.04	36.1	6.69
	10/20/2015	--	--	--	--	--	--	--	--	5.01	9.1	6.80
	3/10/2016	--	--	--	--	--	--	--	--	0.91	55.6	6.74
OW-404U	6/25/2010	14	--	--	--	--	--	--	--	--	--	--
	10/26/2010	25	0.026 J	33	0.00014 J	<0.001	<0.001	12	5.1	4.46	44.1	7.14
	10/15/2012	14	--	--	--	--	--	--	--	1.85	179	7.33
	10/27/2014	15	--	--	--	--	--	--	--	0.27	28.2	7.14
	6/3/2015	--	--	--	--	--	--	--	--	2.19	73	7.26
	10/19/2015	--	--	--	--	--	--	--	--	0.34	-17.4	7.64
	3/10/2016	--	--	--	--	--	--	--	--	0.41	75.4	7.16
WB-1U[2]	6/25/2010	8.9	--	--	--	--	--	--	--	--	--	--
	10/28/2010	11	0.029 J	22	0.00048 J	<0.001	<0.001	10	21	1.69	124	7.11
	4/19/2011	7.7	--	--	--	--	--	--	--	--	--	--
	10/25/2011	11	--	--	--	--	--	--	--	0.43	-19.3	6.86
	4/12/2012	6.4	--	--	--	--	--	--	--	--	--	--
	10/16/2012	7.0	--	--	--	--	--	--	--	--	--	--
	6/4/2013	5.9	--	--	--	--	--	--	--	--	--	--
	10/29/2013	NS	--	--	--	--	--	--	--	NS	NS	NS
	4/15/2014	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/27/2014	2.5	--	--	--	--	--	--	--	--	--	--
	6/3/2015	--	--	--	--	--	--	--	--	0.65	6.43	6.88
	6/3/2015 DUP	--	--	--	--	--	--	--	--	0.65	6.43	6.88
	10/19/2015	--	--	--	--	--	--	--	--	6.61	81.42	7.01
	3/10/2016	--	--	--	--	--	--	--	--	1.73	32.9	7.06
WB-2U	10/26/2010	4.7	0.15	18	0.059	<0.001	<0.001	7.2	0.0097 J	0.31	-111.8	6.46
	10/15/2012	3.7	--	--	--	--	--	--	--	0.15	176	6.38
	10/27/2014	3.2	--	--	--	--	--	--	--	0.19	60.1	6.41
	6/3/2015	--	--	--	--	--	--	--	--	0.32	40.6	7.58
	10/19/2015	--	--	--	--	--	--	--	--	0.24	91.2	6.98
	3/10/2016	--	--	--	--	--	--	--	--	0.92	80.19	6.55
IW-1	3/16/2016	7.7	0.24	--	0.26	<0.0011	0.00098 J	--	--	0.44	34.36	6.68

Notes:

1. All units are milligrams per liter (mg/L), except Oxidation-Reduction Potential - millivolts (mV) and pH - standard unit (su).
2. If a sample went dry before stabilization, there are no field parameters associated with this sample.
3. "--" = analyte not tested; "J" = the concentration reported was at or below the reporting limit; "B" = the analyte in question was detected in the associated laboratory blank; "<" = the compound was not detected above the method quantification limit shown; "NS" = no sample was taken because the well was dry or inaccessible.

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HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
Saprolite Wells												
DEC-204O	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/20/2011	4.6 B	--	--	--	--	--	--	--	0.22	-2.8	6.55
	10/27/2011	1.6	--	--	--	--	--	--	--	0.04	36.9	6.64
	4/12/2012	1.6	--	--	--	--	--	--	--	0.07	100	6.60
	10/16/2012	1.6	--	--	--	--	--	--	--	0.03	168	6.61
	4/23/2013	1.1	--	--	--	--	--	--	--	0.17	141	6.63
	10/30/2013	1.3	--	--	--	--	--	--	--	0.09	82.6	6.62
	4/16/2014	1.3	--	--	--	--	--	--	--	0.08	68.6	6.55
	10/28/2014	1.5	--	--	--	--	--	--	--	0.13	83.3	6.54
GZ-501L	10/27/2010	2.1	0.025 JB	47	0.0082	<0.001	<0.001	32	0.053	0.13	106.1	6.87
	4/18/2011	1.9 B	--	--	--	--	--	--	--	0.12	-19.9	7.13
	10/24/2011	1.4	--	--	--	--	--	--	--	0.15	-28.2	6.86
	4/11/2012	1.3	--	--	--	--	--	--	--	0.13	268	6.88
	10/17/2012	1.1	--	--	--	--	--	--	--	0.13	260	6.91
	4/25/2013	0.87 J	--	--	--	--	--	--	--	0.14	74	6.96
	10/29/2013	0.83 J	--	--	--	--	--	--	--	0.11	73.1	6.96
	4/15/2014	0.95 J	--	--	--	--	--	--	--	0.19	72.9	6.92
	10/29/2014	0.87 J	--	--	--	--	--	--	--	0.16	86.4	6.89
	6/3/2015	--	--	--	--	--	--	--	--	0.30	143.2	6.76
	10/20/2015	--	--	--	--	--	--	--	--	0.11	17.7	6.89
	3/11/2016	--	--	--	--	--	--	--	--	0.16	56.73	6.83
GZ-502L	6/28/2010	1.3	--	--	--	--	--	--	--	--	--	--
	10/28/2010	1.3	0.016 J	46	0.039	0.00019 J	<0.001	44	0.0095 J	0.29	31.9	6.83
	4/21/2011	1.5	0.023 J	44	0.035	<0.001	<0.001	43	<0.010	0.01	49.5	6.85
	10/26/2011	1.3	0.017 J	48	0.020	<0.001	<0.001	34	<0.010	0.10	138.1	6.85
	4/11/2012	1.3	0.026 J	25	0.011	<0.001	<0.001	17	0.013	0.09	292	6.81
	10/18/2012	1.2	<0.200	55	0.0046	<0.001	<0.001	29	<0.010	0.06	154	6.86
	4/24/2013	0.96 J	<0.200	57	0.0079	<0.001	<0.001	31	0.017	0.09	-247	6.93
	10/29/2013	0.99 J	<0.200	58	0.0036	<0.001	<0.001	30	0.022	0.04	78.8	6.92
	4/15/2014	0.90 J	<0.050	57	0.0040	<0.0011	<0.001	31	<0.050	0.09	66.4	6.89
	10/29/2014	0.86 J	<0.050	57	0.0089	<0.0011	<0.001	32	<0.050	0.12	76.7	6.90
GZ-503L	10/29/2010	3.2	0.37	28	0.011	<0.001	<0.001	23	0.0099 J	0.19	-188.9	6.79
	4/21/2011	2.1 B	0.041 J	29	0.0074	<0.001	<0.001	23	0.018	0.08	30.5	6.81
	10/27/2011	1.1	0.021 J	26	0.016	<0.001	<0.001	21	<0.010	0.09	-150.8	6.86
	4/11/2012	1.2	0.031 J	35	0.020	<0.001	<0.001	28	0.0064 J	0.07	181	6.86
	10/17/2012	1.5	<0.200	34	0.016	0.00023 J	0.00013 J	26	0.18	0.13	153	6.60
	4/24/2013	1.2	<0.200	38	0.034	<0.001	<0.001	27	0.059	0.32	-188	6.86
	10/29/2013	1.1	<0.200	35	0.030	<0.001	<0.001	24	0.029	0.16	63.7	6.90
	4/15/2014	1.1	0.079	39	0.037	<0.0011	<0.001	27	0.069	0.17	7.8	6.85
	10/28/2014	1.2	<0.050	40	0.062	<0.0011	<0.001	28	0.031 J	0.17	53.8	6.92
	6/3/2015	1.2	0.025 J	--	0.00066	<0.0011	<0.001	--	--	0.26	87.3	6.66
	10/20/2015	1.6	<0.050	--	0.061	<0.0011	<0.001	--	--	0.05	48.1	6.82
	3/11/2016	2.9	0.080 J	--	0.013	0.00097 J	0.001	--	--	0.22	62.6	6.72
GZ-504L	10/27/2010	2.2	0.045 JB	46	0.022	<0.001	<0.001	12	0.31	0.19	17.9	6.75
	10/15/2012	1.9	--	--	--	--	--	--	--	0.45	65	6.78
	4/24/2013	1.0	--	--	--	--	--	--	--	2.92	25	6.86
	10/30/2013	0.95 J	--	--	--	--	--	--	--	0.07	46.8	6.82
	4/15/2014	1.0	--	--	--	--	--	--	--	0.15	13.6	6.81
	10/30/2014	1.0	--	--	--	--	--	--	--	0.18	48.6	6.83
	6/3/2015	1.1	0.068	--	0.023	<0.0011	<0.001	--	--	0.12	32.7	6.71
	10/19/2015	1.4	0.32	--	0.034	<0.0011	<0.001	--	--	0.14	-15.6	7.85
	3/11/2016	1.4	0.34	--	0.00031 J	<0.0011	<0.001	--	--	0.51	95.7	7.48
GZ-505L	6/28/2010	3.9	--	--	--	--	--	--	--	--	--	--
	10/26/2010	5.9	0.024 J	23	0.00078 J	<0.001	<0.001	7.7	0.011	0.34	456.1	6.44
	4/18/2011	4.6	--	--	--	--	--	--	--	0.79	56.7	6.71
	10/24/2011	4.0	--	--	--	--	--	--	--	0.22	-180.2	6.41
	4/11/2012	3.9	--	--	--	--	--	--	--	0.11	220	6.51
	10/17/2012	3.6	--	--	--	--	--	--	--	0.09	130	6.50
	4/24/2013	4.6	--	--	--	--	--	--	--	0.52	521	6.50
	10/29/2013	3.6	--	--	--	--	--	--	--	0.36	465	6.55
	4/15/2014	3.1	--	--	--	--	--	--	--	0.17	78.8	6.51
	10/28/2014	3.8	--	--	--	--	--	--	--	0.41	526.6	6.60
GZ-601L	4/12/2012	0.70 J	0.021 J	63	<0.001	<0.001	<0.001	6.9	0.14	0.44	278	7.10
	10/16/2012	0.55 J	<0.200	63	<0.001	<0.001	<0.001	7.0	0.83	0.16	65	7.12
	4/25/2013	<1.0	--	--	--	--	--	--	--	0.29	58	7.07
	10/30/2013	<1.0	--	--	--	--	--	--	--	0.23	44.8	7.16
	4/17/2014	<1.0	--	--	--	--	--	--	--	0.15	42.4	7.11
	10/30/2014	<1.0	--	--	--	--	--	--	--	0.16	71.2	7.14
GZ-701L	4/17/2014	--	--	--	--	--	--	--	--	4.00	88.7	6.32
	10/30/2014	0.72 J	--	--	--	--	--	--	--	2.68	116.6	6.41
	6/3/2015	--	--	--	--	--	--	--	--	2.74	85.4	6.35
	10/19/2015	--	--	--	--	--	--	--	--	3.17	191.6	6.84
	3/11/2016	--	--	--	--	--	--	--	--	2.50	62.3	6.26

TABLE 3
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San German, Puerto Rico

SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
OW-1	6/24/2010	NS	--	--	--	--	--	--	--	--	--	--
	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/2011	NS	--	--	--	--	--	--	--	NS	NS	NS
	10/24/2011	1.5	--	--	--	--	--	--	--	0.32	175.1	6.87
	4/11/2012	1.4	--	--	--	--	--	--	--	0.07	224	6.97
	10/16/2012	1.3	--	--	--	--	--	--	--	0.12	150	6.88
	10/28/2014	1.4	--	--	--	--	--	--	--	0.32	57.8	6.80
OW-101L	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/20/2011	2.2 B	0.52	52	0.00062 J	<0.001	<0.001	25	<0.010	0.3	-155.1	6.56
	10/26/2011	1.1	2.9	47	0.0089	<0.001	0.00025 J	22	<0.010	0.19	-128.9	6.70
	4/10/2012	1.1	2.6	50	0.0063	<0.001	0.00048 J	24	0.025	0.13	130	6.72
	10/18/2012	0.82 J	2.0	46	0.0024	<0.001	<0.001	31	0.019	0.12	-147	6.90
	4/23/2013	0.76 J	0.56	26	0.0082	<0.001	0.0022	15	0.053	0.17	-81	6.83
	10/30/2013	0.62 J	1.7	52	0.00050 J	<0.001	<0.001	35	<0.010	0.13	-45.7	6.84
	4/16/2014	0.68 J	1.2	54	0.0044	<0.0011	<0.001	30	<0.050	0.40	-66.8	6.81
	10/28/2014	0.66 J	1.1	58	0.0032	<0.0011	<0.001	36	<0.050	0.30	-34.9	6.83
	6/2/2015	--	--	--	--	--	--	--	--	0.14	-72.1	6.90
	10/20/2015	--	--	--	--	--	--	--	--	0.07	-74.9	6.83
	3/10/2016	--	--	--	--	--	--	--	--	0.30	-24.8	6.85
OW-102	10/28/2010	0.78 J	0.031 J	44	0.00020 J	<0.001	<0.001	29	0.74	1.49	21.9	6.52
	10/17/2012	0.56 J	--	--	--	--	--	--	--	2.42	203	6.55
	4/23/2013	0.39 J	--	--	--	--	--	--	--	1.95	73	6.67
	10/31/2013	0.49 J	--	--	--	--	--	--	--	1.15	95	6.61
	4/16/2014	0.59 J	--	--	--	--	--	--	--	2.39	79.2	6.57
	10/29/2014	<1.0	--	--	--	--	--	--	--	1.22	112.3	6.64
OW-301	6/24/2010	0.36 J	--	--	--	--	--	--	--	--	--	--
	10/26/2010	1.6	0.017 J	38	0.00024 J	<0.001	<0.001	4.1	1.1	4.92	77.6	7.00
	4/21/2011	0.48 J	0.014 J	39	0.00014 J	<0.001	<0.001	6.7	3.5	4.52	41.5	7.23
	10/25-26/2011	0.40 J	0.015	37	<0.001	<0.001	<0.001	5.0	3.0	4.39	-28.0	7.09
	4/11/2012	0.37 J	0.022 J	38	<0.001	<0.001	<0.001	5.0	5.3	3.40	293	6.99
	10/16/2012	0.47 J	<0.200	40	<0.001	<0.001	<0.001	7.3	5.4	4.15	147	7.07
	4/25/2013	<1.0	<0.200	38	<0.001	<0.001	<0.001	7.8	4.1	4.79	-127	7.14
	10/30/2013	0.76 J	<0.200	35	<0.001	<0.001	<0.001	5.7	1.2	3.48	91.6	6.99
	4/16/2014	0.85 J	<0.050	40	<0.00058	<0.0011	<0.001	4.3	0.92	4.80	68.9	6.97
	10/28/2014	0.81 J	<0.050	37	0.0017	<0.0011	<0.001	2.8	0.47	4.34	121.7	6.99
OW-304L	6/24/2010	1.9	--	--	--	--	--	--	--	--	--	--
	10/29/2010	3	0.2	80	0.0027	<0.001	<0.001	72	1.7	0.27	2.5	6.46
	4/21/2011	2.6	8.9	80	0.011	<0.001	<0.001	79	3.1	0.42	-14.1	6.42
	10/27/2011	2.4	7.9	63	0.012	<0.001	<0.001	72	3.2	0.17	39.7	6.51
	4/12/2012	2.6	0.042 J	81	0.0055	<0.001	<0.001	73	2.5	0.94	148	6.48
	10/16/2012	2.7	0.064 J	82	0.0066	<0.001	<0.001	68	2.2	0.14	-231	6.47
	4/25/2013	2.1	<0.200	81	0.018	<0.001	<0.001	65	1.5	0.25	-246	6.50
	10/31/2013	2.5	0.095 J	81	0.0045	<0.001	<0.001	65	1.5	0.16	73.6	6.54
	4/16/2014	2.2	<0.050	79	0.019	<0.0011	<0.001	58	1.6	0.31	73.6	6.49
	10/29/2014	2.4	<0.050	74	0.0058	<0.0011	<0.001	56	1.1	0.68	84.0	6.47
	6/2/2015	2.4	0.085	--	0.014	<0.0011	<0.001	--	--	0.37	81.4	6.43
	10/20/2015	3.2	5.2	--	0.025	<0.0011	<0.001	--	--	0.21	51.7	6.12
	3/15/2016	2.5	1.2	--	0.017	0.0066	0.0057	--	--	0.46	60.0	6.50
OW-307	10/29/2010	1.2	0.016 J	54	0.00012 J	<0.001	<0.001	43	0.1	1.49	69.9	6.98
	4/21/2011	1.3	0.071	29	0.180	<0.001	0.00019 J	15	<0.010	0.00	-50.2	6.75
	10/25/2011	1.0	0.078	14	0.063	<0.001	<0.001	6.4	<0.010	0.07	-212.3	6.71
	4/10/2012	0.87 J	0.050	16	0.51	0.0011	0.00017 J	8.7	<0.010	0.06	210	6.68
	10/18/2012	1.0	0.064 J	12	0.083	<0.001	<0.001	6.7	<0.010	0.06	-15	6.72
	4/23/2013	0.82 J	0.42	21	0.25	0.00096 J	<0.001	9.4	0.010	0.06	-271	6.72
	10/31/2013	0.86 J	0.26	15	0.37	<0.001	<0.001	6.7	<0.010	0.08	37	6.73
	4/16/2014	0.95 J	<0.050	15	0.22	0.0038	<0.001	7.7	0.017 J	0.04	41.3	6.79
	10/29/2014	1.0	<0.050	14	0.12	<0.0011	<0.001	9.6	0.072	0.65	68.6	6.79
	6/2/2015	1.4	0.032 J	--	0.26	0.0039	<0.001	--	--	0.03	51.2	6.74
	10/19/2015	1.5	<0.050	--	0.53	0.0029	<0.001	--	--	0.04	89.6	7.70
	10/19/2015 DUP	1.4	<0.050	--	0.57	0.0031	<0.001	--	--	0.04	89.6	7.70
	3/15/2016	1.3	<.200	--	0.099	<1.1	<1	--	--	0.73	51.0	6.76
OW-401	10/28/2010	1.8	0.020 J	42	0.018	<0.001	<0.001	32	0.048	0.18	131.9	6.82
	10/18/2012	2.1	--	--	--	--	--	--	--	0.88	536	6.51
	10/28/2014	2.0	--	--	--	--	--	--	--	0.25	55.6	6.71
OW-402L	10/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/20/2011	1.7 B	--	--	--	--	--	--	--	0.03	-61.6	6.79
	10/25/2011	0.52 J	--	--	--	--	--	--	--	0.11	-93.1	6.88
	4/10/2012	0.47 J	--	--	--	--	--	--	--	0.02	226	6.86
	10/15/2012	0.65 J	--	--	--	--	--	--	--	0.02	160	6.95
	4/23/2013	0.85 J	--	--	--	--	--	--	--	0.07	-215	6.96
	10/30/2013	0.42 J	--	--	--	--	--	--	--	0.03	60.2	6.98
	4/16/2014	0.71 J	--	--	--	--	--	--	--	0.06	52.2	6.96
	10/29/2014	0.52 J	--	--	--	--	--	--	--	0.12	70.2	7.02
OW-403L	10/29/2010	1.2	1.6	45	0.00038 J	<0.001	<0.001	21	1.5	0.13	-16.7	6.92
	4/21/2011	0.75 J	0.020 J	82	0.00097 J	<0.001	<0.001	44	0.082	0.07	-37.5	6.94
	10/26/2011	0.52 J	0.047 J	74	0.0029	<0.001	<0.001	46	<0.010	0.16	-130.7	6.95
	4/10/2012	0.36 J	0.017 J	73	0.0039	<0.001	<0.001	50	0.027	0.07	179	6.99
	10/16/2012	0.71 J	<0.200	72	0.013	<0.001	<0.001	49	0.047	0.07	104	7.14
	4/23/2013	0.42 J	<0.200	75	0.017	<0.001	<0.001	50	0.18	0.09	-284	7.03
	10/30/2013	0.46 J	<0.200	78	0.027	<0.001	<0.001	49	0.45	0.04	60.8	7.03
	4/16/2014	0.69 J	<0.050	85	0.022	<0.0011	<0.001	49	0.61	0.09	56.3	6.96
	10/29/2014	0.56 J	<0.050	86	0.014	<0.0011	<0.001	48	0.54	0.11	51.8	7.00

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SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
OW-404L	6/25/2010	8.2	--	--	--	--	--	--	--	--	--	--
	10/27/2010	16	0.037 JB	44	0.0025	<0.001	<0.001	37	3.5	1.63	35.3	6.45
	10/15/2012	10	--	--	--	--	--	--	--	3.28	158	7.01
	10/27/2014	5.3	--	--	--	--	--	--	--	0.18	62.6	6.50
OW-405	6/24/2010	NS	--	--	--	--	--	--	--	--	--	--
	10/28/2010	3.0	0.0093 J	90	0.00016 J	<0.001	<0.001	11	3.6	1.9	34.3	6.51
	10/17/2012	1.8	--	--	--	--	--	--	--	3.24	191	6.45
	10/29/2014	3.3	--	--	--	--	--	--	--	2.84	76.7	6.56
OW-407	10/27/2010	0.89 J	0.013 JB	17	0.00019 J	<0.001	<0.001	16	1.4	3.14	97.6	6.65
	10/16/2012	0.95 J	--	--	--	--	--	--	--	3.41	193	6.55
	10/28/2014	0.74 J	--	--	--	--	--	--	--	2.56	81.8	6.48
OW-408	6/24/2010	1.3	--	--	--	--	--	--	--	--	--	--
	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/16/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/25/2013	0.78 J	--	--	--	--	--	--	--	0.24	112	7.07
	10/30/2013	0.77 J	--	--	--	--	--	--	--	0.06	10.3	7.18
	4/16/2014	0.83 J	--	--	--	--	--	--	--	0.07	30.5	7.04
	10/28/2014	1.2	--	--	--	--	--	--	0.072	1.05	-42.5	7.05
WB-1L	6/25/2010	2	--	--	--	--	--	--	--	--	--	--
	10/29/2010	1.8	0.014 J	19	0.0014	<0.001	<0.001	5.8	0.066	0.23	58.4	6.76
	4/18/2011	3.3 B	--	--	--	--	--	--	--	0.58	-32.8	6.85
	10/25/2011	1.4	--	--	--	--	--	--	--	0.23	-225.3	6.82
	4/12/2012	1.6	--	--	--	--	--	--	--	0.13	260	6.77
	10/15/2012	1.6	--	--	--	--	--	--	--	1.04	242	6.77
	4/24/2013	1.5	--	--	--	--	--	--	--	0.40	49	6.90
	10/29/2013	1.6	--	--	--	--	--	--	--	0.10	7.8	6.84
	4/15/2014	1.4	--	--	--	--	--	--	--	0.88	58.1	6.83
	10/27/2014	1.9	--	--	--	--	--	--	--	0.33	60.6	6.79
	6/3/2015	--	--	--	--	--	--	--	--	0.33	76.6	6.73
	10/19/2015	--	--	--	--	--	--	--	--	0.17	93.2	7.84
	3/10/2016	--	--	--	--	--	--	--	--	6.59	72.1	7.80
WB-2L	6/28/2010	4.2	--	--	--	--	--	--	--	--	--	--
	10/26/2010	5.7	0.089	19	0.011	<0.001	<0.001	21	<0.010	0.12	-182.2	6.67
	4/18/2011	4.6	--	--	--	--	--	--	--	0.04	-175.3	6.82
	10/25/2011	2.6	--	--	--	--	--	--	--	0.12	-179.9	6.61
	4/11/2012	2.9	--	--	--	--	--	--	--	0.12	47	6.57
	10/15/2012	5.3	--	--	--	--	--	--	--	3.60	227	7.23
	4/24/2013	4.1	--	--	--	--	--	--	--	0.10	-285	6.67
	10/29/2013	5.0	--	--	--	--	--	--	--	0.03	-152.4	6.62
	4/15/2014	5.2	--	--	--	--	--	--	--	1.53	65.2	7.13
	10/27/2014	2.5	--	--	--	--	--	--	--	0.14	-157.7	6.69
	6/3/2015	--	--	--	--	--	--	--	--	0.31	13.7	7.22
	10/19/2015	--	--	--	--	--	--	--	--	0.09	-181.4	7.12
	3/10/2016	--	--	--	--	--	--	--	--	0.18	22.27	6.68
WB-3L	10/27/2010	1.0	0.021 JB	20	0.00020 J	<0.001	<0.001	12	0.15	0.24	-38.5	7.00
	10/17/2012	0.78 J	--	--	--	--	--	--	--	0.15	124	6.96
	4/24/2013	0.62 J	<0.200	29	0.0011	<0.001	<0.001	22	0.56	0.25	80	7.00
	10/29/2013	0.79 J	<0.200	31	0.00089 J	<0.001	<0.001	23	0.67	0.23	64.3	6.96
	4/15/2014	0.78 J	0.084	34	0.0020	<0.0011	<0.001	24	0.38	0.19	70.3	6.95
	10/28/2014	0.82 J	<0.050	35	0.0035	<0.0011	<0.001	24	0.51	0.17	52.8	6.92
	6/3/2015	0.83 J	0.026 J	--	0.0031	<0.0011	<0.001	--	--	0.10	64.3	6.86
	6/3/2015 DUP	0.83 J	<0.050	--	0.0042	<0.0011	<0.001	--	--	0.10	64.3	6.86
	10/19/2015	1.4	<0.050	--	0.0026	<0.0011	<0.001	--	--	0.30	8.8	6.91
	3/15/2016	0.90J	<0.200	--	0.0029	<0.0011	<0.001	--	--	0.74	83.5	6.94
WB-4L	6/28/2010	1.4	--	--	--	--	--	--	--	--	--	--
	10/26/2010	2.3	0.019 J	25	0.00024 J	<0.001	<0.001	14	0.35	0.28	60.8	6.94
	10/17/2012	1.1	--	--	--	--	--	--	--	0.07	105	6.96
	4/24/2013	0.94 J	<0.200	27	0.00099 J	<0.001	<0.001	18	0.92	0.10	-189	6.99
	10/29/2013	1.0	<0.200	29	<0.001	<0.001	<0.001	18	1.1	0.10	56.3	6.97
	4/15/2014	0.95 J	<0.050	31	0.0014	<0.0011	<0.001	19	<0.25	0.11	65.8	6.95
	10/28/2014	1.0	<0.050	31	0.0020	<0.0011	<0.001	18	0.92	0.09	69.5	6.96
	6/2/2015	1.1	<0.050	--	0.0024	<0.0011	<0.001	--	--	0.07	49.4	6.87
	10/19/2015	1.4	<0.050	--	0.0028	<0.0011	<0.001	--	--	0.30	87.2	6.56
	10/19/2015 DUP	1.3	<0.050	--	0.0026	<0.0011	<0.001	--	--	0.30	87.2	6.56
	3/15/2016	1.2	<0.200	--	0.0046	<0.0011	<0.001	--	--	3.14	40.4	6.87
IW-2	3/16/2016	1.8	<0.200	--	0.0430	0.0110	0.0011	--	--	1.24	79.7	6.78
IW-3	3/16/2016	1.1	<0.200	--	0.0390	<0.011	<0.001	--	--	0.60	83.6	6.69

Notes:

1. All units are milligrams per liter (mg/L), except Oxidation-Reduction Potential - millivolts (mV) and pH - standard unit (su).
2. "--" = analyte not tested; "J" = the concentration reported was at or below the reporting limit; "B" = the analyte in question was detected in the associated laboratory blank; "<" = the compound was not detected above the method quantification limit shown; "NS" = no sample was taken because the well was dry or inaccessible.

TABLE 3
SUMMARY OF GROUNDWATER TESTING RESULTS - BIODEGRADATION PARAMETERS
HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
Bedrock Wells												
BR-308	6/25/2010	1.0	--	--	--	--	--	--	--	--	--	--
	10/28/2010	1.3	0.32	38	0.011	<0.001	<0.001	23	0.0062 J	0.24	-155	7.32
	10/18/2012	0.96 J	--	--	--	--	--	--	--	0.08	-104	7.16
	10/28/2014	0.76 J	--	--	--	--	--	--	--	0.14	-45.3	7.18
DEC-203R	10/27/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/19/2011	0.48 J	--	--	--	--	--	--	--	0.27	-27.2	6.42
	10/27/2011	1.3	--	--	--	--	--	--	--	0.10	48.7	6.64
	4/12/2012	1.3	--	--	--	--	--	--	--	0.07	127	6.54
	10/16/2012	1.3	--	--	--	--	--	--	--	0.11	175	6.52
	10/28/2014	1.3	--	--	--	--	--	--	--	0.20	88.9	6.49
GZ-504R	6/25/2010	1.8	--	--	--	--	--	--	--	--	--	--
	10/28/2010	2.2	0.2	53	0.023	<0.001	<0.001	14	0.015	0.27	-89.5	6.98
	4/19/2011	1.1	0.140 B	55	0.017	<0.001	<0.001	20	<0.010	0.04	-112.9	6.96
	10/25/2011	1.5	0.020 J	16	0.00070 J	<0.001	<0.001	5.5	1.2	0.15	162.5	7.23
	4/11/2012	1.4	0.019 J	58	0.00045 J	<0.001	<0.001	21	0.19	0.07	155	7.00
	10/15/2012	1.2	<0.200	77	0.00035 J	<0.001	<0.001	24	0.20	0.18	218	6.95
	4/24/2013	1.6	<0.200	81	0.00063 J	<0.001	<0.001	24	0.10	0.17	77	7.05
	10/30/2013	0.81 J	<0.200	82	0.0010	<0.001	<0.001	23	<0.01	0.10	60.27	7.05
	4/15/2014	0.85 J	<0.050	80	0.00090	<0.0011	<0.001	24	0.065	0.17	53.0	6.98
	10/30/2014	0.81 J	<0.050	76	0.0013	<0.0011	<0.001	24	0.024 J	0.17	62.0	7.09
	6/3/2015	0.80 J	<0.050	--	0.0035	<0.0011	<0.001	--	--	0.09	70.5	6.91
	10/19/2015	1.0	<0.050	--	0.0019	<0.0011	<0.001	--	--	0.13	4.7	6.96
	3/11/2016	0.92 J	<0.200	--	0.0015	0.00064 J	0.00072 J	--	--	0.17	44.4	7.01
GZ-505R	6/28/2010	0.75 J	--	--	--	--	--	--	--	--	--	--
	10/26/2010	1.4	0.017 J	39	0.00026 J	<0.001	<0.001	12	2.8	0.12	71.8	6.93
	10/17/2012	0.86 J	--	--	--	--	--	--	--	0.10	-37	6.95
	4/24/2013	0.53 J	<0.200	41	0.18	<0.001	<0.001	19	0.93	0.18	12	7.01
	10/30/2013	0.76 J	<0.200	38	0.24	<0.001	<0.001	16	0.94	0.09	34.4	6.99
	4/15/2014	0.74 J	<0.050	35	0.033	<0.0011	<0.001	15	0.81	0.16	30.9	6.97
	10/28/2014	0.67 J	<0.050	34	0.027	<0.0011	<0.001	14	0.96	0.12	50.7	6.97
	6/2/2015	0.72 J	<0.050	--	0.078	<0.0011	<0.001	--	--	0.17	-13.6	6.98
	10/19/2015	0.79 J	<0.050	--	0.021	<0.0011	<0.001	--	--	0.09	-10.3	6.95
	3/15/2016	0.79 J	<0.200	--	0.33	0.00071 J	<0.001	--	--	0.1	67.88	6.98
GZ-506R	6/24/2010	1.0	--	--	--	--	--	--	--	--	--	--
	10/29/2010	0.86 J	0.018 J	64	0.00016 J	<0.001	<0.001	18	0.93	0.9	-13.1	6.81
	4/19/2011	<1.0	0.033 JB	56	0.00053 J	<0.001	<0.001	28	0.78	1.15	-127.3	6.70
	10/27/2011	0.57 J	0.770	47	<0.001	<0.001	<0.001	19	1.5	0.71	-20.4	6.92
	4/12/2012	0.51 J	0.099	40	<0.001	<0.001	<0.001	24	0.73	0.30	76	6.83
	10/16/2012	0.65 J	0.083 J	44	0.000093 J	<0.001	<0.001	28	0.51	0.74	-22	6.84
	4/25/2013	<1.0	<0.200	49	<0.001	<0.001	<0.001	36	0.23	0.29	-246	6.82
	10/31/2013	0.56 J	<0.200	53	<0.001	<0.001	<0.001	33	0.32	0.36	77.2	6.86
	4/17/2014	0.62 J	<0.050	50	0.00044 J	<0.0011	<0.001	34	0.26	0.42	47.4	6.77
	10/29/2014	0.51 J	6.5	78	0.00057 J	<0.0011	<0.001	40	0.29	6.03	43.4	7.95
	6/2/2015	0.56 J	<0.050	--	0.0007	<0.0011	<0.001	--	--	1.92	58.7	6.82
	10/20/2015	1.1	0.018 J	--	0.00039 J	<0.0011	<0.001	--	--	7.46	61.1	6.83
	3/15/2016	<1.0	0.110 J	--	0.00094	0.00093 J	0.00091 J	--	--	0.34	53.8	6.81
GZ-601R	4/12/2012	1.5	0.14	61	0.019	0.00023 J	0.00060 J	40	<0.010	0.26	-3	7.36
	10/16/2012	1.2	0.25	59	0.011	<0.001	0.00026 J	34	<0.010	0.14	-261	7.40
	4/25/2013	0.86 J	0.21	60	0.014	<0.001	0.0020	34	<0.010	0.10	-318	7.37
	10/30/2013	1.1	0.20	56	0.019	<0.001	0.0018	32	0.056	0.10	-152.9	7.39
	4/17/2014	0.65 J	0.12	55	0.013	<0.0011	0.0024	29	<0.050	0.14	-81.3	7.31
	10/30/2014	0.58 J	0.071	53	0.013	<0.0011	0.00078 J	28	<0.050	0.30	-24.5	7.39
	6/3/2015	--	--	--	--	--	--	--	--	0.40	-65.1	7.51
	10/19/2015	--	--	--	--	--	--	--	--	0.21	-67.3	7.49
	3/11/2016	--	--	--	--	--	--	--	--	0.32	-176.7	7.42
GZ-701R	4/17/2014	--	--	--	--	--	--	--	--	0.97	76.1	6.42
	10/30/2014	1.1	--	--	--	--	--	--	--	0.52	57.7	6.60
	6/3/2015	--	--	--	--	--	--	--	--	0.60	12.1	6.12
	10/19/2015	--	--	--	--	--	--	--	--	0.46	27.4	6.81
	3/11/2016	--	--	--	--	--	--	--	--	0.48	54.2	6.49
GZ-702R	10/30/2014	1.5	--	--	--	--	--	--	--	0.63	54.8	7.37
	6/3/2015	--	--	--	--	--	--	--	--	0.16	64.9	6.95
	10/19/2015	--	--	--	--	--	--	--	--	0.79	12.4	6.66
	3/11/2016	--	--	--	--	--	--	--	--	0.23	-94.9	7.42
GZ-703R	4/17/2014	--	--	--	--	--	--	--	--	0.13	30.1	7.02
	10/29/2014	<1.0	--	--	--	--	--	--	--	0.11	72.5	7.04
	6/2/2015	--	--	--	--	--	--	--	--	0.25	47.1	6.95
	10/19/2015	--	--	--	--	--	--	--	--	0.18	9.9	6.98
	3/10/2016	--	--	--	--	--	--	--	--	0.18	48.4	7.01

TABLE 3
SUMMARY OF GROUNDWATER TESTING RESULTS - BIODEGRADATION PARAMETERS
HP Voluntary Remediation Project
San German, Puerto Rico

SAMPLE LOCATION & DATE		Total Organic Carbon	Dissolved Iron	Sulfate	Methane	Ethane	Ethene	Chloride	Nitrate	Dissolved Oxygen	Oxidation-Reduction Potential (mV)	pH (su)
OW-304R	6/24/2010	<1.0	--	--	--	--	--	--	--	--	--	--
	10/29/2010	0.55 J	0.030 J	43	0.019	<0.001	0.00021 J	16	0.91	0.09	-179.8	7.49
	4/21/2011	0.52 J	--	--	--	--	--	--	--	0.12	-128.2	7.37
	10/27/2011	0.36 J	0.410	46	0.0077	<0.001	<0.001	20	1.2	0.07	-105.8	7.42
	4/12/2012	0.53 J	0.021 J	48	0.0076	<0.001	<0.001	21	1.1	0.11	-8	7.33
	10/16/2012	0.87 J	--	51	0.0085	<0.001	<0.001	23	1.2	0.76	-98	7.33
	4/25/2013	0.65 J	--	--	--	--	--	--	--	0.05	-344	7.30
	10/31/2013	0.74 J	--	--	--	--	--	--	--	0.06	20.7	7.31
	4/17/2014	0.77 J	--	--	--	--	--	--	--	0.10	14.8	7.20
	10/29/2014	0.72 J	--	--	--	--	--	--	--	0.59	68.8	7.27
	6/2/2015	--	--	--	--	--	--	--	--	0.17	27.8	7.16
	10/20/2015	--	--	--	--	--	--	--	--	0.32	41.7	7.12
	3/10/2016	--	--	--	--	--	--	--	--	0.07	20.9	7.24
OW-402R	10/29/2010	1.2	0.24	54	0.011	<0.001	<0.001	24	0.17	0.09	-60.9	6.95
	4/20/2011	2.9 B	0.100	100	0.00020 J	<0.001	<0.001	43	0.053	0.07	-93.9	6.91
	10/25/2011	1.1	0.084	76	0.0013	<0.001	0.00021 J	30	<0.010	0.12	-179.1	7.04
	4/10/2012	0.76 J	0.022 J	77	0.00081 J	<0.001	0.00024 J	34	0.086	0.08	88	6.94
	10/15/2012	0.77 J	<0.200	75	0.00016 J	<0.001	<0.001	35	0.14	0.09	161	7.07
	4/23/2013	0.45 J	<0.200	72	<0.002	<0.002	<0.002	36	0.38	0.05	70	7.02
	10/30/2013	0.48 J	<0.200	70	0.00094 J	<0.001	<0.001	36	0.57	0.09	59.9	7.12
	4/16/2014	0.69 J	<0.050	70	0.00044 J	<0.0011	<0.001	37	0.94	0.22	53.2	7.11
	10/29/2014	0.50 J	<0.050	69	0.00057 J	<0.0011	<0.001	38	0.98	0.14	58.3	7.15
OW-404R	6/25/2010	2	--	--	--	--	--	--	--	--	--	--
	10/28/2010	2.1	0.43	23	0.031	<0.001	<0.001	9.8	<0.010	0.12	-79.5	6.72
	4/19/2011	1.2	0.390 B	29	0.048	<0.001	<0.001	9.7	<0.010	0.03	-123.1	6.72
	10/25/2011	1.8	0.430	25	0.050	0.00019 J	<0.001	9.8	<0.010	0.11	-50.1	6.73
	4/12/2012	1.6	0.27	29	0.058	0.00022 J	<0.001	9.3	<0.010	0.17	114	6.67
	10/15/2012	1.7	0.34	26	0.034	<0.001	<0.001	9.7	0.086	0.27	11	6.70
	4/24/2013	1.3	0.21	27	0.046	<0.001	<0.001	10	0.014	0.11	-258	6.77
	10/29/2013	1.3	0.15 J	27	0.054	<0.001	<0.001	10	0.014	0.06	13.6	6.73
	4/15/2014	1.6	0.12	25	0.026	<0.0011	<0.001	9.2	<0.050	0.28	20.7	6.72
	10/27/2014	1.5	0.083	24	0.058	<0.0011	<0.001	10	0.027 J	0.19	41.3	6.68
	6/3/2015	--	--	--	--	--	--	--	--	0.17	8.8	6.71
	10/19/2015	--	--	--	--	--	--	--	--	0.13	-45.5	6.7
	3/10/2016	--	--	--	--	--	--	--	--	0.16	-9.8	6.72

Notes:

1. All units are milligrams per liter (mg/L), except Oxidation-Reduction Potential - millivolts (mV) and pH - standard unit (su).
2. "--" = analyte not tested; "J" = the concentration reported was at or below the reporting limit; "B" = the analyte in question was detected in the associated laboratory blank; "<" = the compound was not detected above the method quantification limit shown; "NS" = no sample was taken because the well was dry or inaccessible.

TABLE 4
INTRINSIC BIODEGRADATION SAMPLING PROGRAM - MARCH 2016
HP Voluntary Remediation Project
San German, Puerto Rico

WELL ID	SAMPLED (YES/NO)	PARAMETERS		RATIONALE FOR NOT SAMPLING
		VOCs[1]	VOCs and IB Parameters[2]	
Wells sampled March 2016 in accordance with the Intrinsic Biodegradation Work Plan				
Alluvium/Fill				
GZ-504U	YES	x		
GZ-519U	YES		x	
GZ-702U	YES	x		
IW-1	YES		x	
OW-101	YES		x	
OW-402U	YES		x	
OW-404U	YES	x		
WB-1U	YES	x		
WB-2U	YES	x		
Saprolite				
GZ-501L	YES	x		
GZ-503L	YES		x	
GZ-504L	YES	x		
GZ-701L	YES	x		
IW-2	YES		x	
IW-3	YES		x	
OW-101L	YES		x	
OW-304L	YES		x	
OW-307	YES		x	
WB-1L	YES	x		
WB-2L	YES	x		
WB-3L	YES		x	
WB-4L	YES		x	
Bedrock				
GZ-504R	YES		x	
GZ-505R	YES		x	
GZ-506R	YES		x	
GZ-601R	YES	x		
GZ-701R	YES	x		
GZ-702R	YES	x		
GZ-703R	YES	x		
OW-304R	YES	x		
OW-404R	YES		x	

Notes:
1. "VOCs" indicates analysis limited to only chlorinated volatile organic compounds (cVOCs) and the field parameters - dissolved oxygen (DO), pH, and oxidation-reduction potential (ORP)
2. "VOCs and IB Parameters" indicates analysis of cVOCs, dissolved iron, methane, ethene, ethane, total organic carbon (TOC), and the field parameters DO, pH, and ORP.

TABLE 5
SUMMARY OF GROUNDWATER ELEVATION DATA
HP Voluntary Remediation Project
San German, Puerto Rico

Date	GROUNDWATER ELEVATION DATA [1]																		
	BR-308	DEC-203R	DEC-204O	GZ-501U	GZ-501L	GZ-502L	GZ-503U	GZ-503L	GZ-504U	GZ-504L	GZ-504R	GZ-505L	GZ-505R	GZ-506U	GZ-506R	GZ-507R	GZ-508R	GZ-509R	GZ-510R
Ref as of 8/16/14	*138.72*	*156.35*	*156.44*	*135.77*	*136.03*	*135.96*	*136.09*	*136.08*	*130.62*	*130.70*	*130.83*	*132.82*	*132.77*	*146.66*	*146.48*	*133.19*	*128.14*	*128.73*	*130.51*
01/26/11	115.00	121.38	121.44	130.57	114.98	114.66	128.49	115.03	120.90	114.65	114.53	114.67	114.27	140.09	115.76	114.18	113.58	113.12	114.28
02/28/11	114.71	123.05	123.03	129.94	114.68	114.72	129.71	114.47	120.84	114.44	114.34	114.56	114.38	138.81	115.43	112.12	111.68	111.19	112.31
03/24/11	114.67	124.63	124.78	129.99	114.36	114.42	129.67	114.34	120.71	114.38	114.24	114.28	114.01	140.33	115.29	113.22	112.87	112.35	113.37
4/19,26/2011	114.42	123.45	123.48	131.24	114.47	114.55	130.18	114.35	119.69	114.38	114.19	114.04	113.93	139.66	115.76	112.58	111.84	111.32	112.48
07/21/11	115.32	129.66	129.68	130.32	115.22	115.16	128.61	114.96	120.91	114.61	114.51	114.62	114.93	139.86	116.48	112.68	111.50	110.99	112.30
10/27,28/2011	119.12	132.11	132.21	132.52	119.03	118.96	132.31	117.48	120.87	118.45	117.83	117.59	117.77	140.94	121.48	110.90	114.32	113.69	115.44
01/27/12	115.07	130.35	129.64	129.65	115.03	114.96	127.99	114.73	120.87	114.45	114.33	114.32	114.32	<139.04	115.98	112.09	111.20	110.72	111.87
04/09/12	115.92	128.86	128.74	133.94	115.63	115.23	129.51	115.23	120.88	115.00	114.66	115.14	114.86	140.15	116.39	112.82	111.85	111.31	112.64
07/24/12	115.07	127.63	127.44	131.24	114.93	114.81	129.29	114.68	<117.62	114.40	114.23	114.62	114.37	139.73	115.88	112.00	111.08	110.57	111.98
10/12/12	116.40	129.78	130.12	132.78	116.72	116.03	130.24	115.23	<117.62	114.90	115.53	115.82	115.80	139.99	118.25	113.68	111.88	111.28	112.98
01/16/13	115.32	130.35	130.19	129.57	116.23	114.96	127.09	114.88	<117.62	114.55	114.33	114.82	114.52	139.35	116.33	111.49	110.36	109.84	111.36
04/22/13	115.17	126.95	126.49	131.44	115.08	114.96	131.09	114.76	<117.62	114.53	114.48	114.22	114.47	139.83	116.08	111.84	110.97	110.49	112.00
07/18/13	116.02	127.60	128.09	134.37	115.96	115.71	130.32	115.63	<117.62	115.40	115.03	115.42	115.22	140.21	117.34	112.95	111.74	111.12	112.76
10/28/13	115.42	129.50	128.89	129.87	115.28	115.16	128.44	114.93	<117.62	114.60	114.48	114.82	114.62	139.56	116.36	112.43	111.45	110.79	112.40
01/22/14	114.82	128.72	128.15	130.06	114.78	114.77	127.96	114.64	<117.62	114.34	114.17	114.57	114.37	139.86	115.68	111.53	110.71	110.26	111.62
04/18/14	116.32	127.85	127.84	133.67	116.33	116.11	131.29	115.73	<117.62	115.55	115.28	115.32	115.27	140.31	118.28	---	111.63	110.99	112.52
07/26/14	114.44	125.35	125.99	129.57	114.33	114.26	128.64	114.22	<117.62	113.94	113.83	113.92	113.97	139.66	114.98	110.87	110.46	109.88	111.25
10/26/14	116.30	128.26	128.49	131.30	116.17	116.00	129.48	115.68	<117.62	115.44	115.16	115.26	115.28	137.71	117.44	112.50	111.21	110.60	112.31
06/01/15	116.16	128.21	128.11	131.95	116.06	115.88	130.90	115.51	<117.62	115.29	115.08	115.32	115.07	140.12	117.62	111.69	112.19	109.10	112.39
10/18/15	115.26	127.28	127.13	131.04	115.34	115.15	130.17	115.09	<117.62	114.87	114.65	114.96	114.90	139.97	116.59	111.36	111.70	108.96	111.98
03/07/16	115.61	125.63	125.53	131.87	115.48	115.39	126.33	101.75	121.27	115.00	114.87	115.28	115.01	140.56	116.67	111.85	111.21	110.46	112.04
	WELL CONSTRUCTION INFORMATION																		
Bottom of Boring [2]	164.00	58.00	40.00	8.00	33.50	35.00	8.40	35.00	13.00	30.00	51.00	27.00	59.00	10.00	81.00	60.00	39.50	54.00	79.00
Boring Bottom Elevation [1]	-25.28	98.35	116.44	127.77	102.53	100.96	127.69	101.08	117.62	100.70	79.83	105.82	73.77	136.66	65.48	73.19	88.64	74.73	51.51
Bottom Screen Elevation [1]	---	98.35	116.44	127.77	102.53	101.96	127.69	101.08	117.62	102.20	79.83	105.82	73.77	137.66	65.48	73.69	88.64	74.73	51.51
Bottom of Screen [2]	---	58.00	40.00	8.00	33.50	34.00	8.40	35.00	13.00	28.50	51.00	27.00	59.00	9.00	81.00	59.50	39.50	54.00	79.00
Date	DEPTH TO WATER MEASUREMENTS [2]																		
	BR-308	DEC-203R	DEC-204O	GZ-501U	GZ-501L	GZ-502L	GZ-503U	GZ-503L	GZ-504U	GZ-504L	GZ-504R	GZ-505L	GZ-505R	GZ-506U	GZ-506R	GZ-507R	GZ-508R	GZ-509R	GZ-510R
Ref as of 8/16/14	*138.72*	*156.35*	*156.44*	*135.77*	*136.03*	*135.96*	*136.09*	*136.08*	*130.62*	*130.70*	*130.83*	*132.82*	*132.77*	*146.66*	*146.48*	*133.19*	*128.14*	*128.73*	*130.51*
01/26/11	23.72	34.97	35.00	5.20	21.05	21.30	7.60	21.05	9.72	16.05	16.30	18.15	18.50	6.57	30.72	---	---	---	---
02/28/11	24.01	33.30	33.41	5.83	21.35	21.24	6.38	21.61	9.78	16.26	16.49	18.26	18.39	7.85	31.05	---	---	---	---
03/24/11	24.05	31.72	31.66	5.78	21.67	21.54	6.42	21.74	9.91	16.32	16.59	18.54	18.76	6.33	31.19	---	---	---	---
04/26/11	24.30	32.90	32.96	4.53	21.56	21.41	5.91	21.73	10.93	16.32	16.64	18.78	18.84	7.00	30.72	---	---	---	---
07/21/11	23.40	26.69	26.76	5.45	20.81	20.80	7.48	21.12	9.71	16.09	16.32	18.20	17.84	6.80	30.00	---	---	---	---
10/28/11	19.60	24.24	24.23	3.25	17.00	17.00	3.78	18.60	9.75	12.25	13.00	15.23	15.00	5.72	25.00	---	---	---	---
01/27/12	23.65	26.00	26.80	6.12	21.00	21.00	8.10	21.35	9.75	16.25	16.50	18.50	18.45	dry	30.50	---	---	---	---
04/09/12	22.80	27.49	27.70	1.83	20.40	20.73	6.58	20.85	9.74	15.70	16.17	17.68	17.91	6.51	30.09	---	---	---	---
07/24/12	23.65	28.72	29.00	4.53	21.10	21.15	6.80	21.40	dry	16.30	16.60	18.20	18.40	6.93	30.60	---	---	---	---
10/12/12	22.32	26.57	26.32	2.99	19.31	19.93	5.85	20.85	dry	15.80	15.30	17.00	16.97	6.67	28.23	---	---	---	---
01/16/13	23.40	26.00	26.25	6.20	19.80	21.00	9.00	21.20	dry	16.15	16.50	18.00	18.25	7.31	30.15	---	---	---	---
04/22/13	23.55	29.40	29.95	4.33	20.95	21.00	5.00	21.32	dry	16.17	16.35	18.60	18.30	6.83	30.40	---	---	---	---
07/18/13	22.70	28.75	28.35	1.40	20.07	20.25	5.77	20.45	dry	15.30	15.80	17.40	17.55	6.45	29.14	---	---	---	---
10/28/13	23.30	26.85	27.55	5.90	20.75	20.80	7.65	21.15	dry	16.10	16.35	18.00	18.15	7.10	30.12	---	---	---	---
01/22/14	23.90	27.63	28.29	5.71	21.25	21.19	8.13	21.44	dry	16.36	16.66	18.25	18.40	6.80	30.80	---	---	---	---
04/18/14	22.40	28.50	28.60	2.10	19.70	19.85	4.80	20.35	dry	15.15	15.55	17.50	17.50	6.35	28.20	---	---	---	---
07/26/14	24.28	31.00	30.45	6.20	21.70	21.70	7.45	21.86	dry	16.76	17.00	18.90	18.80	7.00	31.50	---	---	---	---
10/26/14	22.42	28.09	27.95	4.47	19.86	19.96	6.61	20.4	dry	15.26	15.67	17.56	17.49	8.95	29.04	---	---	---	---
06/01/15	22.56	28.14	28.33	3.82	19.97	20.08	5.19	20.57	dry	15.41	15.75	17.50	17.70	6.54	28.86	---	---	---	---
10/18/15	23.46	29.07	29.31	4.73	20.69	20.81	5.92	20.99	dry	15.83	16.18	17.86	17.87	6.69	29.89	---	---	---	---
03/07/16	23.11	30.72	30.91	3.90	20.55	20.57	9.76	34.33	9.35	15.70	15.96	17.54	17.76	6.10	29.81	---	---	---	---

Notes:
1. Groundwater elevations are in units of feet. Elevations are given relative to Lajas 2 (PID AB9841, NGVD 29) in Sabana Grande, Puerto Rico with elevation 200.27 feet.
2. Depth to water, bottom of boring, and bottom of screen units are feet below ground surface. Measurements are made from the top of the PVC riser of each well.
3. All groundwater level measurements were made by JFA, On Site, and/or GZA personnel. Measurements were made using a water level indicator except for measurements at wells GZ-507R, GZ-508R, GZ-509R, GZ510R, GZ-512R, and GZ-513R which were made using pressure transducers.
4. Water levels have been measured at times and under conditions stated in the text. Fluctuations in the levels of groundwater may occur due to variations in temperature, rainfall, and other factors.
5. Reference elevations were surveyed by Jose O Quinones Moret, BS, PLS of Puerto Rico.
6. Other Notes:
   "dry" indicates water was not observed within the monitoring well.
   "<" signifies less than - elevation shown is for the bottom of the well.
   "---" signifies information is not available.
   "NR" signifies that a water level measurement was not obtained.
7. The end of December 2010 groundwater level round was conducted on January 5, 2011 due to the holidays.
8. For October 12, 2012 data, the original GZ-601R elevation appeared to be the result of a field error. Because the groundwater elevations in GZ-601L and GZ-601R on October 16, 2012 were equal, the October 12, 2012 GZ-601R elevation is assumed to be equal to the GZ-601L elevation on that date.
9. Reference elevations were re-surveyed on August 16, 2014. All previous groundwater elevations were adjusted to reflect the new survey information.
10. Injection wells IW-1 through IW-3 were installed after the 3/7/16 comprehensive gauging round. These wells are scheduled to be gauged during the October 2016 sampling event.

TABLE 5
SUMMARY OF GROUNDWATER ELEVATION DATA
HP Voluntary Remediation Project
San German, Puerto Rico

Date	GROUNDWATER ELEVATION DATA																				
	GZ-511U	GZ-512R	GZ-513R	GZ-515U	GZ-519U	GZ-601L	GZ-601R	GZ-701L	GZ-701R	GZ-702U	GZ-702R	GZ-703R	OW-1	OW-101	OW-101L	OW-102	OW-105	OW-301	OW-304U	OW-304L	OW-304R
Ref as of 8/16/14	*141.84*	*128.63*	*129.15*	*127.85*	*147.02*	*127.69*	*127.88*	*153.33*	*151.93*	*125.58*	*125.66*	*139.97*	*159.27*	*145.24*	*145.78*	*146.11*	*145.88*	*149.29*	*150.03*	*149.91*	*150.00*
01/26/11	138.09	113.69	111.37	123.40	140.24	---	---	---	---	---	---	---	126.99	133.24	118.78	116.11	142.98	128.34	140.11	116.34	116.33
02/28/11	136.63	111.54	109.40	120.76	143.83	---	---	---	---	---	---	---	127.27	134.03	120.05	115.60	142.96	128.14	140.09	116.01	116.19
03/24/11	136.08	113.35	110.51	116.60	143.81	---	---	---	---	---	---	---	128.45	133.92	119.96	115.66	141.93	128.79	140.02	115.94	115.85
4/19,26/2011	135.86	111.89	109.48	124.40	144.10	---	---	---	---	---	---	---	126.82	134.37	120.80	116.75	141.10	127.19	140.08	115.00	115.97
07/21/11	138.24	111.56	109.14	124.41	139.89	---	---	---	---	---	---	---	132.60	134.74	125.48	117.01	143.68	129.66	140.33	118.11	117.85
10/27,28/2011	138.17	116.91	111.81	124.35	141.72	---	---	---	---	---	---	---	135.98	135.82	129.36	122.88	142.74	131.31	142.60	121.30	121.30
01/27/12	135.64	111.24	108.77	121.76	139.54	---	---	---	---	---	---	---	131.76	134.11	125.28	116.33	143.43	128.49	141.06	117.36	117.35
04/09/12	135.22	111.88	109.21	122.46	140.02	114.04	113.68	---	---	---	---	---	131.10	134.16	125.44	117.24	142.95	128.69	141.18	117.97	118.32
07/24/12	137.74	109.53	108.43	120.90	140.07	113.59	113.63	---	---	---	---	---	129.47	135.09	124.13	117.21	143.13	128.29	141.23	116.81	116.70
10/12/12	138.84	114.47	109.30	123.54	140.39	114.34	114.35	---	---	---	---	---	132.08	135.34	127.21	119.31	143.25	130.58	141.53	119.58	119.49
01/16/13	135.34	112.82	107.79	117.85	139.47	113.69	113.58	---	---	---	---	---	132.52	134.34	126.18	116.76	142.93	129.29	141.13	117.91	118.15
04/22/13	138.79	113.10	108.41	123.75	142.72	113.64	113.63	---	---	---	---	---	128.92	135.29	123.18	116.55	143.05	127.74	<141.48	117.31	114.60
07/18/13	139.04	114.18	109.02	124.95	140.92	114.34	114.51	---	---	---	---	---	129.83	135.24	126.03	118.41	143.58	---	141.43	117.98	117.86
10/28/13	136.79	113.85	108.66	120.65	139.87	113.74	113.99	---	---	---	---	---	130.62	134.72	125.28	116.71	142.88	129.17	141.03	117.44	117.50
01/22/14	135.64	113.02	108.07	123.63	139.42	113.59	113.75	---	---	---	---	---	130.27	134.14	124.45	116.01	143.13	128.05	141.21	116.72	116.67
04/18/14	139.24	114.03	108.76	124.15	141.02	114.37	114.28	117.53	117.43	114.46	---	122.27	130.37	134.96	125.38	119.61	143.53	129.94	141.85	118.61	118.50
07/26/14	137.08	106.60	107.60	122.64	139.80	113.23	113.18	115.72	114.81	118.38	---	119.17	127.29	131.74	122.30	115.31	142.88	126.67	140.33	115.31	115.27
10/26/14	138.71	111.14	108.30	121.00	140.70	114.04	114.19	118.43	118.29	114.28	113.99	122.73	129.54	136.58	126.03	117.99	143.48	130.45	141.53	118.80	118.71
06/01/15	138.83	111.45	107.08	122.88	140.82	114.16	113.96	116.97	116.75	114.20	113.98	121.86	129.71	135.63	125.66	118.65	143.23	129.51	140.44	117.78	117.64
10/18/15	137.75	111.26	106.87	122.74	140.70	114.02	113.89	116.90	116.68	114.11	114.17	120.11	129.00	134.93	123.24	116.22	140.80	127.08	<140.03	115.94	115.94
03/07/16	138.80	---	---	126.69	140.83	114.28	114.13	116.83	115.27	114.34	114.12	120.06	126.82	134.91	122.38	117.78	143.86	127.89	140.01	116.21	116.11
	WELL CONSTRUCTION INFORMATION																				
Bottom of Boring [2]	10.00	65.00	54.00	14.00	12.50	34.00	80.00	54.00	75.00	28.00	55.00	52.00	44.58	20.00	34.00	40.00	19.00	43.00	10.00	54.80	89.00
Boring Bottom Elevation [1]	131.84	63.63	75.15	113.85	134.52	93.69	47.88	99.33	76.93	97.58	70.66	87.97	114.69	125.24	111.78	106.11	126.88	106.29	140.03	95.11	61.00
Bottom Screen Elevation [1]	131.84	64.63	79.65	115.85	134.52	93.69	50.88	99.33	76.93	101.58	70.66	87.97	122.87	129.24	111.78	108.41	132.88	108.29	140.03	96.01	61.00
Bottom of Screen [2]	10.00	64.00	49.50	12.00	12.50	34.00	77.00	54.00	75.00	24.00	55.00	52.00	36.40	16.00	34.00	37.70	13.00	41.00	10.00	53.90	89.00
Date	DEPTH TO WATER MEASUREMENTS																				
	GZ-511U	GZ-512R	GZ-513R	GZ-515U	GZ-519U	GZ-601L	GZ-601R	GZ-701L	GZ-701R	GZ-702U	GZ-702R	GZ-703R	OW-1	OW-101	OW-101L	OW-102	OW-105	OW-301	OW-304U	OW-304L	OW-304R
Ref as of 8/16/14	*141.84*	*128.63*	*129.15*	*127.85*	*147.02*	*127.69*	*127.88*	*153.33*	*151.93*	*125.58*	*125.66*	*139.97*	*159.27*	*145.24*	*145.78*	*146.11*	*145.88*	*149.29*	*150.03*	*149.91*	*150.00*
01/26/11	3.75	---	---	4.45	6.78	---	---	---	---	---	---	---	32.28	12.00	27.00	30.00	2.90	20.95	9.92	33.57	33.67
02/28/11	5.21	---	---	7.09	3.19	---	---	---	---	---	---	---	32.00	11.21	25.73	30.51	2.92	21.15	9.94	33.90	33.81
03/24/11	5.76	---	---	11.25	3.21	---	---	---	---	---	---	---	30.82	11.32	25.82	30.45	3.95	20.50	10.01	33.97	34.15
04/26/11	5.98	---	---	3.45	2.92	---	---	---	---	---	---	---	32.45	10.87	24.98	29.36	4.78	22.10	9.95	34.91	34.03
07/21/11	3.60	---	---	3.44	7.13	---	---	---	---	---	---	---	26.67	10.50	20.30	29.10	2.20	19.63	9.70	31.80	32.15
10/28/11	3.67	---	---	3.50	5.30	---	---	---	---	---	---	---	23.29	9.42	16.42	23.23	3.14	17.98	7.43	28.61	28.70
01/27/12	6.20	---	---	6.09	7.48	---	---	---	---	---	---	---	27.51	11.13	20.50	29.78	2.45	20.80	8.97	32.55	32.65
04/09/12	6.62	---	---	5.39	7.00	13.65	14.20	---	---	---	---	---	28.17	11.08	20.34	28.87	2.93	20.60	8.85	31.94	31.68
07/24/12	4.10	---	---	6.95	6.95	14.10	14.25	---	---	---	---	---	29.80	10.15	21.65	28.90	2.75	21.00	8.80	33.10	33.30
10/12/12	3.00	---	---	4.31	6.63	13.35	13.53	---	---	---	---	---	27.19	9.90	18.57	26.80	2.63	18.71	8.50	30.33	30.51
01/16/13	6.50	---	---	10.00	7.55	14.00	14.30	---	---	---	---	---	26.75	10.90	19.60	29.35	2.95	20.00	8.90	32.00	31.85
04/22/13	3.05	---	---	4.10	4.30	14.05	14.25	---	---	---	---	---	30.35	9.95	22.60	29.56	2.83	21.55	dry	32.60	35.40
07/18/13	2.80	---	---	2.90	6.10	13.35	13.37	---	---	---	---	---	29.44	10.00	19.75	27.70	2.30	---	8.60	31.93	32.14
10/28/13	5.05	---	---	7.20	7.15	13.95	13.89	---	---	---	---	---	28.65	10.52	20.50	29.40	3.00	20.12	9.00	32.47	32.50
01/22/14	6.20	---	---	4.22	7.60	14.10	14.13	---	---	---	---	---	29.00	11.10	21.33	30.10	2.75	21.24	8.82	33.19	33.33
04/18/14	2.60	---	---	3.70	6.00	13.32	13.60	35.80	34.50	11.12	---	17.70	28.90	10.28	20.40	26.50	2.35	19.35	8.18	31.30	31.50
07/26/14	4.76	---	---	5.21	7.22	14.46	14.70	37.61	37.12	7.20	---	20.80	31.98	13.50	23.48	30.80	3.00	22.62	9.70	34.60	34.73
10/26/14	3.13	---	---	6.85	6.32	13.65	13.69	34.9	33.64	11.30	11.67	17.24	29.73	8.66	19.75	28.12	2.40	18.84	8.50	31.11	31.29
06/01/15	3.01	---	---	4.97	6.20	13.53	13.92	36.36	35.18	11.38	11.68	18.11	29.56	9.61	20.12	27.46	2.65	19.78	9.59	32.13	32.36
10/18/15	4.09	---	---	5.11	6.32	13.67	13.99	36.43	35.25	11.47	11.49	19.86	30.27	10.31	22.54	29.89	5.08	22.21	dry	33.97	34.06
03/07/16	3.04	---	---	1.16	6.19	13.41	13.75	36.50	36.66	11.24	11.54	19.91	32.45	10.33	23.40	28.33	2.02	21.40	10.02	33.70	33.89

Notes:
1. Groundwater elevations are in units of feet. Elevations are given relative to Lajas 2 (PID AB9841, NAVD 29) in Sabana Grande, Puerto Rico with elevation 200.27 feet.
2. Depth to water, bottom of boring, and bottom of screen units are feet below ground surface. Measurements are made from the top of the PVC riser of each well.
3. All groundwater level measurements were made by JFA personnel. Measurements were made using a water level indicator except for measurements at wells GZ-507R, GZ-508R, GZ-509R, GZ510R, GZ-512R, and GZ-513R which were made using pressure transducers.
4. Water levels have been measured at times and under conditions stated in the text. Fluctuations in the levels of groundwater may occur due to variations in temperature, rainfall, and other factors.
5. Reference elevations were surveyed by Jose O Quinones Moret, BS, PLS of Puerto Rico.
6. Other Notes:
   "dry" indicates water was not observed within the monitoring well.
   "<" signifies less than - elevation shown is for the bottom of the well.
   "---" signifies information is not available.
   "NR" signifies that a water level measurement was not obtained.
7. The end of December 2010 groundwater level round was conducted on January 5, 2011 due to the holidays.
8. For October 12, 2012 data, the original GZ-601R elevation appeared to be the result of a field error. Because the groundwater elevations in GZ-601L and GZ-601R on October 16, 2012 were equal, the October 12, 2012 GZ-601R elevation is assumed to be equal to the GZ-601L elevation on that date.
9. Reference elevations were re-surveyed on August 16, 2014. All previous groundwater elevations were adjusted to reflect the new survey information.

TABLE 5
SUMMARY OF GROUNDWATER ELEVATION DATA
HP Voluntary Remediation Project
San German, Puerto Rico

Date	GROUNDWATER ELEVATION DATA																							
	OW-305I	OW-305U	OW-307	OW-401	OW-402U	OW-402L	OW-402R	OW-403L	OW-404U	OW-404L	OW-404R	OW-405	OW-407	OW-408	W-1	W-5	W-7	W-8	WB-1U	WB-1L	WB-2U	WB-2L	WB-3L	WB-4L
Ref as of 8/16/14	*141.63*	*141.22*	*144.08*	*138.37*	*146.71*	*146.69*	*146.97*	*146.39*	*130.04*	*130.09*	*130.02*	*139.93*	*153.62*	*152.58*	*154.90*	*161.40*	*131.60*	*149.56*	*129.52*	*129.51*	*130.39*	*129.97*	*129.77*	*129.31*
01/26/11	139.48	137.82	119.60	114.95	140.11	119.01	119.19	118.92	129.06	114.72	114.62	<117.70	129.92	121.50	122.20	---	115.90	120.76	126.94	116.33	122.34	114.54	114.24	114.40
02/28/11	138.77	137.46	120.68	114.72	137.34	120.20	120.33	120.07	127.80	114.48	114.38	119.01	129.55	122.91	123.53	---	116.50	122.08	126.56	115.90	121.78	114.29	114.13	114.26
03/24/11	139.02	133.92	120.52	114.57	137.03	120.07	120.49	119.74	127.32	114.37	114.22	<117.7	130.59	124.19	125.30	---	115.56	122.76	126.63	115.75	121.84	114.30	113.96	114.10
4/19,26/2011	140.13	137.59	120.25	115.27	141.01	120.94	121.38	122.01	127.09	114.36	114.25	118.03	129.34	122.81	123.98	---	115.00	122.86	126.32	115.77	120.69	114.07	114.09	114.11
07/21/11	138.82	137.60	126.28	115.18	133.41	125.59	125.58	125.77	128.54	114.67	114.59	121.03	132.21	128.28	130.15	---	115.70	128.46	126.52	114.00	123.39	114.35	113.87	114.11
10/27,28/2011	141.03	137.39	134.13	118.97	142.32	128.97	128.12	128.83	129.44	117.16	117.62	124.03	137.44	130.98	133.17	---	118.60	131.58	126.08	119.28	124.95	116.45	116.77	116.96
01/27/12	138.23	137.37	125.90	114.97	133.31	125.23	125.55	125.94	128.29	114.44	114.37	120.48	132.87	128.48	130.15	---	115.60	128.33	124.55	115.76	122.27	114.27	113.98	114.06
04/09/12	138.90	138.18	126.34	115.59	139.71	124.91	125.48	125.68	129.61	115.25	114.92	121.32	131.24	128.06	129.16	---	115.76	127.68	126.81	117.08	122.16	114.84	114.54	114.58
07/24/12	139.48	137.62	124.88	114.92	139.88	123.99	124.17	124.39	128.59	114.29	114.22	120.17	129.82	126.91	127.70	---	115.60	126.86	126.02	114.76	122.74	114.22	113.87	114.01
10/12/12	140.43	140.62	129.83	116.27	141.08	126.71	126.57	127.08	129.58	116.09	115.61	123.02	132.52	129.21	130.39	---	116.02	129.66	126.73	116.66	124.68	115.49	114.86	115.28
01/16/13	138.13	137.22	126.88	115.17	133.81	126.24	126.37	126.64	127.79	113.49	113.42	121.48	132.02	---	129.93	---	115.70	129.06	124.92	115.61	122.69	114.27	114.02	114.01
04/22/13	140.16	138.07	125.18	115.02	140.86	123.31	123.57	123.84	129.29	114.54	114.41	119.43	128.97	126.03	126.90	---	115.60	126.01	125.37	116.36	121.59	114.42	113.92	114.01
07/18/13	140.63	138.82	129.13	115.87	141.26	125.19	125.37	125.29	130.04	115.69	115.02	122.08	---	---	128.30	---	116.40	127.71	127.27	111.31	122.89	115.42	114.57	114.21
10/28/13	139.03	137.42	125.98	115.57	137.41	125.39	125.54	125.72	127.74	114.57	114.47	121.18	130.87	128.40	129.12	---	115.65	128.09	125.32	116.21	122.83	114.37	113.99	114.09
01/22/14	138.06	138.40	125.28	114.85	133.71	124.37	124.45	124.99	129.48	114.49	114.25	120.34	130.12	127.68	---	---	---	---	126.62	116.26	122.21	114.18	113.90	114.01
04/18/14	140.73	138.52	130.18	116.17	141.56	124.89	124.97	125.29	129.69	115.64	115.22	121.98	130.97	127.38	---	---	---	---	<126.56	117.61	123.39	115.07	114.57	114.71
07/26/14	138.94	137.52	122.96	114.37	138.66	122.23	122.36	122.79	127.65	114.05	113.95	119.03	127.66	125.01	---	---	---	---	125.52	115.63	122.34	113.85	113.55	113.69
10/26/14	140.58	138.23	129.12	116.28	140.81	125.57	125.62	125.72	127.95	115.89	115.11	122.81	130.91	127.43	---	---	---	---	126.93	117.98	125.53	114.95	114.46	114.60
06/01/15	140.44	138.28	129.42	115.93	141.14	124.91	124.94	125.40	128.93	115.41	115.01	121.60	130.35	127.65	---	---	---	---	126.84	117.79	125.02	114.86	114.40	114.48
10/18/15	138.74	137.15	126.83	113.34	140.89	124.63	124.64	125.12	128.65	115.13	114.73	121.39	130.11	127.39	---	---	---	---	127.13	117.67	124.90	114.76	114.32	114.54
03/07/16	140.43	138.82	125.26	115.45	141.18	122.74	122.81	123.19	128.68	116.17	114.99	119.66	128.00	125.66	---	---	---	---	124.38	118.06	124.58	114.88	114.49	114.62
	WELL CONSTRUCTION INFORMATION																							
Bottom of Boring [2]	14.50	2.50	40.00	65.90	17.00	53.00	79.00	58.00	5.00	27.50	43.00	23.50	40.00	42.00	---	---	---	---	5.50	31.00	12.00	31.00	31.00	30.00
Boring Bottom Elevation [1]	127.13	138.72	104.08	72.47	129.71	93.69	67.97	88.39	125.04	102.59	87.02	116.43	113.62	110.58	---	---	---	---	124.02	98.51	118.39	98.97	98.77	109.31
Bottom Screen Elevation [1]	127.13	138.72	106.08	73.37	129.71	93.69	67.97	91.39	125.04	102.59	87.02	116.43	113.62	110.58	---	---	---	---	124.05	101.01	120.39	99.97	99.77	109.81
Bottom of Screen [2]	14.50	2.50	38.00	65.00	17.00	53.00	79.00	55.00	5.00	27.50	43.00	23.50	40.00	42.00	---	---	---	---	5.50	28.50	10.00	30.00	30.00	29.50
Date	DEPTH TO WATER MEASUREMENTS																							
	OW-305I [7]	OW-305U [7]	OW-307	OW-401	OW-402U	OW-402L	OW-402R	OW-403L	OW-404U	OW-404L	OW-404R	OW-405	OW-407	OW-408	W-1	W-5	W-7	W-8	WB-1U	WB-1L	WB-2U	WB-2L	WB-3L	WB-4L
Ref as of 8/16/14	*141.63*	*141.22*	*144.08*	*138.37*	*146.71*	*146.69*	*146.97*	*146.39*	*130.04*	*130.09*	*130.02*	*139.93*	*153.62*	*152.58*	*154.90*	*161.40*	*131.60*	*149.56*	*129.52*	*129.51*	*130.39*	*129.97*	*129.77*	*129.31*
01/26/11	2.15	3.40	24.48	23.42	6.60	27.68	27.78	27.47	0.98	15.37	15.40	dry	23.70	31.08	32.70	---	15.70	28.80	2.58	13.18	8.05	15.43	15.53	14.91
02/28/11	2.86	3.76	23.40	23.65	9.37	26.49	26.64	26.32	2.24	15.61	15.64	20.92	24.07	29.67	31.37	---	15.10	27.48	2.96	13.61	8.61	15.68	15.64	15.05
03/24/11	2.61	7.30	23.56	23.80	9.68	26.62	26.48	26.65	2.72	15.72	15.80	dry	23.03	28.39	29.60	---	16.04	26.80	2.89	13.76	8.55	15.67	15.81	15.21
04/26/11	1.50	3.63	23.83	23.10	5.70	25.75	25.59	24.38	2.95	15.73	15.77	21.90	24.28	29.77	30.92	---	16.60	26.70	3.20	13.74	9.70	15.90	15.68	15.20
07/21/11	2.81	3.62	17.80	23.19	13.30	21.10	21.39	20.62	1.50	15.42	15.43	18.90	21.41	24.30	24.75	---	15.90	21.10	3.00	15.51	7.00	15.62	15.90	15.20
10/28/11	0.60	3.83	9.95	19.40	4.39	17.72	18.85	17.56	0.60	12.93	12.40	15.90	16.18	21.60	21.73	---	13.00	17.98	3.44	10.23	5.44	13.52	13.00	12.35
01/27/12	3.40	3.85	18.18	23.40	13.40	21.46	21.42	20.45	1.75	15.65	15.65	19.45	20.75	24.10	24.75	---	16.00	21.23	4.97	13.75	8.12	15.70	15.79	15.25
04/09/12	2.73	3.04	17.74	22.78	7.00	21.78	21.49	20.71	0.43	14.84	15.10	18.61	22.38	24.52	25.74	---	15.84	21.88	2.71	12.43	8.23	15.13	15.23	14.73
07/24/12	2.15	3.60	19.20	23.45	6.83	22.70	22.80	22.00	1.45	15.80	15.80	19.76	23.80	25.67	27.20	---	16.00	22.70	3.50	14.75	7.65	15.75	15.90	15.30
10/12/12	1.20	0.60	14.25	22.10	5.63	19.98	20.40	19.31	0.46	14.00	14.41	16.91	21.10	23.37	24.51	---	15.58	19.90	2.79	12.85	5.71	14.48	14.91	14.03
01/16/13	3.50	4.00	17.20	23.20	12.90	20.45	20.60	19.75	2.25	16.60	16.60	18.45	21.60	---	24.97	---	15.90	20.50	4.60	13.90	7.70	15.70	15.75	15.30
04/22/13	1.47	3.15	18.90	23.35	5.85	23.38	23.40	22.55	0.75	15.55	15.61	20.50	24.65	26.55	28.00	---	16.00	23.55	4.15	13.15	8.80	15.55	15.85	15.30
07/18/13	1.00	2.40	14.95	22.50	5.45	21.50	21.60	21.10	0.00	14.40	15.00	17.85	---	---	26.60	---	15.20	21.85	2.25	18.20	7.50	14.55	15.20	15.10
10/28/13	2.60	3.80	18.10	22.80	9.30	21.30	21.43	20.67	2.30	15.52	15.55	18.75	22.75	24.18	25.78	---	15.95	21.47	4.20	13.30	7.56	15.60	15.78	15.22
01/22/14	3.57	2.82	18.80	23.52	13.00	22.32	22.52	21.40	0.56	15.60	15.77	19.59	23.50	24.90	---	---	---	---	2.90	13.25	8.18	15.79	15.87	15.30
04/18/14	0.90	2.70	13.90	22.20	5.15	21.80	22.00	21.10	0.35	14.45	14.80	17.95	22.65	25.20	---	---	---	---	dry	11.90	7.00	14.90	15.20	14.60
07/26/14	2.69	3.70	21.12	24.00	8.05	24.46	24.61	23.60	2.39	16.04	16.07	20.90	25.96	27.57	---	---	---	---	4.00	13.88	8.05	16.12	16.22	15.62
10/26/14	1.05	2.99	14.96	22.09	5.90	21.12	21.35	20.67	2.09	14.20	14.91	17.12	22.71	25.15	---	---	---	---	2.59	11.53	4.86	15.02	15.31	14.71
06/01/15	1.19	2.94	14.66	22.44	5.57	21.78	22.03	20.99	1.11	14.68	15.01	18.33	23.27	24.93	---	---	---	---	2.68	11.72	5.37	15.11	15.37	14.83
10/18/15	2.89	4.07	17.25	25.03	5.82	22.06	22.33	21.27	1.39	14.96	15.29	18.54	23.51	25.19	---	---	---	---	2.39	11.84	5.49	15.21	15.45	14.77
03/07/16	1.20	2.40	18.82	22.92	5.53	23.95	24.16	23.20	1.36	13.92	15.03	20.27	25.62	26.92	---	---	---	---	5.14	11.45	5.81	15.09	15.28	14.69

Notes:
1. Groundwater elevations are in units of feet. Elevations are given relative to Lajas 2 (PID AB9841, NAVD 29) in Sabana Grande, Puerto Rico with elevation 200.27 feet.
2. Depth to water, bottom of boring, and bottom of screen units are feet below ground surface. Measurements are made from the top of the PVC riser of each well.
3. All groundwater level measurements were made by JFA personnel. Measurements were made using a water level indicator except for measurements at wells GZ-507R, GZ-508R, GZ-509R, GZ510R, GZ-512R, and GZ-513R which were made using pressure transducers.
4. Water levels have been measured at times and under conditions stated in the text. Fluctuations in the levels of groundwater may occur due to variations in temperature, rainfall, and other factors.
5. Reference elevations were surveyed by Jose O Quinones Moret, BS, PLS of Puerto Rico.
6. Other Notes:
   "dry" indicates water was not observed within the monitoring well.
   "<" signifies less than - elevation shown is for the bottom of the well.
   "---" signifies information is not available.
   "NR" signifies that a water level measurement was not obtained.
7. The end of December 2010 groundwater level round was conducted on January 5, 2011 due to the holidays.
8. For October 12, 2012 data, the original GZ-601R elevation appeared to be the result of a field error. Because the groundwater elevations in GZ-601L and GZ-601R on October 16, 2012 were equal, the October 12, 2012 GZ-601R elevation is assumed to be equal to the GZ-601L
9. Reference elevations were re-surveyed on August 16, 2014. All previous groundwater elevations were adjusted to reflect the new survey information.

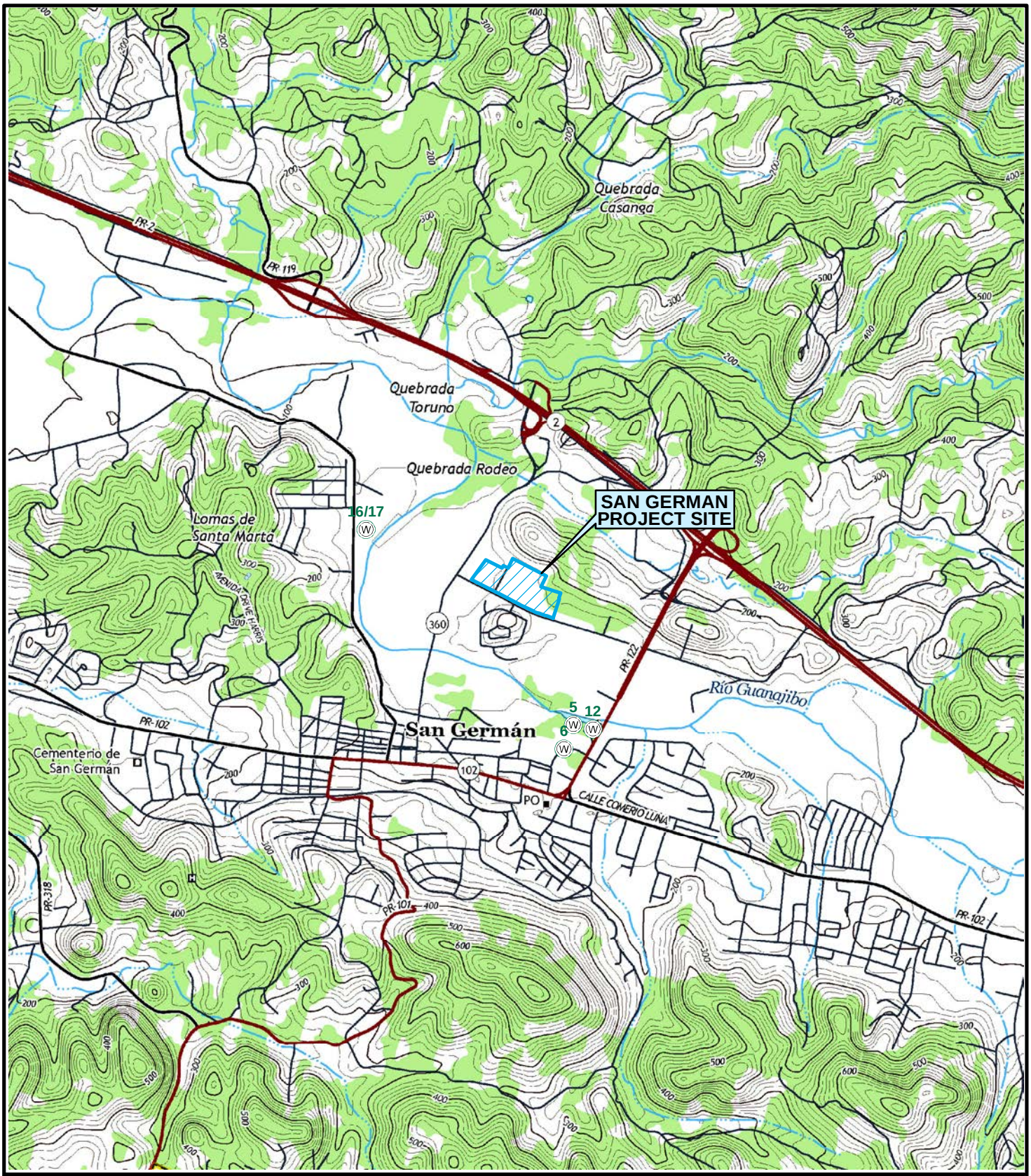
TABLE 6
PROPOSED INTRINSIC BIODEGRADATION SAMPLING PROGRAM - OCTOBER 2016
HP Voluntary Remediation Project
San German, Puerto Rico

WELL ID	TO BE SAMPLED (YES/NO)	PARAMETERS	
		VOCs[1]	VOCs and IB Parameters[2]
Wells required to be sampled October 2016 in accordance with the Intrinsic Biodegradation Work Plan			
Alluvium/Fill			
GZ-501U	YES	x	
GZ-503U	YES	x	
GZ-504U	YES	x	
GZ-506U	YES	x	
GZ-511U	YES	x	
GZ-515U	YES		x
GZ-519U	YES		x
GZ-702U	YES	x	
OW-101	YES		x
OW-105	YES	x	
OW-304U	YES	x	
OW-305I	YES	x	
OW-305U	YES	x	
OW-402U	YES	x	
OW-404U	YES	x	
WB-1U	YES	x	
WB-2U	YES	x	
IW-1	YES		x
Saprolite			
DEC-204O	YES	x	
GZ-501L	YES	x	
GZ-502L	YES	x	
GZ-503L	YES		x
GZ-504L	YES		x
GZ-505L	YES	x	
GZ-601L	YES	x	
GZ-701L	YES	x	
OW-1	YES	x	
OW-101L	YES	x	
OW-102	YES	x	
OW-301	YES		x
OW-304L	YES		x
OW-307	YES		x
OW-401	YES	x	
OW-402L	YES	x	
OW-403L	YES	x	
OW-404L	YES	x	
OW-405	YES	x	
OW-407	YES	x	
OW-408	YES	x	
WB-1L	YES	x	
WB-2L	YES	x	
WB-3L	YES		x
WB-4L	YES		x
IW-2	YES		x
IW-3	YES		x
Bedrock			
BR-308	YES	x	
DEC-203R	YES	x	
GZ-504R	YES		x
GZ-505R	YES		x
GZ-506R	YES		x
GZ-601R	YES	x	
GZ-701R	YES	x	
GZ-702R	YES	x	
GZ-703R	YES	x	
OW-304R	YES	x	
OW-402R	YES	x	
OW-404R	YES	x	

Notes:

1. "VOCs" indicates analysis limited to only chlorinated volatile organic compounds (cVOCs), and the field parameters dissolved oxygen (DO), pH, and oxidation-reduction potential (ORP)
2. "VOCs and IB Parameters" indicates analysis of cVOCs, dissolved iron, methane, ethene, ethane, TOC, and the field parameters DO, pH, and ORP.
3. The next biennal sampling round is scheduled for Fall 2016.

FIGURES



SOURCE : SCANNED USGS TOPOGRAPHIC QUADRANGLES DISTRIBUTED BY THE U.S. GEOLOGICAL SURVEY (USGS); SAN GERMAN, PUERTO RICO QUADRANGLE.

0 1,000 2,000 4,000 6,000 Feet

N S E W

PROJ. MGR.: JAC
DESIGNED BY: JJR
REVIEWED BY: CAL
OPERATOR: EMD

DATE: 07-26-2016

SITE LOCUS PLAN

HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

JOB NO. 01.0024065.17

FIGURE NO. 1

GZA GeoEnvironmental, Inc. J:\23,000-24,999\24065\24065-17.JAC\Figures\GIS\MXDs\24065-17_2015-USGS_SiteLocus_FIG1.mxd, 7/26/2016, 9:01:46 AM, anthony.pungitore

LEGEND

- ABANDONED BEDROCK EXTRACTION WELL
- MONITORING WELL SCREENED IN FILL
- MONITORING WELL SCREENED IN ALLUVIUM
- MONITORING WELL SCREENED IN SAPROLITE
- MONITORING WELL SCREENED IN BEDROCK
- ABANDONED MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (FILL)
- INJECTION WELL (SAPROLITE)
- SANITARY SEWER MANHOLE
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

NOTES:

1) THIS MAP CONTAINS THE ESRI ArcGIS ONLINE WORLD IMAGERY MAP SERVICE, PUBLISHED DECEMBER 12, 2009 BY ESRI ARCIMS SERVICES AND UPDATED OFTEN. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

2) THE CATCH BASINS, DRAIN LINES, DITCH AND VARIOUS LABELS WERE APPROXIMATELY LOCATED FROM THE FOLLOWING TWO PLANS;
- PLAN PROVIDED BY PEDRO PANZARDI & ASSOCIATES ENTITLED "SITE PLAN WITH ELEVATIONS OF SEWER SYSTEM", DATED: 03-11-1988, ORIGINAL SCALE: 1:500 OR 1"=41', SHEET NO.: 3-OF-7, PROJECT NO.: 8811, DRAWING NO.: 10-1.1.
- PLAN PROVIDED BY DIGITAL EQUIPMENT CORPORATION (DEC) OF SAN GERMAN, PUERTO RICO ENTITLED "PLAN & PROFILE", DRAWN BY: YELAZQUES, DATED: 01-23-1987, ORIGINAL SCALE: 1:500 OR 1"=41'.

3) REFERENCE ELEVATIONS AND WELL LOCATIONS WERE SURVEYED BY JOSE O. QUINONES MORET, BS, PLS OF PUERTO RICO ON AUGUST 16, 2014. ELEVATIONS ARE RELATIVE TO LAJAS 2 (PID AB9841, NAVD 29) IN SABANA GRANDE, PUERTO RICO WITH ELEVATION 200.27 FEET. COORDINATES ARE PROVIDED IN NAD 83.

4) THE LOCATION OF INJECTION WELLS IW-1, IW-2, AND IW-3 WERE DERIVED FROM ELECTRONIC FILES PREPARED BY: JAVIER E. BIDOT ASSOCIATES, PSC LAND SURVEYORS & CONSULTANTS, ENTITLED: SUBSURFACE UTILITIES SURVEY PACKARD/DIGITAL FACILITIES.

0 25 50 100 150
SCALE IN FEET

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

SITE PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: HP, Inc.	
PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE
DESIGNED BY: JY	DRAWN BY: EMD/ADP	SCALE: 1 INCH = 50 FT	2
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

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LEGEND

- OW-305U 138.82 — MONITORING WELL SCREENED IN FILL; GROUNDWATER ELEVATION IN FILL UNIT (MARCH 2016)
- OW-305I 140.43 — MONITORING WELL SCREENED IN ALLUVIUM; GROUNDWATER ELEVATION IN ALLUVIUM UNIT (MARCH 2016)
- OW-401 115.45 — MONITORING WELL SCREENED IN SAPROLITE; GROUNDWATER ELEVATION IN SAPROLITE UNIT (MARCH 2016)
- BR-308 115.61 — MONITORING WELL SCREENED IN BEDROCK; GROUNDWATER ELEVATION IN BEDROCK UNIT (MARCH 2016)
- GZ-507R 111.85 — ABANDONED MONITORING WELL WITH DEDICATED TRANSDUCER INSTALLED; GROUNDWATER ELEVATION IN BEDROCK UNIT (MARCH 2016)
- IW-1 — INJECTION WELL (FILL)
- IW-2 — INJECTION WELL (SAPROLITE)
- GZ-502 — ABANDONED MONITORING WELL
- W-8 — ABANDONED BEDROCK EXTRACTION WELL
- SANITARY SEWER MANHOLE
- GROUNDWATER CONTOUR IN BEDROCK UNIT (MARCH 2016)
- INFERRED GROUNDWATER CONTOUR IN BEDROCK UNIT (MARCH 2016)
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

0 25 50 100 150
SCALE IN FEET

NOTES:

1) WATER LEVELS WERE MEASURED BY GZA GEOENVIRONMENTAL, INC. PERSONNEL AND ON-SITE ENVIRONMENTAL PERSONNEL ON MARCH 07, 2016.

2) THE GROUNDWATER TREATMENT SYSTEM WAS SHUT DOWN AT 13:25 ON NOVEMBER 1, 2010 IN ACCORDANCE WITH THE INTRINSIC BIODEGRADATION STUDY WORK PLAN SUBMITTED ON MAY 14, 2010 AND APPROVED BY THE PUERTO RICO ENVIRONMENTAL QUALITY BOARD ON OCTOBER 29, 2010.

3) APPROXIMATELY 4.59 INCHES OF PRECIPITATION WERE MEASURED DURING THE MONTH PRIOR TO THE MARCH 07, 2016 WATER LEVEL MEASURING EVENT.

4) THIS MAP CONTAINS THE ESRI ARCGIS ONLINE WORLD IMAGERY MAP SERVICE, PUBLISHED DECEMBER 12, 2009 BY ESRI ARCIMS SERVICES AND UPDATED OFTEN. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

5) THE CATCH BASINS, DRAIN LINES, DITCH AND VARIOUS LABELS WERE APPROXIMATELY LOCATED FROM THE FOLLOWING TWO PLANS:
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- PLAN PROVIDED BY DIGITAL EQUIPMENT CORPORATION (DEC) OF SAN GERMAN, PUERTO RICO ENTITLED "PLAN & PROFILE", DRAWN BY: YELAZQUES, DATED: 01-23-1987, ORIGINAL SCALE: 1:500 OR 1"=41'.

6) REFERENCE ELEVATIONS AND WELL LOCATIONS WERE SURVEYED BY JOSE O. QUINONES MORET, BS, PLS OF PUERTO RICO ON AUGUST 16, 2014. ELEVATIONS ARE RELATIVE TO LAJAS 2 (PID AB9841, NAVD 29) IN SABANA GRANDE, PUERTO RICO WITH ELEVATION 200.27 FEET. COORDINATES ARE PROVIDED IN NAD 83.

7) WATER LEVEL DATA SHOWN WITH A "<" DESIGNATION INDICATES WELL WAS DRY AT THE TIME THE MEASUREMENTS WERE TAKEN. VALUE PROVIDED INDICATES BOTTOM OF WELL ELEVATION.

8) THE ESTIMATED GROUNDWATER ELEVATION CONTOURS AND DIRECTION OF GROUNDWATER FLOW ARE BASED ON MEASURED WATER LEVELS IN WIDELY SPACED MONITORING WELLS AND ASSUME AN IDEALIZED SPATIAL DISTRIBUTION OF HYDRAULIC HEAD. ACTUAL GROUNDWATER FLOW WILL OCCUR PREFERENTIALLY ALONG FRACTURE SETS WHICH REPRESENT HIGH PERMEABILITY PATHWAYS. THESE PATHWAYS MAY NOT BE ALIGNED WITH THE LOCAL HYDRAULIC HEAD GRADIENT AND MAY CONSEQUENTLY RESULT IN GROUNDWATER FLOW IN A DIRECTOIN WHICH IS NOT ALIGNED WITH THE DEPICTED MAXIMUM HYDRAULIC GRADIENT.

9) GROUNDWATER ELEVATIONS MEASURED FROM PRESSURE TRANSDUCERS LOCATED IN ABANDONED WELLS GZ-507R, GZ-508R, GZ-509R, GZ-510R, GZ-512R AND GZ-513R WERE CONSIDERED BUT NOT DIRECTLY USED TO ESTIMATE THE GROUNDWATER ELEVATION CONTOURS.

10) THE LOCATION OF INJECTION WELLS IW-1, IW-2, AND IW-3 WERE DERIVED FROM ELECTRONIC FILES PREPARED BY: JAVIER E. BIDOT ASSOCIATES, PSC LAND SURVEYORS & CONSULTANTS, ENTITLED: SUBSURFACE UTILITIES SURVEY PACKARD/DIGITAL FACILITIES.

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PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016 GROUNDWATER CONTOURS IN BEDROCK

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com			PREPARED FOR: HP, Inc.
PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE
DESIGNED BY: JJR	DRAWN BY: EMD/SMA/PJA	SCALE: 1 INCH = 50 FT	3
DATE: 08-04-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

© 2016 - GZA GeoEnvironmental, Inc. \\GZANORJobs\23\000-24,999\24065\24065-17.JAC\Figures\GIS\MXDs\24065-17_GWC_2016MarchData_FIG3.mxd, 8/4/2016, 8:02:49 AM, anthony.pungitore

LEGEND

- GZ-519U 140 — MONITORING WELL SCREENED IN FILL
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR TRICHLOROETHENE (TCE) IN FILL UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- IW-1 670 — INJECTION WELL SCREENED IN FILL
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR TRICHLOROETHENE (TCE) IN FILL UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- GZ-702U 3.2 — MONITORING WELL SCREENED IN ALLUVIUM
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR TRICHLOROETHENE (TCE) IN ALLUVIUM UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- MONITORING WELL SCREENED IN SAPROLITE
- INJECTION WELL SCREENED IN SAPROLITE
- MONITORING WELL SCREENED IN BEDROCK
- ABANDONED MONITORING WELL
- ABANDONED BEDROCK EXTRACTION WELL

(DRY) - INDICATES WELL DRY UPON SAMPLING
(NS) - INDICATES NO SAMPLE TAKEN
(ND) - INDICATES VOLATILE ORGANIC COMPOUNDS (VOC's) NOT DETECTED

- SANITARY SEWER MANHOLE
- AREA WHERE FILL IS ABSENT
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

0 25 50 100 150
SCALE IN FEET

NOTES:

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PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016 TCE CONCENTRATIONS IN FILL/ALLUVIUM

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR: HP, Inc.

PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE
DESIGNED BY: JJR	DRAWN BY: EMD/SW/AP	SCALE: 1 INCH = 50 FT	4A
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

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LEGEND

- MONITORING WELL SCREENED IN FILL
- INJECTION WELL SCREENED IN FILL
- MONITORING WELL SCREENED IN ALLUVIUM
- WB-1L 170 — MONITORING WELL SCREENED IN SAPROLITE
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR TRICHLOROETHENE (TCE) IN SAPROLITE UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- IW-2 55 — INJECTION WELL SCREENED IN SAPROLITE
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR TRICHLOROETHENE (TCE) IN SAPROLITE UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- OW-404R 22 — MONITORING WELL SCREENED IN BEDROCK
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR TRICHLOROETHENE (TCE) IN BEDROCK UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- ABANDONED MONITORING WELL
- ABANDONED BEDROCK EXTRACTION WELL
- SANITARY SEWER MANHOLE
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

(DRY) - INDICATES WELL DRY UPON SAMPLING
(NS) - INDICATES NO SAMPLE TAKEN
(ND) - INDICATES VOLATILE ORGANIC COMPOUNDS (VOC's) NOT DETECTED

0 25 50 100 150
SCALE IN FEET

NOTES:

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PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016
TCE CONCENTRATIONS IN SAPROLITE/BEDROCK

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: HP, Inc.	
PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE
DESIGNED BY: JJR	DRAWN BY: EMD/SW/AP	SCALE: 1 INCH = 50 FT	4B
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

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LEGEND

- OW-404U ND — MONITORING WELL SCREENED IN FILL
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR CIS-1,2-DICHLOROETHENE (DCE) IN FILL UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- IW-1 320 — INJECTION WELL SCREENED IN FILL
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR CIS-1,2-DICHLOROETHENE (DCE) IN FILL UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- GZ-702U 2.5 — MONITORING WELL SCREENED IN ALLUVIUM
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR CIS-1,2-DICHLOROETHENE (DCE) IN ALLUVIUM UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- MONITORING WELL SCREENED IN SAPROLITE
- INJECTION WELL SCREENED IN SAPROLITE
- MONITORING WELL SCREENED IN BEDROCK
- ABANDONED MONITORING WELL
- ABANDONED BEDROCK EXTRACTION WELL
- SANITARY SEWER MANHOLE
- AREA WHERE FILL IS ABSENT
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

(DRY) - INDICATES WELL DRY UPON SAMPLING
(NS) - INDICATES NO SAMPLE TAKEN
(ND) - INDICATES VOLATILE ORGANIC COMPOUNDS (VOC's) NOT DETECTED

0 25 50 100 150
SCALE IN FEET

NOTES:

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PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016
DCE CONCENTRATIONS IN FILL/ALLUVIUM

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
HP, Inc.

PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE
DESIGNED BY: JJR	DRAWN BY: EMD/SW/AP	SCALE: 1 INCH = 50 FT	4C
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

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LEGEND

- MONITORING WELL SCREENED IN FILL
- INJECTION WELL SCREENED IN FILL
- MONITORING WELL SCREENED IN ALLUVIUM
- WB-1L 210 — MONITORING WELL SCREENED IN SAPROLITE
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR CIS-1,2-DICHLOROETHENE (DCE) IN SAPROLITE UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- IW-2 130 — INJECTION WELL SCREENED IN SAPROLITE
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR CIS-1,2-DICHLOROETHENE (DCE) IN SAPROLITE UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- OW-404R 12 — MONITORING WELL SCREENED IN BEDROCK
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR CIS-1,2-DICHLOROETHENE (DCE) IN BEDROCK UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- ABANDONED MONITORING WELL
- ABANDONED BEDROCK EXTRACTION WELL
- SANITARY SEWER MANHOLE
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

(DRY) - INDICATES WELL DRY UPON SAMPLING
(NS) - INDICATES NO SAMPLE TAKEN
(ND) - INDICATES VOLATILE ORGANIC COMPOUNDS (VOC's) NOT DETECTED

0 25 50 100 150
SCALE IN FEET

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PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016
DCE CONCENTRATIONS IN SAPROLITE/BEDROCK

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: HP, Inc.	
PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE 4D
DESIGNED BY: JJR	DRAWN BY: EMD/SW/AP	SCALE: 1 INCH = 50 FT	
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

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LEGEND

- OW-101 ND — MONITORING WELL SCREENED IN FILL
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR VINYL CHLORIDE (VC) IN FILL UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- IW-1 12 — INJECTION WELL SCREENED IN FILL
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR VINYL CHLORIDE (VC) IN FILL UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- WB-2U ND — MONITORING WELL SCREENED IN ALLUVIUM
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR VINYL CHLORIDE (VC) IN ALLUVIUM UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- MONITORING WELL SCREENED IN SAPROLITE
- INJECTION WELL SCREENED IN SAPROLITE
- MONITORING WELL SCREENED IN BEDROCK
- ABANDONED MONITORING WELL
- ABANDONED BEDROCK EXTRACTION WELL
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- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

(DRY) - INDICATES WELL DRY UPON SAMPLING
(NS) - INDICATES NO SAMPLE TAKEN
(ND) - INDICATES VOLATILE ORGANIC COMPOUNDS (VOC's) NOT DETECTED

0 25 50 100 150
SCALE IN FEET

NOTES:

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2) THE CATCH BASINS, DRAIN LINES, DITCH AND VARIOUS LABELS WERE APPROXIMATELY LOCATED FROM THE FOLLOWING TWO PLANS:
- PLAN PROVIDED BY PEDRO PANZARDI & ASSOCIATES ENTITLED "SITE PLAN WITH ELEVATIONS OF SEWER SYSTEM", DATED: 03-11-1988, ORIGINAL SCALE: 1:500 OR 1"=41', SHEET NO.: 3-OF-7, PROJECT NO.: 8811, DRAWING NO.: 10-1.1.
- PLAN PROVIDED BY DIGITAL EQUIPMENT CORPORATION (DEC) OF SAN GERMAN, PUERTO RICO ENTITLED "PLAN & PROFILE", DRAWN BY: YELAZQUES, DATED: 01-23-1987, ORIGINAL SCALE: 1:500 OR 1"=41'.

3) REFERENCE ELEVATIONS AND WELL LOCATIONS WERE SURVEYED BY JOSE O. QUINONES MORET, BS, PLS OF PUERTO RICO ON AUGUST 16, 2014. ELEVATIONS ARE RELATIVE TO LAJAS 2 (PID AB9841, NAVD 29) IN SABANA GRANDE, PUERTO RICO WITH ELEVATION 200.27 FEET. COORDINATES ARE PROVIDED IN NAD 83.

4) ANALYTICAL DATA PRESENTED ARE FROM GROUNDWATER SAMPLES COLLECTED MARCH 2016.

5) THE LOCATION OF INJECTION WELLS IW-1, IW-2, AND IW-3 WERE DERIVED FROM ELECTRONIC FILES PREPARED BY: JAVIER E. BIDOT ASSOCIATES, PSC LAND SURVEYORS & CONSULTANTS, ENTITLED: SUBSURFACE UTILITIES SURVEY PACKARD/DIGITAL FACILITIES.

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA, ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016
VC CONCENTRATIONS IN FILL/ALLUVIUM

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com

PREPARED FOR: HP, Inc.

PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE
DESIGNED BY: JJR	DRAWN BY: EMD/ADP	SCALE: 1 INCH = 50 FT	4E
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

© 2016 - GZA GeoEnvironmental, Inc. J:\23,000-24,999\24065\24065-17.JAC\Figures\GIS\MXDs\24065-17_VC_FillAlluvium_2016MarchData_FIG4E.mxd, 7/26/2016, 1:38:48 PM, anthony.pungitore

LEGEND

- MONITORING WELL SCREENED IN FILL
- INJECTION WELL SCREENED IN FILL
- MONITORING WELL SCREENED IN ALLUVIUM
- GZ-503L 6.7 — MONITORING WELL SCREENED IN SAPROLITE
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR VINYL CHLORIDE (VC) IN SAPROLITE UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- IW-2 3.2 — INJECTION WELL SCREENED IN SAPROLITE
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR VINYL CHLORIDE (VC) IN SAPROLITE UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- OW-404R ND — MONITORING WELL SCREENED IN BEDROCK
  CHEMICAL CONCENTRATION IN GROUNDWATER FOR VINYL CHLORIDE (VC) IN BEDROCK UNIT IN MICROGRAMS PER LITER ug/L (MARCH 2016)
- ABANDONED MONITORING WELL
- ABANDONED BEDROCK EXTRACTION WELL
- SANITARY SEWER MANHOLE
- APPROXIMATE PROPERTY BOUNDARY
- ELEVATION CONTOUR (2012 USGS TOPOGRAPHIC QUADRANGLE)

(DRY) - INDICATES WELL DRY UPON SAMPLING
(NS) - INDICATES NO SAMPLE TAKEN
(ND) - INDICATES VOLATILE ORGANIC COMPOUNDS (VOC's) NOT DETECTED

0 25 50 100 150
SCALE IN FEET

NOTES:

1) THIS MAP CONTAINS THE ESRI ArcGIS ONLINE WORLD IMAGERY MAP SERVICE, PUBLISHED DECEMBER 12, 2009 BY ESRI ARCIMS SERVICES AND UPDATED OFTEN. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

2) THE CATCH BASINS, DRAIN LINES, DITCH AND VARIOUS LABELS WERE APPROXIMATELY LOCATED FROM THE FOLLOWING TWO PLANS:
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- PLAN PROVIDED BY DIGITAL EQUIPMENT CORPORATION (DEC) OF SAN GERMAN, PUERTO RICO ENTITLED "PLAN & PROFILE", DRAWN BY: YELAZQUES, DATED: 01-23-1987, ORIGINAL SCALE: 1:500 OR 1"=41'.

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4) ANALYTICAL DATA PRESENTED ARE FROM GROUNDWATER SAMPLES COLLECTED MARCH 2016.

5) THE LOCATION OF INJECTION WELLS IW-1, IW-2, AND IW-3 WERE DERIVED FROM ELECTRONIC FILES PREPARED BY: JAVIER E. BIDOT ASSOCIATES, PSC LAND SURVEYORS & CONSULTANTS, ENTITLED: SUBSURFACE UTILITIES SURVEY PACKARD/DIGITAL FACILITIES.

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PROJECT PROGRESS REPORT
JANUARY 2016 (Q1) THROUGH JUNE 2016 (Q2)
HP VOLUNTARY REMEDIATION PROJECT
SAN GERMAN, PUERTO RICO

MARCH 2016
VC CONCENTRATIONS IN SAPROLITE/BEDROCK

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: HP, Inc.	
PROJ MGR: JAC	REVIEWED BY: CAL	CHECKED BY: CAL	FIGURE 4F
DESIGNED BY: JJR	DRAWN BY: EMD/ADP	SCALE: 1 INCH = 50 FT	
DATE: 07-26-2016	PROJECT NO. 01.0024065.17	REVISION NO.	

© 2016 - GZA GeoEnvironmental, Inc. J:\23,000-24,999\24065\24065-17.JAC\Figures\GIS\MXDs\24065-17_VC_SapBed_2016MarchData_Fig4F.mxd, 7/26/2016, 2:05:50 PM, anthony.pungitore

APPENDIX A

LIMITATIONS

LIMITATIONS

1. The reported findings submitted in this report are based in part upon previous and recent data obtained from a limited number of samples from widely spaced subsurface explorations and monitoring wells. The nature and extent of variations between these explorations may not become evident until further investigation is performed. If variations or other latent conditions then appear evident, it will be necessary to re-evaluate the conclusions of this Report.

2. Water level readings have been made in the observation wells periodically and under conditions stated in the text. These data have been reviewed and interpretations have been made in the text of this Report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

3. Quantitative laboratory testing was performed as part of the site investigation and remediation work. Where such analyses have been conducted by an outside laboratory, GZA GeoEnvironmental, Inc. (GZA) has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data.

4. The findings contained in this Report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the Report. Some of these data were preliminary "screening" level data, and may have not been confirmed with quantitative analyses. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA, and the findings presented herein modified accordingly.

5. Chemical analyses have been performed for specific parameters during the course of this study, as detailed in the text. It must be noted that additional constituents not searched for during the current study may be present in soil and groundwater at the site.

APPENDIX B

RESPONSE TO EQB'S COMMENTS

GZA's Response to EQB's Comments
on
Review of the Semi-Annual Project Progress Report: July (Q3) through December (Q4) 2015
Voluntary Remediation Project
HP, Inc.
San German, Puerto Rico
PRD-991291857
prepared by
GZA GeoEnvironmental, Inc., of
Norwood, Massachusetts

Dated: August 18, 2016

The following comments are from the Review of the Semi-Annual Project Progress Report: July (Q3) through December (Q4) 2015 from Nilda Del Mar Sanchez Santiago, Esq., Manager of the Land Pollution Control Area division of Puerto Rico Environmental Quality Board (PREQB) dated March 30, 2016.

Page Specific Comments

1. Page 4, Section 1.0, First Paragraph: It is recommended to include that concurrence with the Intrinsic Bioremediation Study Work Plan, which included the Revision 4 of the Quality assurance Project Plan was obtained from PREQB in a letter dated November 2, 2015.

   The text of the Q1-Q2 2016 Status Report has been revised as noted above.

2. Page 5, Section 6.1: Please detail what were the various housekeeping/monitoring activities conducted at the groundwater treatment system.

   These activities include observation and photo-documentation of the GWTS surrounding area, removal of trash and debris from the GWTS area, and observation of the GWTS for abnormal conditions. Additionally, PRIDCO personnel regularly maintain the landscaped areas at the Site.

   This text has been added to the Q1-Q2 2016 Status Report.

3. Page 6, Section 6.2: The time interval between sampling events should be specified as part of the last statement of the first paragraph of this section.

   The previous sampling event occurred in October 2015.

   This text has been added to the Q1-Q2 2016 Status Report.

4. Page 7, Section 7.1, Last Paragraph: Discussion should present what were the groundwater flow direction under pumping conditions (before 2010).

   When extraction wells W-1 and W-8 were active, there were localized areas of bedrock groundwater capture associated with these extraction wells, as depicted in the March 19, 2010 progress report for the period of July through December 2009.

   This text has been added to the Q1-Q2 2016 Status Report.

5. Page 8, Third Paragraph: Provide explanation regarding the statement; "Trip blanks and/or field blanks were collected each day or sampling." The statement suggested that both or only one were collected per day. According to the work plan and the associated QAPP, on semiannual events three trip blanks will be collected and one field blank per sampling day. Revise the statement to reflect actual quantities.

   One trip blank was collected per cooler and one field blank was collected per sampling day. Three trip blanks and two field blanks were collected during the October 2015 sampling event.

<u>Analytical Data Quality Assessment's Comments:</u>

1. The report contains copies of the Chain of Custody Record Sheets (COCs). These were signed and filled completely, and all of the samples identified in them match the ones identified in the Test America Laboratory Test Results. However the following discrepancies were found:

   a. COC640-47715-11114.1 (Page 1/3, Sample List's Row 10): The person who filled this COC overwrote the sample identification number in row 10, which causes the number to not be easily distinguished. Based upon the date and time of collection it appears to be sample GZ-601R. This apparent entry error was not corrected by crossing-out the mistake and writing the correction next to it, followed by the initials of the person making the correction.

   b. COC640-47715-11114.1 (Page 1/3, Sample List's Row 11): The person who filled this COC overwrote the sample identification number in row 11, which causes the number to not be easily distinguished. Based upon the date and time of collection it appears to be sample GZ-702R. This apparent entry error was not corrected by crossing-out the mistake and writing the correction next to it, followed by the initials of the person making the correction.

   c. COC640-47715-11114.1 (Page 3/3, Sample List's Row 3): The sample identification number for sample GZ-703R was written incompletely. The COC indicates GZ-703 instead of GZ-703R as required.

   Discrepancies between the information in COCs and the Analytical Report should be avoided. For example, entry errors in the COCs, or any other field documentation, must be corrected by crossing-out the mistake and writing the correction next to it, followed by the initials of the person making the correction. Overwriting over the entry error must be avoided. Also,

whenever filling COCs the omission of any information, including failing to list of any samples collected, or any other information required, must be avoided.

Noted.

2. To avoid confusion when reviewing the QA/QC blanks, it is recommended that they be differentiated not only by the Laboratory number, but by the field identification number also. For examples, although all of the Trip Blanks were identified differently, the field blanks were both identified as "Field Blank" as the following table shows:

Field Sample ID	Lab ID Number	Collection Date
Field Blank	660-69962-2	10/20/2015
Field Blank	660-69962-2	10/19/2015
Trip Blank	660-69962-1	10/20/2015
Trip Blank 1	660-69962-1	10/19/2015
Trip Blank 2	660-69962-24	10/19/2015

Noted.

APPENDIX C

INJECTION WELL BORING LOGS

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	HP Inc. Voluntary Remediation Project San Germán, PR	BORING NO.: IW-1 SHEET: 1 of 1 PROJECT NO: 01.0024065.18 REVIEWED BY: JAC

Drilling Co.: AMF Drilling **Foreman:** Mickey Ferrera **Logged By:** James Roehrig	**Type of Rig:** Truck **Rig Model:** CME 55 **Drilling Method:** HSA	**Boring Location:** See Plan **Ground Surface Elev. (ft.):** **Final Boring Depth (ft.):** 20 **Date Start - Finish:** 3/7/2016 - 3/8/2016	**H. Datum:** NAD83 **V. Datum:** NGVD29

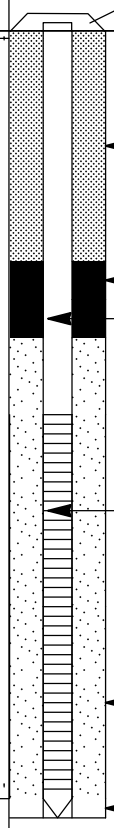
Auger/Casing Type: Hollow Stem Auger **I.D./O.D.:** 6-1/4 / 8-1/4 **Hmr Weight (lb.):** 140 **Hmr Fall (in.):** 30 **Other:**	**Sampler Type:** **I.D./O.D (in.):** **Sampler Hmr Wt:** **Sampler Hmr Fall:** **Other:**

Groundwater Depth (ft.)

Date	Time	Water Depth	Casing	Stab. Time
3/8/16	0830	20.20	PVC	N/A
3/9/16	0845	19.78	PVC	1 day

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum Depth (ft)	Stratum Description	Stratum Elev. (ft)
		S-1	1-1.5	6	6			S-1: Dry, brown, fine SAND, little Silt, trace Gravel, trace Slag. (Fill)	1	<0.1	0.2'	ASPHALT	
		S-2	3-3.5	6	6			S-2: Dry, brown, fine SAND, little Cobble, trace Silt, trace Slag, trace Concrete Fragments. (Fill)		<0.1			
5									2 3 4				
10		S-3	10-10					S-3: Moist, brown, fine SAND, little Silt, little Gravel, little Cobble. (Fill)		<0.1		FILL	
15		S-4	15-15					S-4: Moist to wet, brown, fine SAND & SILT, little Gravel, little Cobble. (Fill)	5	<0.1			
20									6		20'		
								Bottom of boring at 20 feet.					
25													
30													

Equipment Installed



REMARKS

1. Field testing results represent total organic vapor levels, referenced to a benzene standard, measured in the headspace of sealed soil sample jars using a ThermoEnvironmental 580B organic vapor meter equipped with a photoionization detector (PID) and 10.6eV lamp. Results in parts per million by volume (ppmv). ND indicates nothing detected (<0.1 ppmv).
2. Hand cleared to 5 feet. Samples collected with a hand auger.
3. Advanced boring with 4-1/4" / 6-1/4" augers before drilling with 6-1/4" / 8-1/4" augers.
4. Soil classified based on drill cuttings.
5. Samples S-3 and S-4 were classified based on soil cuttings.
6. Well installed approximately 35 feet east of OW-101. See OW-101 boring log for additional soil descriptions.

See log key for explanation of sample descriptions and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Boring No.: IW-1

24065.18 SAN GERMAIN VOLUNTARY REMEDIATION PROJECT.GPJ; STANDARD BORING W/E W/O SMP 2PG2; 8/15/2016

TEST BORING LOG

GZA GeoEnvironmental, Inc. *Engineers and Scientists*	**HP Inc.** **Voluntary Remediation Project** **San Germán, PR**	**BORING NO.:** IW-2 **SHEET:** 1 of 1 **PROJECT NO:** 01.0024065.18 **REVIEWED BY:** JAC

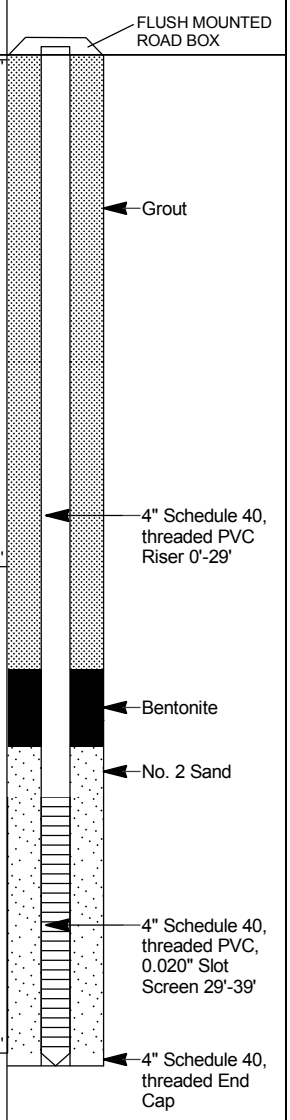
Drilling Co.: AMF Drilling **Foreman:** Mickey Ferrera **Logged By:** James Roehrig	**Type of Rig:** Truck **Rig Model:** CME 55 **Drilling Method:** HSA	**Boring Location:** See Plan **Ground Surface Elev. (ft.):** **Final Boring Depth (ft.):** 39 **Date Start - Finish:** 3/8/2016 - 3/9/2016	**H. Datum:** NAD83 **V. Datum:** NGVD29

Auger/Casing Type: Hollow Stem Auger **I.D./O.D.:** 6-1/4 / 8-1/4 **Hmr Weight (lb.):** 140 **Hmr Fall (in.):** 30 **Other:**	**Sampler Type:** **I.D./O.D (in.):** **Sampler Hmr Wt:** **Sampler Hmr Fall:** **Other:**	**Groundwater Depth (ft.)**

Date	Time	Water Depth	Casing	Stab. Time
3/9/16	1515	18.66	PVC	1 day

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum Depth (ft)	Stratum Description	Stratum Elev. (ft)
		S-1	1-1.5	6	6			S-1: Dry, brown, fine SAND, little Silt, little Gravel, trace Slag. (Fill)	1	<0.1	0.2'	ASPHALT	
		S-2	3-3.5	6	6			S-2: Dry, brown, fine SAND, little Gravel, little Cobble, trace Slag, trace Silt. (Fill)	2 3 4	<0.1		FILL	
5													
10		S-3	10-10					S-3: Moist, brown, fine SAND, little Silt, little cobble, little Gravel. (Fill)		<0.1			
15		S-4	15-15					S-4: Moist, brown, fine SAND, little Silt, little cobble, little Gravel. (Fill)		<0.1			
20		S-5	20-20					S-5: Wet, brown, SILT & CLAY, some Gravel, little Cobble (Saprolite).		<0.1	20'	SAPROLITE	
25		S-6	25-25					S-6: Wet, brown, SILT & CLAY, some Gravel, little Cobble (Saprolite).		<0.1			
30		S-7	30-30					S-7: Wet, brown, SILT & CLAY, some Gravel, little Cobble (Saprolite).	5	<0.1			
35		S-8	35-35					S-8: Wet, brown, SILT & CLAY, some Gravel, little Cobble (Saprolite).		<0.1			
40								Bottom of boring at 39 feet.	6 7		39'		
45													

Equipment Installed



REMARKS

1. Field testing results represent total organic vapor levels, referenced to a benzene standard, measured in the headspace of sealed soil sample jars using a ThermoEnvironmental 580B organic vapor meter equipped with a photoionization detector (PID) and 10.6eV lamp. Results in parts per million by volume (ppmv). ND indicates nothing detected (<0.1 ppmv).
2. Hand cleared to 5 feet. Samples collected with a hand auger.
3. Advanced boring with 4-1/4" / 6-1/4" augers before drilling with 6-1/4" / 8-1/4" augers.
4. Soil classified based on drill cuttings.
5. Samples S-3 through S-8 were classified based on soil cuttings.
6. Auger refusal due to bedrock at 39 feet.
7. Well installed approximately 30 feet east of OW-307. See OW-307 boring log for additional soil descriptions.

See log key for explanation of sample descriptions and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Boring No.: IW-2

24065.18 SAN GERMAIN VOLUNTARY REMEDIATION PROJECT.GPJ; STANDARD BORING W/E W/O SMP 2PG2; 8/15/2016

TEST BORING LOG

GZA GeoEnvironmental, Inc.
Engineers and Scientists

HP Inc.
Voluntary Remediation Project
San Germán, PR

BORING NO.: IW-3
SHEET: 1 of 1
PROJECT NO: 01.0024065.18
REVIEWED BY: JAC

Drilling Co.: AMF Drilling
Foreman: Mickey Ferrera
Logged By: James Roehrig

Type of Rig: Truck
Rig Model: CME 55
Drilling Method: HSA

Boring Location: See Plan
Ground Surface Elev. (ft.):
Final Boring Depth (ft.): 34
Date Start - Finish: 3/8/2016 - 3/9/2016

H. Datum: NAD83
V. Datum: NGVD29

Auger/Casing Type: Hollow Stem Auger
I.D./O.D.: 6-1/4 / 8-1/4
Hmr Weight (lb.): 140
Hmr Fall (in.): 30
Other:

Sampler Type:
I.D./O.D (in.):
Sampler Hmr Wt:
Sampler Hmr Fall:
Other:

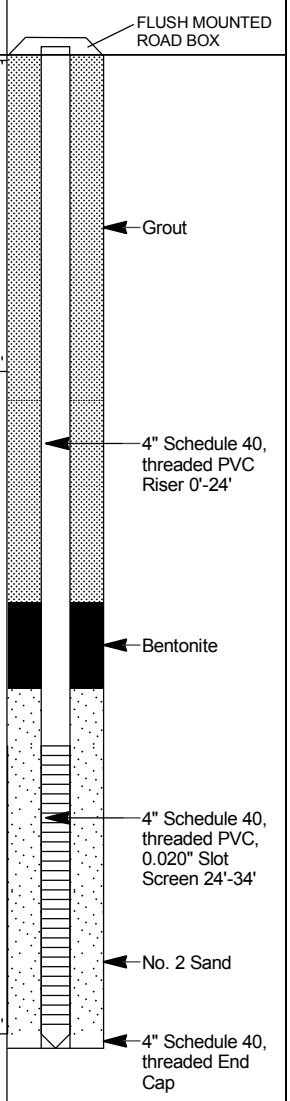
Groundwater Depth (ft.)

Date	Time	Water Depth	Casing	Stab. Time
3/9/16	1520	17.75	PVC	N/A

Depth (ft)	Casing Blows/ Core Rate	Sample No.	Sample Depth (ft.)	Pen. (in)	Rec. (in)	Blows (per 6 in.)	SPT Value	Sample Description Modified Burmister	Remark	Field Test Data
		S-1	1-1.5	6	6			S-1: Dry, brown, fine SAND, little Silt, little Gravel, trace Slag. (Fill)	1	<0.1
		S-2	3-3.5	6	6			S-2: Dry, brown, fine SAND, little Concrete Fragments, little Gravel, trace Silt, trace Slag. (Fill)		<0.1
5									2	
									3	
									4	
10		S-3	10-10					S-3: Moist, brown, fine SAND, little Silt, little Gravel, little Cobble. (Fill)		<0.1
15		S-4	15-15					S-4: Moist, brown, Clayey SILT, some Gravel, little Cobble. (Saprolite)		<0.1
20		S-5	20-20					S-5: Wet, brown, SILT & CLAY, some Gravel, little Cobble. (Saprolite)		<0.1
25		S-6	25-25					S-6: Wet, brown, CLAY & SILT, some Gravel, little Cobble. (Saprolite)		<0.1
30		S-7	30-30					S-7: Wet, brown, CLAY & SILT, some Gravel, little Cobble. (Saprolite)	5	<0.1
									6	
35								Bottom of boring at 34 feet.	7	
40										

Depth (ft)	Stratum Description	Elev. (ft)
0.2'	ASPHALT	
	FILL	
11'	SAPROLITE	
34'		

Equipment Installed



REMARKS

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2. Hand cleared to 5 feet. Samples collected with a hand auger.
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4. Soil classified based on drill cuttings.
5. Samples S-3 through S-7 were classified based on soil cuttings.
6. Auger refusal due to bedrock at 34 feet.
7. Well installed approximately 30 feet east of OW-307. See OW-307 boring log for additonal soil descriptions.

See log key for explanation of sample descriptions and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Boring No.: IW-3

24065.18 SAN GERMAIN VOLUNTARY REMEDIATION PROJECT.GPJ; STANDARD BORING W/E W/O SMP 2PG2; 8/15/2016

APPENDIX D

LABORATORY ANALYTICAL REPORTS - MARCH 2016

Daliz Estades Santaliz

Licensed Chemist

To Whom It May Concern:

I, Daliz M. Estades Santaliz, in my capacity as Puerto Rico Certified Chemist, hereby certify the attached Analytical Results from Project HP-San German IB and Laboratory ID Numbers:

660-72606-1	660-72663-12
660-72606-2	660-72663-13
660-72606-3	660-72663-14
660-72606-4	660-72663-15
660-72606-5	660-72663-16
660-72606-6	660-72663-17
660-72606-7	660-72663-18
660-72606-8	660-72663-19
660-72606-9	660-72663-20
660-72606-10	660-72663-21
660-72606-11	660-72663-22
660-72606-12	660-72663-23
660-72663-1	660-72663-24
660-72663-2	660-72663-25
660-72663-3	660-72663-26
660-72663-4	660-72697-1
660-72663-5	660-72697-2
660-72663-6	660-72697-3
660-72663-7	660-72697-4
660-72663-8	660-72697-5
660-72663-9	660-72731-1
660-72663-10	

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Lcda. Daliz M. Estades Santaliz

PO Box 727
Dorado, PR 00646-0727

ANALYTICAL REPORT

Job Number: 660-72606-1

Job Description: HP-San German IB

For:
GZA GeoEnvironmental, Inc.
249 Vanderbilt Ave
Norwood, MA 02062

Attention: Mr. John Colbert

Approved for release.
Haukur M Gudnason
Project Manager II
5/3/2016 11:39 AM

Haukur M Gudnason, Project Manager II
6712 Benjamin Road, Tampa, FL, 33634
(813)280-8342
haukur.gudnason@testamericainc.com
05/03/2016
Revision: 1

Methods: FDEP, DOH Certification #: E84282, E81005 These test results meet all the requirements of NELAC unless specified in the case narrative. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report. The estimated uncertainty associated with these reported results is available upon request. The results contained in this test report relate only to these samples included herein.

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Definitions/Glossary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC 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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
660-72606-1

Comments
This is a revised report to include the certificate from a Puerto Rico chemist and document the sample ID discrepencies for GZ-504U and GZ-702U. Samples GZ-504U and GZ-702U were logged in as “GZ-504V and GZ-702V because the interpretation of the COC at login was the "U" looked more like "V”. The sample IDs were corrected in the LIMS a shor time after login but there are instances in the report where the incorrect IDs were used. Note that the lab used the Lab IDs only when processing samples and thus there is no concern of incorrect result being reported..

Receipt
The samples were received on 3/12/2016 9:15 AM, 3/16/2016 10:20 AM, 3/17/2016 9:00 AM and 3/19/2016 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.9º C, 1.1º C, 1.5º C, 2.1º C and 4.0º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) for batch 167472 recovered outside control limits for the following analytes: tetrachloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: OW-304L and OW-304R. Elevated reporting limits (RLs) are provided. Batch 167632.

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

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

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

General Chemistry
Method(s) 415.1, SM 5310B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-300212 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Trip Blank — Lab Sample ID: 660-72606-1

No Detections.

Client Sample ID: Field Blank — Lab Sample ID: 660-72606-2

No Detections.

Client Sample ID: GZ-501L — Lab Sample ID: 660-72606-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	27		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	36		1.0	0.61	ug/L	1		8260B	Total/NA
Tetrachloroethene - RA	1.8		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: GZ-503L — Lab Sample ID: 660-72606-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	45		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.8		1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene	46		1.0	0.61	ug/L	1		8260B	Total/NA
Vinyl chloride	6.7		1.0	0.71	ug/L	1		8260B	Total/NA
Tetrachloroethene - RA	2.3		1.0	0.50	ug/L	1		8260B	Total/NA
Ethane	0.97	J	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	1.0		1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	13		0.58	0.29	ug/L	1		RSK-175	Total/NA
Dissolved Iron	80	J	200	50	ug/L	1		6010B	Dissolved
Total Organic Carbon	2.9		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: GZ-504U — Lab Sample ID: 660-72606-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromoform	4.7		1.0	0.63	ug/L	1		8260B	Total/NA
Chloroform	29		1.0	0.90	ug/L	1		8260B	Total/NA
Dibromochloromethane	14		1.0	0.31	ug/L	1		8260B	Total/NA

Client Sample ID: GZ-504L — Lab Sample ID: 660-72606-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	2.4		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	0.64	J	1.0	0.61	ug/L	1		8260B	Total/NA
Methane	0.31	J	0.58	0.29	ug/L	1		RSK-175	Total/NA
Dissolved Iron	340		200	50	ug/L	1		6010B	Dissolved
Total Organic Carbon	1.4		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: GZ-504R — Lab Sample ID: 660-72606-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	15		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	30		1.0	0.61	ug/L	1		8260B	Total/NA
Tetrachloroethene - RA	0.92	J	1.0	0.50	ug/L	1		8260B	Total/NA
Ethane	0.64	J	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	0.72	J	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	1.5		0.58	0.29	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-504R (Continued) — Lab Sample ID: 660-72606-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	0.92	J	1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: GZ-601R — Lab Sample ID: 660-72606-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.66	J	1.0	0.52	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene	24		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	0.86	J	1.0	0.61	ug/L	1		8260B	Total/NA
Vinyl chloride	0.86	J	1.0	0.71	ug/L	1		8260B	Total/NA

Client Sample ID: GZ-701L — Lab Sample ID: 660-72606-9

No Detections.

Client Sample ID: GZ-701R — Lab Sample ID: 660-72606-10

No Detections.

Client Sample ID: GZ-702U — Lab Sample ID: 660-72606-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	2.5		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	3.2		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: GZ-702R — Lab Sample ID: 660-72606-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	24		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	71		1.0	0.61	ug/L	1		8260B	Total/NA
Vinyl chloride	1.3		1.0	0.71	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank 1 — Lab Sample ID: 660-72663-1

No Detections.

Client Sample ID: Field Blank 1 — Lab Sample ID: 660-72663-2

No Detections.

Client Sample ID: OW-304L — Lab Sample ID: 660-72663-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.1		2.0	1.0	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.6	J	2.0	1.3	ug/L	2		8260B	Total/NA
Vinyl chloride	17		2.0	1.4	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	300		20	13	ug/L	20		8260B	Total/NA
Trichloroethene - DL	530		20	12	ug/L	20		8260B	Total/NA
Ethane	6.6		1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	5.7		1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	17		0.58	0.29	ug/L	1		RSK-175	Total/NA
Dissolved Iron	1200		200	50	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-304L (Continued) — Lab Sample ID: 660-72663-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	2.5		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: OW-304R — Lab Sample ID: 660-72663-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	5.6		2.0	1.1	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethylene	140		2.0	1.3	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.8	J	2.0	1.3	ug/L	2		8260B	Total/NA
Tetrachloroethene	2.5		2.0	1.0	ug/L	2		8260B	Total/NA
Vinyl chloride	190		2.0	1.4	ug/L	2		8260B	Total/NA
Trichloroethene - DL	1200		20	12	ug/L	20		8260B	Total/NA

Client Sample ID: GZ-506R — Lab Sample ID: 660-72663-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	18		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	38		1.0	0.61	ug/L	1		8260B	Total/NA
Ethane	0.93	J	1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	0.91	J	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	0.94		0.58	0.29	ug/L	1		RSK-175	Total/NA
Dissolved Iron	110	J	200	50	ug/L	1		6010B	Dissolved

Client Sample ID: GZ-519U — Lab Sample ID: 660-72663-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.5		1.0	0.90	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene	68		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.8		1.0	0.67	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	1.9		1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene - DL	140		5.0	3.1	ug/L	5		8260B	Total/NA
Methane	1.6		0.58	0.29	ug/L	1		RSK-175	Total/NA
Dissolved Iron	110	J	200	50	ug/L	1		6010B	Dissolved
Total Organic Carbon	0.92	J	1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: OW-402U — Lab Sample ID: 660-72663-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	19		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.2		1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene	62		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: OW-402U DUP — Lab Sample ID: 660-72663-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	19		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.98	J	1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene	61		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: OW-101 — Lab Sample ID: 660-72663-9

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-101 (Continued) — Lab Sample ID: 660-72663-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	32		5.0	3.4	ug/L	5		8260B	Total/NA
1,1-Dichloroethene	11		5.0	3.4	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	1800		50	33	ug/L	50		8260B	Total/NA
Trichloroethene - DL	3200		50	31	ug/L	50		8260B	Total/NA
Methane	0.79		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	1.7		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: OW-101L — Lab Sample ID: 660-72663-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	54		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.90	J	1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene	3.2		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: OW-101L DUP — Lab Sample ID: 660-72663-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	55		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.84	J	1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene	3.8		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: OW-307 — Lab Sample ID: 660-72663-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	1.9		1.0	0.67	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	140		5.0	3.3	ug/L	5		8260B	Total/NA
Trichloroethene - DL	200		5.0	3.1	ug/L	5		8260B	Total/NA
Methane	9.9		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	1.3		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: GZ-703R — Lab Sample ID: 660-72663-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	45		1.0	0.65	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	2.5		1.0	0.67	ug/L	1		8260B	Total/NA
Tetrachloroethene	2.0		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene - DL	170		5.0	3.1	ug/L	5		8260B	Total/NA

Client Sample ID: GZ-505R — Lab Sample ID: 660-72663-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.2		1.0	0.67	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.2		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	81		1.0	0.61	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	100		5.0	3.3	ug/L	5		8260B	Total/NA
Ethane	0.71	J	1.1	0.55	ug/L	1		RSK-175	Total/NA
Methane	330		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	0.79	J	1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: WB-3L — Lab Sample ID: 660-72663-16

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-3L (Continued) — Lab Sample ID: 660-72663-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	98		1.0	0.65	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.6		1.0	0.67	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.77	J	1.0	0.67	ug/L	1		8260B	Total/NA
Tetrachloroethene	4.7		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	75		1.0	0.61	ug/L	1		8260B	Total/NA
Vinyl chloride	7.6		1.0	0.71	ug/L	1		8260B	Total/NA
Methane	2.9		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	0.90	J	1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: WB-3L DUP — Lab Sample ID: 660-72663-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	3.4		1.0	0.67	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.75	J	1.0	0.67	ug/L	1		8260B	Total/NA
Tetrachloroethene	4.7		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	83		1.0	0.61	ug/L	1		8260B	Total/NA
Vinyl chloride	7.6		1.0	0.71	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	83		5.0	3.3	ug/L	5		8260B	Total/NA

Client Sample ID: WB-4L — Lab Sample ID: 660-72663-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	56		1.0	0.65	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.87	J	1.0	0.67	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.4		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene - DL	110		5.0	3.1	ug/L	5		8260B	Total/NA
Methane	4.6		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	1.2		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: WB-4L DUP — Lab Sample ID: 660-72663-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	56		1.0	0.65	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.89	J	1.0	0.67	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.4		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene - DL	110		5.0	3.1	ug/L	5		8260B	Total/NA

Client Sample ID: WB-2U — Lab Sample ID: 660-72663-20

No Detections.

Client Sample ID: WB-2L — Lab Sample ID: 660-72663-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	42		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	10		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: OW-404U — Lab Sample ID: 660-72663-22

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-404R — Lab Sample ID: 660-72663-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	12		1.0	0.65	ug/L	1		8260B	Total/NA
Trichloroethene	22		1.0	0.61	ug/L	1		8260B	Total/NA

Client Sample ID: WB-1L — Lab Sample ID: 660-72663-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	3.4		1.0	0.67	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	1.1		1.0	0.67	ug/L	1		8260B	Total/NA
Vinyl chloride	4.2		1.0	0.71	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	210		5.0	3.3	ug/L	5		8260B	Total/NA
Trichloroethene - DL	170		5.0	3.1	ug/L	5		8260B	Total/NA

Client Sample ID: WB-1U — Lab Sample ID: 660-72663-25

No Detections.

Client Sample ID: TRIP BLANK 2 — Lab Sample ID: 660-72663-26

No Detections.

Client Sample ID: Trip Blank — Lab Sample ID: 660-72697-1

No Detections.

Client Sample ID: Field Blank — Lab Sample ID: 660-72697-2

No Detections.

Client Sample ID: IW-1 — Lab Sample ID: 660-72697-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	8.0		1.0	0.90	ug/L	1		8260B	Total/NA
Dibromochloromethane	1.9		1.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.68	J	1.0	0.52	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	17		1.0	0.67	ug/L	1		8260B	Total/NA
Vinyl chloride	12		1.0	0.71	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	320		10	6.5	ug/L	10		8260B	Total/NA
trans-1,2-Dichloroethene - DL	98		10	6.7	ug/L	10		8260B	Total/NA
Trichloroethene - DL	670		10	6.1	ug/L	10		8260B	Total/NA
Ethylene	0.98	J	1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	260		0.58	0.29	ug/L	1		RSK-175	Total/NA
Dissolved Iron	240		200	50	ug/L	1		6010B	Dissolved
Total Organic Carbon	7.7		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: IW-2 — Lab Sample ID: 660-72697-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	2.1		1.0	0.67	ug/L	1		8260B	Total/NA
Trichloroethene	55		1.0	0.61	ug/L	1		8260B	Total/NA
Vinyl chloride	3.2		1.0	0.71	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethylene - DL	130		5.0	3.3	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: IW-2 (Continued) — Lab Sample ID: 660-72697-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethane	1.1		1.1	0.55	ug/L	1		RSK-175	Total/NA
Ethylene	1.1		1.0	0.50	ug/L	1		RSK-175	Total/NA
Methane	43		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	1.8		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: IW-3 — Lab Sample ID: 660-72697-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethylene	42		1.0	0.65	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.4		1.0	0.50	ug/L	1		8260B	Total/NA
Trichloroethene	31		1.0	0.61	ug/L	1		8260B	Total/NA
Methane	39		0.58	0.29	ug/L	1		RSK-175	Total/NA
Total Organic Carbon	1.1		1.0	0.50	mg/L	1		SM 5310B	Total/NA

Client Sample ID: Purge Water — Lab Sample ID: 660-72731-1

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Trip Blank

Lab Sample ID: 660-72606-1

Date Collected: 03/11/16 06:30
Matrix: Water
Date Received: 03/12/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 17:45	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 17:45	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 17:45	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 17:45	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 17:45	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 17:45	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 17:45	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 17:45	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 17:45	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 17:45	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 17:45	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 17:45	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 17:45	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 17:45	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 17:45	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 17:45	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/16/16 17:45	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 17:45	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 17:45	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 17:45	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 17:45	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 17:45	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 17:45	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 17:45	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 17:45	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 17:45	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 17:45	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 17:45	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/16/16 17:45	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 17:45	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 17:45	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 119*		*03/16/16 17:45*	*1*
Dibromofluoromethane	*106*		*83 - 123*		*03/16/16 17:45*	*1*
Toluene-d8 (Surr)	*101*		*78 - 126*		*03/16/16 17:45*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Field Blank

Lab Sample ID: 660-72606-2

Date Collected: 03/11/16 06:35
Matrix: Water
Date Received: 03/12/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 18:03	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 18:03	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 18:03	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 18:03	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 18:03	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 18:03	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 18:03	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 18:03	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 18:03	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 18:03	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 18:03	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 18:03	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 18:03	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:03	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 18:03	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 18:03	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/16/16 18:03	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:03	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:03	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 18:03	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 18:03	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 18:03	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 18:03	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 18:03	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 18:03	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 18:03	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:03	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:03	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/16/16 18:03	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:03	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 18:03	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 119*		*03/16/16 18:03*	*1*
Dibromofluoromethane	*111*		*83 - 123*		*03/16/16 18:03*	*1*
Toluene-d8 (Surr)	*107*		*78 - 126*		*03/16/16 18:03*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-501L

Date Collected: 03/11/16 07:50
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 20:31	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 20:31	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 20:31	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 20:31	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 20:31	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 20:31	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 20:31	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 20:31	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 20:31	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 20:31	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 20:31	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 20:31	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 20:31	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 20:31	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 20:31	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 20:31	1
cis-1,2-Dichloroethylene	**27**		1.0	0.65	ug/L			03/16/16 20:31	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 20:31	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 20:31	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 20:31	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 20:31	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 20:31	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 20:31	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 20:31	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 20:31	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 20:31	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 20:31	1
Trichloroethene	**36**		1.0	0.61	ug/L			03/16/16 20:31	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 20:31	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 20:31	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 119*		*03/16/16 20:31*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/16/16 20:31*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/16/16 20:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**1.8**		1.0	0.50	ug/L			03/17/16 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 119*		*03/17/16 17:48*	*1*
Dibromofluoromethane	*99*		*83 - 123*		*03/17/16 17:48*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/17/16 17:48*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-503L

Date Collected: 03/11/16 08:15
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 20:49	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 20:49	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 20:49	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 20:49	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 20:49	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 20:49	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 20:49	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 20:49	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 20:49	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 20:49	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 20:49	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 20:49	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 20:49	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 20:49	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 20:49	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 20:49	1
cis-1,2-Dichloroethylene	**45**		1.0	0.65	ug/L			03/16/16 20:49	1
trans-1,2-Dichloroethene	**2.8**		1.0	0.67	ug/L			03/16/16 20:49	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 20:49	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 20:49	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 20:49	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 20:49	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 20:49	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 20:49	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 20:49	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 20:49	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 20:49	1
Trichloroethene	**46**		1.0	0.61	ug/L			03/16/16 20:49	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 20:49	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 20:49	1
Vinyl chloride	**6.7**		1.0	0.71	ug/L			03/16/16 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 119*		*03/16/16 20:49*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/16/16 20:49*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/16/16 20:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**2.3**		1.0	0.50	ug/L			03/17/16 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 119*		*03/17/16 18:06*	*1*
Dibromofluoromethane	*97*		*83 - 123*		*03/17/16 18:06*	*1*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/17/16 18:06*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	**0.97**	**J**	1.1	0.55	ug/L			03/16/16 17:36	1
Ethylene	**1.0**		1.0	0.50	ug/L			03/16/16 17:36	1

Client Sample ID: GZ-503L

Date Collected: 03/11/16 08:15
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	13		0.58	0.29	ug/L			03/16/16 17:36	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	80	J	200	50	ug/L		03/21/16 07:10	03/21/16 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.9		1.0	0.50	mg/L			03/19/16 20:50	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-504U

Date Collected: 03/11/16 08:00
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 18:22	1
Bromoform	**4.7**		1.0	0.63	ug/L			03/16/16 18:22	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 18:22	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 18:22	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 18:22	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 18:22	1
Chloroform	**29**		1.0	0.90	ug/L			03/16/16 18:22	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 18:22	1
Dibromochloromethane	**14**		1.0	0.31	ug/L			03/16/16 18:22	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 18:22	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 18:22	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 18:22	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 18:22	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:22	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 18:22	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 18:22	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/16/16 18:22	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:22	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:22	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 18:22	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 18:22	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 18:22	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 18:22	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 18:22	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 18:22	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 18:22	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:22	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:22	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/16/16 18:22	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:22	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 18:22	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 119*		*03/16/16 18:22*	*1*
Dibromofluoromethane	*108*		*83 - 123*		*03/16/16 18:22*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/16/16 18:22*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-504L

Date Collected: 03/11/16 07:05
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 18:40	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 18:40	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 18:40	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 18:40	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 18:40	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 18:40	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 18:40	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 18:40	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 18:40	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 18:40	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 18:40	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 18:40	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 18:40	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:40	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 18:40	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 18:40	1
cis-1,2-Dichloroethylene	**2.4**		1.0	0.65	ug/L			03/16/16 18:40	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:40	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:40	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 18:40	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 18:40	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 18:40	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 18:40	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 18:40	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 18:40	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 18:40	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:40	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:40	1
Trichloroethene	**0.64**	**J**	1.0	0.61	ug/L			03/16/16 18:40	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:40	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 18:40	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 119*		*03/16/16 18:40*	*1*
Dibromofluoromethane	*105*		*83 - 123*		*03/16/16 18:40*	*1*
Toluene-d8 (Surr)	*101*		*78 - 126*		*03/16/16 18:40*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/16/16 17:49	1
Ethylene	<1.0		1.0	0.50	ug/L			03/16/16 17:49	1
Methane	**0.31**	**J**	0.58	0.29	ug/L			03/16/16 17:49	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	**340**		200	50	ug/L		03/21/16 07:10	03/21/16 12:04	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-504L

Date Collected: 03/11/16 07:05
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-6

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.4		1.0	0.50	mg/L			03/19/16 21:04	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-504R

Date Collected: 03/11/16 07:10
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 18:59	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 18:59	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 18:59	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 18:59	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 18:59	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 18:59	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 18:59	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 18:59	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 18:59	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 18:59	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 18:59	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 18:59	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 18:59	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:59	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 18:59	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 18:59	1
cis-1,2-Dichloroethylene	**15**		1.0	0.65	ug/L			03/16/16 18:59	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:59	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 18:59	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 18:59	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 18:59	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 18:59	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 18:59	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 18:59	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 18:59	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:59	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 18:59	1
Trichloroethene	**30**		1.0	0.61	ug/L			03/16/16 18:59	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 18:59	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 18:59	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*70 - 119*		*03/16/16 18:59*	*1*
Dibromofluoromethane	*113*		*83 - 123*		*03/16/16 18:59*	*1*
Toluene-d8 (Surr)	*106*		*78 - 126*		*03/16/16 18:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.92**	**J**	1.0	0.50	ug/L			03/17/16 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 119*		*03/17/16 17:29*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/17/16 17:29*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/17/16 17:29*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	**0.64**	**J**	1.1	0.55	ug/L			03/16/16 18:01	1
Ethylene	**0.72**	**J**	1.0	0.50	ug/L			03/16/16 18:01	1

Client Sample ID: GZ-504R

Date Collected: 03/11/16 07:10
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1.5**		0.58	0.29	ug/L			03/16/16 18:01	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/21/16 07:10	03/21/16 12:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.92**	**J**	1.0	0.50	mg/L			03/20/16 03:20	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-601R

Date Collected: 03/11/16 09:45
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 19:17	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 19:17	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 19:17	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 19:17	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 19:17	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 19:17	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 19:17	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 19:17	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 19:17	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 19:17	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 19:17	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 19:17	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 19:17	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 19:17	1
1,1-Dichloroethane	**0.66**	**J**	1.0	0.52	ug/L			03/16/16 19:17	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 19:17	1
cis-1,2-Dichloroethylene	**24**		1.0	0.65	ug/L			03/16/16 19:17	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 19:17	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 19:17	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 19:17	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 19:17	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 19:17	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 19:17	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 19:17	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 19:17	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 19:17	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 19:17	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 19:17	1
Trichloroethene	**0.86**	**J**	1.0	0.61	ug/L			03/16/16 19:17	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 19:17	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 19:17	1
Vinyl chloride	**0.86**	**J**	1.0	0.71	ug/L			03/16/16 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 119*		*03/16/16 19:17*	*1*
Dibromofluoromethane	*104*		*83 - 123*		*03/16/16 19:17*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/16/16 19:17*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-701L

Lab Sample ID: 660-72606-9

Date Collected: 03/11/16 10:45
Matrix: Water
Date Received: 03/12/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 19:36	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 19:36	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 19:36	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 19:36	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 19:36	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 19:36	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 19:36	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 19:36	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 19:36	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 19:36	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 19:36	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 19:36	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 19:36	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 19:36	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 19:36	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 19:36	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/16/16 19:36	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 19:36	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 19:36	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 19:36	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 19:36	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 19:36	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 19:36	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 19:36	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 19:36	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 19:36	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 19:36	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 19:36	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/16/16 19:36	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 19:36	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 19:36	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 119*		*03/16/16 19:36*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/16/16 19:36*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/16/16 19:36*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-701R

Date Collected: 03/11/16 09:45
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 19:54	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 19:54	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 19:54	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 19:54	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 19:54	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 19:54	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 19:54	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 19:54	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 19:54	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 19:54	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 19:54	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 19:54	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 19:54	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 19:54	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 19:54	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 19:54	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/16/16 19:54	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 19:54	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 19:54	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 19:54	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 19:54	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 19:54	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 19:54	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 19:54	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 19:54	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 19:54	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 19:54	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 19:54	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/16/16 19:54	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 19:54	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 19:54	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 119*		*03/16/16 19:54*	*1*
Dibromofluoromethane	*104*		*83 - 123*		*03/16/16 19:54*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/16/16 19:54*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-702U

Date Collected: 03/11/16 11:00
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 20:12	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 20:12	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 20:12	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 20:12	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 20:12	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 20:12	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 20:12	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 20:12	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 20:12	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 20:12	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 20:12	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 20:12	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 20:12	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 20:12	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 20:12	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 20:12	1
cis-1,2-Dichloroethylene	**2.5**		1.0	0.65	ug/L			03/16/16 20:12	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 20:12	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 20:12	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 20:12	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 20:12	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 20:12	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 20:12	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 20:12	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 20:12	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 20:12	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 20:12	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 20:12	1
Trichloroethene	**3.2**		1.0	0.61	ug/L			03/16/16 20:12	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 20:12	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 20:12	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 119*		*03/16/16 20:12*	*1*
Dibromofluoromethane	*110*		*83 - 123*		*03/16/16 20:12*	*1*
Toluene-d8 (Surr)	*104*		*78 - 126*		*03/16/16 20:12*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-702R

Date Collected: 03/11/16 10:30
Date Received: 03/12/16 09:15

Lab Sample ID: 660-72606-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 21:08	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 21:08	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 21:08	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 21:08	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 21:08	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 21:08	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 21:08	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 21:08	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 21:08	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 21:08	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 21:08	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 21:08	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 21:08	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 21:08	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 21:08	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 21:08	1
cis-1,2-Dichloroethylene	**24**		1.0	0.65	ug/L			03/16/16 21:08	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 21:08	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 21:08	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 21:08	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 21:08	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 21:08	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 21:08	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 21:08	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 21:08	1
Tetrachloroethene	<1.0	*	1.0	0.50	ug/L			03/16/16 21:08	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 21:08	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 21:08	1
Trichloroethene	**71**		1.0	0.61	ug/L			03/16/16 21:08	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 21:08	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 21:08	1
Vinyl chloride	**1.3**		1.0	0.71	ug/L			03/16/16 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 119*		*03/16/16 21:08*	*1*
Dibromofluoromethane	*104*		*83 - 123*		*03/16/16 21:08*	*1*
Toluene-d8 (Surr)	*101*		*78 - 126*		*03/16/16 21:08*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Trip Blank 1

Lab Sample ID: 660-72663-1

Date Collected: 03/15/16 05:45
Matrix: Water
Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 12:04	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 12:04	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 12:04	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 12:04	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 12:04	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 12:04	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 12:04	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 12:04	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 12:04	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 12:04	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 12:04	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 12:04	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 12:04	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 12:04	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 12:04	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 12:04	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/21/16 12:04	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 12:04	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 12:04	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 12:04	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 12:04	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 12:04	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 12:04	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 12:04	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 12:04	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 12:04	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 12:04	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 12:04	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/21/16 12:04	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 12:04	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 12:04	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/21/16 12:04*	*1*
Dibromofluoromethane	*106*		*83 - 123*		*03/21/16 12:04*	*1*
Toluene-d8 (Surr)	*103*		*78 - 126*		*03/21/16 12:04*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Field Blank 1

Lab Sample ID: 660-72663-2

Date Collected: 03/15/16 05:55
Date Received: 03/16/16 10:20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 12:22	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 12:22	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 12:22	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 12:22	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 12:22	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 12:22	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 12:22	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 12:22	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 12:22	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 12:22	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 12:22	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 12:22	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 12:22	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 12:22	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 12:22	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 12:22	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/21/16 12:22	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 12:22	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 12:22	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 12:22	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 12:22	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 12:22	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 12:22	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 12:22	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 12:22	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 12:22	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 12:22	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 12:22	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/21/16 12:22	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 12:22	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 12:22	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 12:22*	*1*
Dibromofluoromethane	*109*		*83 - 123*		*03/21/16 12:22*	*1*
Toluene-d8 (Surr)	*105*		*78 - 126*		*03/21/16 12:22*	*1*

Client Sample ID: OW-304L

Lab Sample ID: 660-72663-3

Date Collected: 03/15/16 06:15

Matrix: Water

Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<2.0		2.0	1.2	ug/L			03/21/16 15:36	2
Bromoform	<2.0		2.0	1.3	ug/L			03/21/16 15:36	2
Bromomethane	<10		10	5.0	ug/L			03/21/16 15:36	2
Carbon tetrachloride	<2.0		2.0	0.86	ug/L			03/21/16 15:36	2
Chlorobenzene	<2.0		2.0	1.3	ug/L			03/21/16 15:36	2
Chloroethane	<10		10	5.0	ug/L			03/21/16 15:36	2
Chloroform	<2.0		2.0	1.8	ug/L			03/21/16 15:36	2
Chloromethane	<8.0		8.0	2.0	ug/L			03/21/16 15:36	2
Dibromochloromethane	<2.0		2.0	0.62	ug/L			03/21/16 15:36	2
Dibromomethane	<2.0		2.0	0.92	ug/L			03/21/16 15:36	2
1,2-Dichlorobenzene	<2.0		2.0	0.98	ug/L			03/21/16 15:36	2
1,3-Dichlorobenzene	<2.0		2.0	1.3	ug/L			03/21/16 15:36	2
1,4-Dichlorobenzene	<2.0		2.0	1.2	ug/L			03/21/16 15:36	2
Dichlorodifluoromethane	<10		10	5.0	ug/L			03/21/16 15:36	2
1,1-Dichloroethane	**4.1**		2.0	1.0	ug/L			03/21/16 15:36	2
1,2-Dichloroethane	<2.0		2.0	1.1	ug/L			03/21/16 15:36	2
trans-1,2-Dichloroethene	**1.6**	**J**	2.0	1.3	ug/L			03/21/16 15:36	2
1,1-Dichloroethene	<2.0		2.0	1.3	ug/L			03/21/16 15:36	2
1,2-Dichloropropane	<2.0		2.0	1.0	ug/L			03/21/16 15:36	2
cis-1,3-Dichloropropene	<2.0		2.0	0.78	ug/L			03/21/16 15:36	2
trans-1,3-Dichloropropene	<2.0		2.0	0.54	ug/L			03/21/16 15:36	2
Methylene Chloride	<10		10	8.0	ug/L			03/21/16 15:36	2
1,1,1,2-Tetrachloroethane	<2.0		2.0	1.3	ug/L			03/21/16 15:36	2
1,1,2,2-Tetrachloroethane	<2.0		2.0	0.34	ug/L			03/21/16 15:36	2
Tetrachloroethene	<2.0		2.0	1.0	ug/L			03/21/16 15:36	2
1,1,1-Trichloroethane	<2.0		2.0	0.94	ug/L			03/21/16 15:36	2
1,1,2-Trichloroethane	<2.0		2.0	0.94	ug/L			03/21/16 15:36	2
Trichlorofluoromethane	<10		10	5.0	ug/L			03/21/16 15:36	2
1,2,3-Trichloropropane	<2.0		2.0	0.88	ug/L			03/21/16 15:36	2
Vinyl chloride	**17**		2.0	1.4	ug/L			03/21/16 15:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 15:36*	*2*
Dibromofluoromethane	*106*		*83 - 123*		*03/21/16 15:36*	*2*
Toluene-d8 (Surr)	*102*		*78 - 126*		*03/21/16 15:36*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**300**		20	13	ug/L			03/21/16 15:00	20
Trichloroethene	**530**		20	12	ug/L			03/21/16 15:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 119*		*03/21/16 15:00*	*20*
Dibromofluoromethane	*106*		*83 - 123*		*03/21/16 15:00*	*20*
Toluene-d8 (Surr)	*102*		*78 - 126*		*03/21/16 15:00*	*20*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	**6.6**		1.1	0.55	ug/L			03/21/16 23:01	1
Ethylene	**5.7**		1.0	0.50	ug/L			03/21/16 23:01	1

Client Sample ID: OW-304L

Date Collected: 03/15/16 06:15
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	17		0.58	0.29	ug/L			03/21/16 23:01	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	1200		200	50	ug/L		03/23/16 09:30	03/23/16 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	2.5		1.0	0.50	mg/L			04/06/16 17:14	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-304R

Date Collected: 03/15/16 06:00
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<2.0		2.0	1.2	ug/L			03/21/16 15:53	2
Bromoform	<2.0		2.0	1.3	ug/L			03/21/16 15:53	2
Bromomethane	<10		10	5.0	ug/L			03/21/16 15:53	2
Carbon tetrachloride	<2.0		2.0	0.86	ug/L			03/21/16 15:53	2
Chlorobenzene	<2.0		2.0	1.3	ug/L			03/21/16 15:53	2
Chloroethane	<10		10	5.0	ug/L			03/21/16 15:53	2
Chloroform	<2.0		2.0	1.8	ug/L			03/21/16 15:53	2
Chloromethane	<8.0		8.0	2.0	ug/L			03/21/16 15:53	2
Dibromochloromethane	<2.0		2.0	0.62	ug/L			03/21/16 15:53	2
Dibromomethane	<2.0		2.0	0.92	ug/L			03/21/16 15:53	2
1,2-Dichlorobenzene	<2.0		2.0	0.98	ug/L			03/21/16 15:53	2
1,3-Dichlorobenzene	<2.0		2.0	1.3	ug/L			03/21/16 15:53	2
1,4-Dichlorobenzene	<2.0		2.0	1.2	ug/L			03/21/16 15:53	2
Dichlorodifluoromethane	<10		10	5.0	ug/L			03/21/16 15:53	2
1,1-Dichloroethane	<2.0		2.0	1.0	ug/L			03/21/16 15:53	2
1,2-Dichloroethane	**5.6**		2.0	1.1	ug/L			03/21/16 15:53	2
cis-1,2-Dichloroethylene	**140**		2.0	1.3	ug/L			03/21/16 15:53	2
trans-1,2-Dichloroethene	**1.8**	**J**	2.0	1.3	ug/L			03/21/16 15:53	2
1,1-Dichloroethene	<2.0		2.0	1.3	ug/L			03/21/16 15:53	2
1,2-Dichloropropane	<2.0		2.0	1.0	ug/L			03/21/16 15:53	2
cis-1,3-Dichloropropene	<2.0		2.0	0.78	ug/L			03/21/16 15:53	2
trans-1,3-Dichloropropene	<2.0		2.0	0.54	ug/L			03/21/16 15:53	2
Methylene Chloride	<10		10	8.0	ug/L			03/21/16 15:53	2
1,1,1,2-Tetrachloroethane	<2.0		2.0	1.3	ug/L			03/21/16 15:53	2
1,1,2,2-Tetrachloroethane	<2.0		2.0	0.34	ug/L			03/21/16 15:53	2
Tetrachloroethene	**2.5**		2.0	1.0	ug/L			03/21/16 15:53	2
1,1,1-Trichloroethane	<2.0		2.0	0.94	ug/L			03/21/16 15:53	2
1,1,2-Trichloroethane	<2.0		2.0	0.94	ug/L			03/21/16 15:53	2
Trichlorofluoromethane	<10		10	5.0	ug/L			03/21/16 15:53	2
1,2,3-Trichloropropane	<2.0		2.0	0.88	ug/L			03/21/16 15:53	2
Vinyl chloride	**190**		2.0	1.4	ug/L			03/21/16 15:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/21/16 15:53*	*2*
Dibromofluoromethane	*103*		*83 - 123*		*03/21/16 15:53*	*2*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/21/16 15:53*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**1200**		20	12	ug/L			03/21/16 15:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 15:18*	*20*
Dibromofluoromethane	*100*		*83 - 123*		*03/21/16 15:18*	*20*
Toluene-d8 (Surr)	*104*		*78 - 126*		*03/21/16 15:18*	*20*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-506R

Date Collected: 03/15/16 06:55
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 18:35	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 18:35	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 18:35	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 18:35	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 18:35	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 18:35	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 18:35	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 18:35	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 18:35	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 18:35	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 18:35	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 18:35	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 18:35	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 18:35	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 18:35	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 18:35	1
cis-1,2-Dichloroethylene	**18**		1.0	0.65	ug/L			03/21/16 18:35	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 18:35	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 18:35	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 18:35	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 18:35	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 18:35	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 18:35	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 18:35	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 18:35	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 18:35	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 18:35	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 18:35	1
Trichloroethene	**38**		1.0	0.61	ug/L			03/21/16 18:35	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 18:35	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 18:35	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 119*		*03/21/16 18:35*	*1*
Dibromofluoromethane	*102*		*83 - 123*		*03/21/16 18:35*	*1*
Toluene-d8 (Surr)	*102*		*78 - 126*		*03/21/16 18:35*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	**0.93**	**J**	1.1	0.55	ug/L			03/21/16 23:14	1
Ethylene	**0.91**	**J**	1.0	0.50	ug/L			03/21/16 23:14	1
Methane	**0.94**		0.58	0.29	ug/L			03/21/16 23:14	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	**110**	**J**	200	50	ug/L		03/23/16 09:30	03/23/16 16:27	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-506R

Date Collected: 03/15/16 06:55
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-5

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.0		1.0	0.50	mg/L			04/06/16 17:29	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-519U

Date Collected: 03/15/16 07:15
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 18:53	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 18:53	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 18:53	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 18:53	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 18:53	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 18:53	1
Chloroform	**2.5**		1.0	0.90	ug/L			03/21/16 18:53	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 18:53	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 18:53	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 18:53	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 18:53	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 18:53	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 18:53	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 18:53	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 18:53	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 18:53	1
cis-1,2-Dichloroethylene	**68**		1.0	0.65	ug/L			03/21/16 18:53	1
trans-1,2-Dichloroethene	**2.8**		1.0	0.67	ug/L			03/21/16 18:53	1
1,1-Dichloroethene	**1.9**		1.0	0.67	ug/L			03/21/16 18:53	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 18:53	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 18:53	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 18:53	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 18:53	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 18:53	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 18:53	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 18:53	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 18:53	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 18:53	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 18:53	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 18:53	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 119*		*03/21/16 18:53*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/21/16 18:53*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 18:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**140**		5.0	3.1	ug/L			03/22/16 19:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/22/16 19:50*	*5*
Dibromofluoromethane	*103*		*83 - 123*		*03/22/16 19:50*	*5*
Toluene-d8 (Surr)	*101*		*78 - 126*		*03/22/16 19:50*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/21/16 23:27	1
Ethylene	<1.0		1.0	0.50	ug/L			03/21/16 23:27	1

Client Sample ID: GZ-519U

Date Collected: 03/15/16 07:15
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	1.6		0.58	0.29	ug/L			03/21/16 23:27	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	110	J	200	50	ug/L		03/23/16 09:30	03/23/16 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.92	J	1.0	0.50	mg/L			04/06/16 17:43	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-402U

Date Collected: 03/15/16 08:00
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 19:12	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 19:12	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 19:12	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 19:12	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 19:12	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 19:12	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 19:12	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 19:12	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 19:12	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 19:12	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 19:12	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 19:12	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 19:12	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 19:12	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 19:12	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 19:12	1
cis-1,2-Dichloroethylene	**19**		1.0	0.65	ug/L			03/21/16 19:12	1
trans-1,2-Dichloroethene	**1.2**		1.0	0.67	ug/L			03/21/16 19:12	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 19:12	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 19:12	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 19:12	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 19:12	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 19:12	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 19:12	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 19:12	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 19:12	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 19:12	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 19:12	1
Trichloroethene	**62**		1.0	0.61	ug/L			03/21/16 19:12	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 19:12	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 19:12	1
Vinyl chloride	<1.0	F1	1.0	0.71	ug/L			03/21/16 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 119*		*03/21/16 19:12*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/21/16 19:12*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/21/16 19:12*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-402U DUP

Lab Sample ID: 660-72663-8

Date Collected: 03/15/16 08:00
Matrix: Water
Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 20:26	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 20:26	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 20:26	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 20:26	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 20:26	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 20:26	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 20:26	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 20:26	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 20:26	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 20:26	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 20:26	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 20:26	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 20:26	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 20:26	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 20:26	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 20:26	1
cis-1,2-Dichloroethylene	**19**		1.0	0.65	ug/L			03/21/16 20:26	1
trans-1,2-Dichloroethene	**0.98**	**J**	1.0	0.67	ug/L			03/21/16 20:26	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 20:26	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 20:26	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 20:26	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 20:26	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 20:26	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 20:26	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 20:26	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 20:26	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 20:26	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 20:26	1
Trichloroethene	**61**		1.0	0.61	ug/L			03/21/16 20:26	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 20:26	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 20:26	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 119*		*03/21/16 20:26*	*1*
Dibromofluoromethane	*105*		*83 - 123*		*03/21/16 20:26*	*1*
Toluene-d8 (Surr)	*104*		*78 - 126*		*03/21/16 20:26*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-101

Date Collected: 03/15/16 08:05
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<5.0		5.0	2.9	ug/L			03/22/16 00:09	5
Bromoform	<5.0		5.0	3.2	ug/L			03/22/16 00:09	5
Bromomethane	<25		25	13	ug/L			03/22/16 00:09	5
Carbon tetrachloride	<5.0		5.0	2.2	ug/L			03/22/16 00:09	5
Chlorobenzene	<5.0		5.0	3.2	ug/L			03/22/16 00:09	5
Chloroethane	<25		25	13	ug/L			03/22/16 00:09	5
Chloroform	<5.0		5.0	4.5	ug/L			03/22/16 00:09	5
Chloromethane	<20		20	5.0	ug/L			03/22/16 00:09	5
Dibromochloromethane	<5.0		5.0	1.6	ug/L			03/22/16 00:09	5
Dibromomethane	<5.0		5.0	2.3	ug/L			03/22/16 00:09	5
1,2-Dichlorobenzene	<5.0		5.0	2.5	ug/L			03/22/16 00:09	5
1,3-Dichlorobenzene	<5.0		5.0	3.2	ug/L			03/22/16 00:09	5
1,4-Dichlorobenzene	<5.0		5.0	3.0	ug/L			03/22/16 00:09	5
Dichlorodifluoromethane	<25		25	13	ug/L			03/22/16 00:09	5
1,1-Dichloroethane	<5.0		5.0	2.6	ug/L			03/22/16 00:09	5
1,2-Dichloroethane	<5.0		5.0	2.9	ug/L			03/22/16 00:09	5
trans-1,2-Dichloroethene	**32**		5.0	3.4	ug/L			03/22/16 00:09	5
1,1-Dichloroethene	**11**		5.0	3.4	ug/L			03/22/16 00:09	5
1,2-Dichloropropane	<5.0		5.0	2.6	ug/L			03/22/16 00:09	5
cis-1,3-Dichloropropene	<5.0		5.0	2.0	ug/L			03/22/16 00:09	5
trans-1,3-Dichloropropene	<5.0		5.0	1.4	ug/L			03/22/16 00:09	5
Methylene Chloride	<25		25	20	ug/L			03/22/16 00:09	5
1,1,1,2-Tetrachloroethane	<5.0		5.0	3.2	ug/L			03/22/16 00:09	5
1,1,2,2-Tetrachloroethane	<5.0		5.0	0.85	ug/L			03/22/16 00:09	5
Tetrachloroethene	<5.0		5.0	2.5	ug/L			03/22/16 00:09	5
1,1,1-Trichloroethane	<5.0		5.0	2.4	ug/L			03/22/16 00:09	5
1,1,2-Trichloroethane	<5.0		5.0	2.4	ug/L			03/22/16 00:09	5
Trichlorofluoromethane	<25		25	13	ug/L			03/22/16 00:09	5
1,2,3-Trichloropropane	<5.0		5.0	2.2	ug/L			03/22/16 00:09	5
Vinyl chloride	<5.0		5.0	3.6	ug/L			03/22/16 00:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/22/16 00:09*	*5*
Dibromofluoromethane	*101*		*83 - 123*		*03/22/16 00:09*	*5*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/22/16 00:09*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**1800**		50	33	ug/L			03/21/16 21:59	50
Trichloroethene	**3200**		50	31	ug/L			03/21/16 21:59	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/21/16 21:59*	*50*
Dibromofluoromethane	*100*		*83 - 123*		*03/21/16 21:59*	*50*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/21/16 21:59*	*50*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/21/16 23:40	1
Ethylene	<1.0		1.0	0.50	ug/L			03/21/16 23:40	1

Client Sample ID: OW-101

Date Collected: 03/15/16 08:05
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.79		0.58	0.29	ug/L			03/21/16 23:40	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.7		1.0	0.50	mg/L			04/06/16 17:54	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-101L

Lab Sample ID: 660-72663-10

Date Collected: 03/15/16 09:25
Matrix: Water
Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 16:08	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 16:08	1
Bromomethane	<5.0	F1	5.0	2.5	ug/L			03/22/16 16:08	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 16:08	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 16:08	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 16:08	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 16:08	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 16:08	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 16:08	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 16:08	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 16:08	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 16:08	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 16:08	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 16:08	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 16:08	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 16:08	1
cis-1,2-Dichloroethylene	**54**		1.0	0.65	ug/L			03/22/16 16:08	1
trans-1,2-Dichloroethene	**0.90**	**J**	1.0	0.67	ug/L			03/22/16 16:08	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 16:08	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 16:08	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 16:08	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 16:08	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 16:08	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 16:08	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 16:08	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 16:08	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 16:08	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 16:08	1
Trichloroethene	**3.2**		1.0	0.61	ug/L			03/22/16 16:08	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 16:08	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 16:08	1
Vinyl chloride	<1.0	F1	1.0	0.71	ug/L			03/22/16 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/22/16 16:08*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/22/16 16:08*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/22/16 16:08*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-101L DUP

Lab Sample ID: 660-72663-12

Date Collected: 03/15/16 09:25
Matrix: Water
Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 20:45	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 20:45	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 20:45	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 20:45	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 20:45	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 20:45	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 20:45	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 20:45	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 20:45	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 20:45	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 20:45	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 20:45	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 20:45	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 20:45	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 20:45	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 20:45	1
cis-1,2-Dichloroethylene	**55**		1.0	0.65	ug/L			03/21/16 20:45	1
trans-1,2-Dichloroethene	**0.84**	**J**	1.0	0.67	ug/L			03/21/16 20:45	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 20:45	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 20:45	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 20:45	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 20:45	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 20:45	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 20:45	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 20:45	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 20:45	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 20:45	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 20:45	1
Trichloroethene	**3.8**		1.0	0.61	ug/L			03/21/16 20:45	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 20:45	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 20:45	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 119*		*03/21/16 20:45*	*1*
Dibromofluoromethane	*102*		*83 - 123*		*03/21/16 20:45*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/21/16 20:45*	*1*

Client Sample ID: OW-307

Lab Sample ID: 660-72663-13

Date Collected: 03/15/16 09:30

Matrix: Water

Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 23:32	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 23:32	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 23:32	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 23:32	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 23:32	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 23:32	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 23:32	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 23:32	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 23:32	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 23:32	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 23:32	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 23:32	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 23:32	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 23:32	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 23:32	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 23:32	1
trans-1,2-Dichloroethene	**1.9**		1.0	0.67	ug/L			03/21/16 23:32	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 23:32	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 23:32	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 23:32	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 23:32	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 23:32	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 23:32	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 23:32	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 23:32	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 23:32	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 23:32	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 23:32	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 23:32	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 23:32*	*1*
Dibromofluoromethane	*102*		*83 - 123*		*03/21/16 23:32*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 23:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**140**		5.0	3.3	ug/L			03/21/16 22:18	5
Trichloroethene	**200**		5.0	3.1	ug/L			03/21/16 22:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 22:18*	*5*
Dibromofluoromethane	*104*		*83 - 123*		*03/21/16 22:18*	*5*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 22:18*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/21/16 23:53	1
Ethylene	<1.0		1.0	0.50	ug/L			03/21/16 23:53	1

Client Sample ID: OW-307

Date Collected: 03/15/16 09:30
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**9.9**		0.58	0.29	ug/L			03/21/16 23:53	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**1.3**		1.0	0.50	mg/L			04/06/16 18:11	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-703R

Date Collected: 03/15/16 10:05
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 22:55	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 22:55	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 22:55	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 22:55	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 22:55	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 22:55	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 22:55	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 22:55	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 22:55	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 22:55	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 22:55	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 22:55	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 22:55	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 22:55	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 22:55	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 22:55	1
cis-1,2-Dichloroethylene	**45**		1.0	0.65	ug/L			03/21/16 22:55	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 22:55	1
1,1-Dichloroethene	**2.5**		1.0	0.67	ug/L			03/21/16 22:55	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 22:55	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 22:55	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 22:55	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 22:55	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 22:55	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 22:55	1
Tetrachloroethene	**2.0**		1.0	0.50	ug/L			03/21/16 22:55	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 22:55	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 22:55	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 22:55	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 22:55	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 22:55*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/21/16 22:55*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 22:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**170**		5.0	3.1	ug/L			03/21/16 22:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 22:36*	*5*
Dibromofluoromethane	*102*		*83 - 123*		*03/21/16 22:36*	*5*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 22:36*	*5*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-505R

Date Collected: 03/15/16 10:10
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 21:03	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 21:03	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 21:03	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 21:03	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 21:03	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 21:03	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 21:03	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 21:03	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 21:03	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 21:03	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 21:03	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 21:03	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 21:03	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 21:03	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 21:03	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 21:03	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 21:03	1
1,1-Dichloroethene	**1.2**		1.0	0.67	ug/L			03/21/16 21:03	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 21:03	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 21:03	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 21:03	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 21:03	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 21:03	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 21:03	1
Tetrachloroethene	**1.2**		1.0	0.50	ug/L			03/21/16 21:03	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 21:03	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 21:03	1
Trichloroethene	**81**		1.0	0.61	ug/L			03/21/16 21:03	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 21:03	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 21:03	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 119*		*03/21/16 21:03*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/21/16 21:03*	*1*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/21/16 21:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**100**		5.0	3.3	ug/L			03/22/16 20:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/22/16 20:09*	*5*
Dibromofluoromethane	*101*		*83 - 123*		*03/22/16 20:09*	*5*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 20:09*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	**0.71**	**J**	1.1	0.55	ug/L			03/22/16 00:05	1
Ethylene	<1.0		1.0	0.50	ug/L			03/22/16 00:05	1

Client Sample ID: GZ-505R

Date Collected: 03/15/16 10:10
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**330**		0.58	0.29	ug/L			03/22/16 00:05	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.79**	**J**	1.0	0.50	mg/L			04/06/16 18:48	1

Client Sample ID: WB-3L

Lab Sample ID: 660-72663-16

Date Collected: 03/15/16 11:35

Matrix: Water

Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 21:22	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 21:22	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 21:22	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 21:22	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 21:22	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 21:22	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 21:22	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 21:22	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 21:22	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 21:22	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 21:22	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 21:22	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 21:22	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 21:22	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 21:22	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 21:22	1
cis-1,2-Dichloroethylene	**98**		1.0	0.65	ug/L			03/21/16 21:22	1
trans-1,2-Dichloroethene	**3.6**		1.0	0.67	ug/L			03/21/16 21:22	1
1,1-Dichloroethene	**0.77**	**J**	1.0	0.67	ug/L			03/21/16 21:22	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 21:22	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 21:22	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 21:22	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 21:22	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 21:22	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 21:22	1
Tetrachloroethene	**4.7**		1.0	0.50	ug/L			03/21/16 21:22	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 21:22	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 21:22	1
Trichloroethene	**75**		1.0	0.61	ug/L			03/21/16 21:22	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 21:22	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 21:22	1
Vinyl chloride	**7.6**		1.0	0.71	ug/L			03/21/16 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/21/16 21:22*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/21/16 21:22*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 21:22*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/22/16 00:18	1
Ethylene	<1.0		1.0	0.50	ug/L			03/22/16 00:18	1
Methane	**2.9**		0.58	0.29	ug/L			03/22/16 00:18	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:43	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-3L

Date Collected: 03/15/16 11:35
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-16

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.90	J	1.0	0.50	mg/L			04/06/16 19:03	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-3L DUP

Date Collected: 03/15/16 11:35
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-17

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 21:41	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 21:41	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 21:41	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 21:41	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 21:41	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 21:41	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 21:41	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 21:41	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 21:41	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 21:41	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 21:41	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 21:41	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 21:41	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 21:41	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 21:41	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 21:41	1
trans-1,2-Dichloroethene	**3.4**		1.0	0.67	ug/L			03/21/16 21:41	1
1,1-Dichloroethene	**0.75**	**J**	1.0	0.67	ug/L			03/21/16 21:41	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 21:41	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 21:41	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 21:41	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 21:41	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 21:41	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 21:41	1
Tetrachloroethene	**4.7**		1.0	0.50	ug/L			03/21/16 21:41	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 21:41	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 21:41	1
Trichloroethene	**83**		1.0	0.61	ug/L			03/21/16 21:41	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 21:41	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 21:41	1
Vinyl chloride	**7.6**		1.0	0.71	ug/L			03/21/16 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/21/16 21:41*	*1*
Dibromofluoromethane	*102*		*83 - 123*		*03/21/16 21:41*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/21/16 21:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**83**		5.0	3.3	ug/L			03/22/16 20:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/22/16 20:27*	*5*
Dibromofluoromethane	*102*		*83 - 123*		*03/22/16 20:27*	*5*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 20:27*	*5*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-4L

Date Collected: 03/15/16 11:30
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-18

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 19:13	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 19:13	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 19:13	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 19:13	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 19:13	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 19:13	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 19:13	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 19:13	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 19:13	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 19:13	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 19:13	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 19:13	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 19:13	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 19:13	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 19:13	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 19:13	1
cis-1,2-Dichloroethylene	**56**		1.0	0.65	ug/L			03/22/16 19:13	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 19:13	1
1,1-Dichloroethene	**0.87**	**J**	1.0	0.67	ug/L			03/22/16 19:13	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 19:13	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 19:13	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 19:13	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 19:13	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 19:13	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 19:13	1
Tetrachloroethene	**1.4**		1.0	0.50	ug/L			03/22/16 19:13	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 19:13	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 19:13	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 19:13	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 19:13	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/22/16 19:13*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/22/16 19:13*	*1*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/22/16 19:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**110**		5.0	3.1	ug/L			03/23/16 20:13	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*70 - 119*		*03/23/16 20:13*	*5*
Dibromofluoromethane	*102*		*83 - 123*		*03/23/16 20:13*	*5*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/23/16 20:13*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/22/16 00:31	1
Ethylene	<1.0		1.0	0.50	ug/L			03/22/16 00:31	1

Client Sample ID: WB-4L

Date Collected: 03/15/16 11:30
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-18

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**4.6**		0.58	0.29	ug/L			03/22/16 00:31	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**1.2**		1.0	0.50	mg/L			04/06/16 19:17	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-4L DUP

Lab Sample ID: 660-72663-19

Date Collected: 03/15/16 11:30
Matrix: Water
Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 19:32	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 19:32	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 19:32	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 19:32	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 19:32	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 19:32	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 19:32	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 19:32	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 19:32	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 19:32	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 19:32	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 19:32	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 19:32	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 19:32	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 19:32	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 19:32	1
cis-1,2-Dichloroethylene	**56**		1.0	0.65	ug/L			03/22/16 19:32	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 19:32	1
1,1-Dichloroethene	**0.89**	**J**	1.0	0.67	ug/L			03/22/16 19:32	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 19:32	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 19:32	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 19:32	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 19:32	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 19:32	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 19:32	1
Tetrachloroethene	**1.4**		1.0	0.50	ug/L			03/22/16 19:32	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 19:32	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 19:32	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 19:32	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 19:32	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/22/16 19:32*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/22/16 19:32*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/22/16 19:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**110**		5.0	3.1	ug/L			03/23/16 20:31	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/23/16 20:31*	*5*
Dibromofluoromethane	*102*		*83 - 123*		*03/23/16 20:31*	*5*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/23/16 20:31*	*5*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-2U

Date Collected: 03/15/16 12:20
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 17:41	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 17:41	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 17:41	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 17:41	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 17:41	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 17:41	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 17:41	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 17:41	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 17:41	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 17:41	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 17:41	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 17:41	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 17:41	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 17:41	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 17:41	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 17:41	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/22/16 17:41	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 17:41	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 17:41	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 17:41	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 17:41	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 17:41	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 17:41	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 17:41	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 17:41	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 17:41	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 17:41	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 17:41	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/22/16 17:41	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 17:41	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 17:41	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/22/16 17:41*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/22/16 17:41*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/22/16 17:41*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-2L

Date Collected: 03/15/16 12:30
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 18:55	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 18:55	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 18:55	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 18:55	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 18:55	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 18:55	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 18:55	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 18:55	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 18:55	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 18:55	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 18:55	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 18:55	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 18:55	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 18:55	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 18:55	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 18:55	1
cis-1,2-Dichloroethylene	**42**		1.0	0.65	ug/L			03/22/16 18:55	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 18:55	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 18:55	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 18:55	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 18:55	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 18:55	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 18:55	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 18:55	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 18:55	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 18:55	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 18:55	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 18:55	1
Trichloroethene	**10**		1.0	0.61	ug/L			03/22/16 18:55	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 18:55	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 18:55	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 119*		*03/22/16 18:55*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/22/16 18:55*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 18:55*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-404U

Date Collected: 03/15/16 13:05
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-22

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 17:59	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 17:59	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 17:59	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 17:59	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 17:59	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 17:59	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 17:59	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 17:59	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 17:59	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 17:59	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 17:59	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 17:59	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 17:59	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 17:59	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 17:59	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 17:59	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/22/16 17:59	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 17:59	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 17:59	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 17:59	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 17:59	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 17:59	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 17:59	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 17:59	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 17:59	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 17:59	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 17:59	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 17:59	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/22/16 17:59	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 17:59	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 17:59	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/22/16 17:59*	*1*
Dibromofluoromethane	*102*		*83 - 123*		*03/22/16 17:59*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 17:59*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-404R

Date Collected: 03/15/16 13:20
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-23

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 18:18	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 18:18	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 18:18	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 18:18	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 18:18	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 18:18	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 18:18	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 18:18	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 18:18	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 18:18	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 18:18	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 18:18	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 18:18	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 18:18	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 18:18	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 18:18	1
cis-1,2-Dichloroethylene	**12**		1.0	0.65	ug/L			03/22/16 18:18	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 18:18	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 18:18	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 18:18	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 18:18	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 18:18	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 18:18	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 18:18	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 18:18	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 18:18	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 18:18	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 18:18	1
Trichloroethene	**22**		1.0	0.61	ug/L			03/22/16 18:18	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 18:18	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 18:18	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/22/16 18:18*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/22/16 18:18*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 18:18*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-1L

Date Collected: 03/15/16 14:15
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-24

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 21:04	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 21:04	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 21:04	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 21:04	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 21:04	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 21:04	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 21:04	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 21:04	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 21:04	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 21:04	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 21:04	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 21:04	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 21:04	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 21:04	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 21:04	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 21:04	1
trans-1,2-Dichloroethene	**3.4**		1.0	0.67	ug/L			03/22/16 21:04	1
1,1-Dichloroethene	**1.1**		1.0	0.67	ug/L			03/22/16 21:04	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 21:04	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 21:04	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 21:04	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 21:04	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 21:04	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 21:04	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 21:04	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 21:04	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 21:04	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 21:04	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 21:04	1
Vinyl chloride	**4.2**		1.0	0.71	ug/L			03/22/16 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 119*		*03/22/16 21:04*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/22/16 21:04*	*1*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/22/16 21:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**210**		5.0	3.3	ug/L			03/22/16 20:46	5
Trichloroethene	**170**		5.0	3.1	ug/L			03/22/16 20:46	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 119*		*03/22/16 20:46*	*5*
Dibromofluoromethane	*102*		*83 - 123*		*03/22/16 20:46*	*5*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 20:46*	*5*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: WB-1U

Date Collected: 03/15/16 14:30
Date Received: 03/16/16 10:20

Lab Sample ID: 660-72663-25

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 18:36	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 18:36	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 18:36	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 18:36	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 18:36	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 18:36	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 18:36	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 18:36	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 18:36	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 18:36	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 18:36	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 18:36	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 18:36	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 18:36	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 18:36	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 18:36	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/22/16 18:36	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 18:36	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 18:36	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 18:36	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 18:36	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 18:36	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 18:36	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 18:36	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 18:36	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 18:36	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 18:36	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 18:36	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/22/16 18:36	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 18:36	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 18:36	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 119*		*03/22/16 18:36*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/22/16 18:36*	*1*
Toluene-d8 (Surr)	*103*		*78 - 126*		*03/22/16 18:36*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: TRIP BLANK 2

Lab Sample ID: 660-72663-26

Date Collected: 03/15/16 05:45

Matrix: Water

Date Received: 03/16/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 17:22	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 17:22	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 17:22	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 17:22	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 17:22	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 17:22	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 17:22	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 17:22	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 17:22	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 17:22	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 17:22	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 17:22	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 17:22	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 17:22	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 17:22	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 17:22	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/22/16 17:22	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 17:22	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 17:22	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 17:22	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 17:22	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 17:22	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 17:22	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 17:22	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 17:22	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 17:22	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 17:22	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 17:22	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/22/16 17:22	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 17:22	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 17:22	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/22/16 17:22*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/22/16 17:22*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 17:22*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Trip Blank

Lab Sample ID: 660-72697-1

Date Collected: 03/16/16 07:30
Matrix: Water
Date Received: 03/17/16 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 14:58	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 14:58	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 14:58	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 14:58	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 14:58	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 14:58	1
Chloroform	<1.0		1.0	0.90	ug/L			03/23/16 14:58	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 14:58	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/23/16 14:58	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 14:58	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 14:58	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 14:58	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 14:58	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 14:58	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/23/16 14:58	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 14:58	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/23/16 14:58	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 14:58	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 14:58	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 14:58	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 14:58	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 14:58	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 14:58	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 14:58	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 14:58	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/23/16 14:58	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 14:58	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 14:58	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/23/16 14:58	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 14:58	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 14:58	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/23/16 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/23/16 14:58*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/23/16 14:58*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/23/16 14:58*	*1*

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Field Blank

Lab Sample ID: 660-72697-2

Date Collected: 03/16/16 08:30
Matrix: Water
Date Received: 03/17/16 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 15:17	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 15:17	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 15:17	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 15:17	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 15:17	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 15:17	1
Chloroform	<1.0		1.0	0.90	ug/L			03/23/16 15:17	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 15:17	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/23/16 15:17	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 15:17	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 15:17	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 15:17	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 15:17	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 15:17	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/23/16 15:17	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 15:17	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/23/16 15:17	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 15:17	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 15:17	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 15:17	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 15:17	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 15:17	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 15:17	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 15:17	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 15:17	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/23/16 15:17	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 15:17	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 15:17	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/23/16 15:17	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 15:17	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 15:17	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/23/16 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 119*		*03/23/16 15:17*	*1*
Dibromofluoromethane	*99*		*83 - 123*		*03/23/16 15:17*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/23/16 15:17*	*1*

Client Sample ID: IW-1

Date Collected: 03/16/16 13:00
Date Received: 03/17/16 09:00

Lab Sample ID: 660-72697-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 22:04	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 22:04	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 22:04	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 22:04	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 22:04	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 22:04	1
Chloroform	**8.0**		1.0	0.90	ug/L			03/23/16 22:04	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 22:04	1
Dibromochloromethane	**1.9**		1.0	0.31	ug/L			03/23/16 22:04	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 22:04	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 22:04	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 22:04	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 22:04	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 22:04	1
1,1-Dichloroethane	**0.68**	**J**	1.0	0.52	ug/L			03/23/16 22:04	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 22:04	1
1,1-Dichloroethene	**17**		1.0	0.67	ug/L			03/23/16 22:04	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 22:04	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 22:04	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 22:04	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 22:04	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 22:04	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 22:04	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/23/16 22:04	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 22:04	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 22:04	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 22:04	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 22:04	1
Vinyl chloride	**12**		1.0	0.71	ug/L			03/23/16 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/23/16 22:04*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/23/16 22:04*	*1*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/23/16 22:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**320**		10	6.5	ug/L			03/23/16 20:50	10
trans-1,2-Dichloroethene	**98**		10	6.7	ug/L			03/23/16 20:50	10
Trichloroethene	**670**		10	6.1	ug/L			03/23/16 20:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/23/16 20:50*	*10*
Dibromofluoromethane	*103*		*83 - 123*		*03/23/16 20:50*	*10*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/23/16 20:50*	*10*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/22/16 00:44	1
Ethylene	**0.98**	**J**	1.0	0.50	ug/L			03/22/16 00:44	1

Client Sample ID: IW-1

Lab Sample ID: 660-72697-3

Date Collected: 03/16/16 13:00

Matrix: Water

Date Received: 03/17/16 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	260		0.58	0.29	ug/L			03/22/16 00:44	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	240		200	50	ug/L		03/23/16 09:30	03/23/16 16:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	7.7		1.0	0.50	mg/L			04/02/16 20:26	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: IW-2

Date Collected: 03/16/16 10:15
Date Received: 03/17/16 09:00

Lab Sample ID: 660-72697-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 21:27	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 21:27	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 21:27	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 21:27	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 21:27	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 21:27	1
Chloroform	<1.0		1.0	0.90	ug/L			03/23/16 21:27	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 21:27	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/23/16 21:27	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 21:27	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 21:27	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 21:27	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 21:27	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 21:27	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/23/16 21:27	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 21:27	1
trans-1,2-Dichloroethene	**2.1**		1.0	0.67	ug/L			03/23/16 21:27	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 21:27	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 21:27	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 21:27	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 21:27	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 21:27	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 21:27	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 21:27	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/23/16 21:27	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 21:27	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 21:27	1
Trichloroethene	**55**		1.0	0.61	ug/L			03/23/16 21:27	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 21:27	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 21:27	1
Vinyl chloride	**3.2**		1.0	0.71	ug/L			03/23/16 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/23/16 21:27*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/23/16 21:27*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/23/16 21:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethylene	**130**		5.0	3.3	ug/L			03/23/16 21:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*70 - 119*		*03/23/16 21:08*	*5*
Dibromofluoromethane	*103*		*83 - 123*		*03/23/16 21:08*	*5*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/23/16 21:08*	*5*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	**1.1**		1.1	0.55	ug/L			03/22/16 00:57	1
Ethylene	**1.1**		1.0	0.50	ug/L			03/22/16 00:57	1

Client Sample ID: IW-2

Date Collected: 03/16/16 10:15
Date Received: 03/17/16 09:00

Lab Sample ID: 660-72697-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	43		0.58	0.29	ug/L			03/22/16 00:57	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.8		1.0	0.50	mg/L			04/06/16 19:31	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: IW-3

Date Collected: 03/16/16 11:15
Date Received: 03/17/16 09:00

Lab Sample ID: 660-72697-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 15:36	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 15:36	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 15:36	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 15:36	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 15:36	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 15:36	1
Chloroform	<1.0		1.0	0.90	ug/L			03/23/16 15:36	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 15:36	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/23/16 15:36	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 15:36	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 15:36	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 15:36	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 15:36	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 15:36	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/23/16 15:36	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 15:36	1
cis-1,2-Dichloroethylene	**42**		1.0	0.65	ug/L			03/23/16 15:36	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 15:36	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 15:36	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 15:36	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 15:36	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 15:36	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 15:36	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 15:36	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 15:36	1
Tetrachloroethene	**1.4**		1.0	0.50	ug/L			03/23/16 15:36	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 15:36	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 15:36	1
Trichloroethene	**31**		1.0	0.61	ug/L			03/23/16 15:36	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 15:36	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 15:36	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/23/16 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 119*		*03/23/16 15:36*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/23/16 15:36*	*1*
Toluene-d8 (Surr)	*99*		*78 - 126*		*03/23/16 15:36*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/22/16 01:10	1
Ethylene	<1.0		1.0	0.50	ug/L			03/22/16 01:10	1
Methane	**39**		0.58	0.29	ug/L			03/22/16 01:10	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 16:55	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: IW-3

Date Collected: 03/16/16 11:15
Date Received: 03/17/16 09:00

Lab Sample ID: 660-72697-5

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.1		1.0	0.50	mg/L			04/06/16 20:39	1

Client Sample Results

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Purge Water

Lab Sample ID: 660-72731-1

Date Collected: 03/18/16 13:00
Matrix: Water
Date Received: 03/19/16 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 16:31	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 16:31	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 16:31	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 16:31	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 16:31	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 16:31	1
Chloroform	<1.0		1.0	0.90	ug/L			03/23/16 16:31	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 16:31	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/23/16 16:31	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 16:31	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 16:31	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 16:31	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 16:31	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 16:31	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/23/16 16:31	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 16:31	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/23/16 16:31	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 16:31	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 16:31	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 16:31	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 16:31	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 16:31	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 16:31	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 16:31	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 16:31	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/23/16 16:31	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 16:31	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 16:31	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/23/16 16:31	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 16:31	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 16:31	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/23/16 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 119*		*03/23/16 16:31*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/23/16 16:31*	*1*
Toluene-d8 (Surr)	*101*		*78 - 126*		*03/23/16 16:31*	*1*

Default Detection Limits

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.63	ug/L	8260B
1,1,1-Trichloroethane	1.0	0.47	ug/L	8260B
1,1,2,2-Tetrachloroethane	1.0	0.17	ug/L	8260B
1,1,2-Trichloroethane	1.0	0.47	ug/L	8260B
1,1-Dichloroethane	1.0	0.52	ug/L	8260B
1,1-Dichloroethene	1.0	0.67	ug/L	8260B
1,2,3-Trichloropropane	1.0	0.44	ug/L	8260B
1,2-Dichlorobenzene	1.0	0.49	ug/L	8260B
1,2-Dichloroethane	1.0	0.57	ug/L	8260B
1,2-Dichloropropane	1.0	0.52	ug/L	8260B
1,3-Dichlorobenzene	1.0	0.64	ug/L	8260B
1,4-Dichlorobenzene	1.0	0.60	ug/L	8260B
Bromobenzene	1.0	0.58	ug/L	8260B
Bromoform	1.0	0.63	ug/L	8260B
Bromomethane	5.0	2.5	ug/L	8260B
Carbon tetrachloride	1.0	0.43	ug/L	8260B
Chlorobenzene	1.0	0.63	ug/L	8260B
Chloroethane	5.0	2.5	ug/L	8260B
Chloroform	1.0	0.90	ug/L	8260B
Chloromethane	4.0	1.0	ug/L	8260B
cis-1,2-Dichloroethylene	1.0	0.65	ug/L	8260B
cis-1,3-Dichloropropene	1.0	0.39	ug/L	8260B
Dibromochloromethane	1.0	0.31	ug/L	8260B
Dibromomethane	1.0	0.46	ug/L	8260B
Dichlorodifluoromethane	5.0	2.5	ug/L	8260B
Methylene Chloride	5.0	4.0	ug/L	8260B
Tetrachloroethene	1.0	0.50	ug/L	8260B
trans-1,2-Dichloroethene	1.0	0.67	ug/L	8260B
trans-1,3-Dichloropropene	1.0	0.27	ug/L	8260B
Trichloroethene	1.0	0.61	ug/L	8260B
Trichlorofluoromethane	5.0	2.5	ug/L	8260B
Vinyl chloride	1.0	0.71	ug/L	8260B

Method: RSK-175 - Dissolved Gases (GC)

Analyte	RL	MDL	Units	Method
Ethane	1.1	0.55	ug/L	RSK-175
Ethylene	1.0	0.50	ug/L	RSK-175
Methane	0.58	0.29	ug/L	RSK-175

Method: 6010B - Metals (ICP) - Dissolved

Analyte	RL	MDL	Units	Method
Dissolved Iron	200	50	ug/L	6010B

General Chemistry

Analyte	RL	MDL	Units	Method
Total Organic Carbon	1.0	0.50	mg/L	SM 5310B

Surrogate Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (70-119)	DBFM (83-123)	TOL (78-126)
660-72606-1	Trip Blank	94	106	101
660-72606-2	Field Blank	92	111	107
660-72606-3	GZ-501L	94	103	99
660-72606-3 - RA	GZ-501L	105	99	99
660-72606-4	GZ-503L	95	103	99
660-72606-4 - RA	GZ-503L	105	97	98
660-72606-5	GZ-504U	95	108	100
660-72606-6	GZ-504L	92	105	101
660-72606-7	GZ-504R	92	113	106
660-72606-7 - RA	GZ-504R	103	100	99
660-72606-8	GZ-601R	93	104	100
660-72606-9	GZ-701L	93	103	100
660-72606-10	GZ-701R	93	104	100
660-72606-11	GZ-702U	94	110	104
660-72606-12	GZ-702R	93	104	101
660-72663-1	Trip Blank 1	102	106	103
660-72663-2	Field Blank 1	101	109	105
660-72663-3 - DL	OW-304L	98	106	102
660-72663-3	OW-304L	101	106	102
660-72663-4 - DL	OW-304R	101	100	104
660-72663-4	OW-304R	100	103	99
660-72663-5	GZ-506R	105	102	102
660-72663-6	GZ-519U	104	101	100
660-72663-6 - DL	GZ-519U	102	103	101
660-72663-7	OW-402U	104	101	99
660-72663-7 MS	OW-402U	100	99	101
660-72663-7 MSD	OW-402U	98	100	100
660-72663-8	OW-402U DUP	103	105	104
660-72663-9 - DL	OW-101	100	100	99
660-72663-9	OW-101	100	101	98
660-72663-10	OW-101L	101	100	99
660-72663-10 MS	OW-101L	99	99	100
660-72663-10 MSD	OW-101L	100	98	100
660-72663-12	OW-101L DUP	104	102	99
660-72663-13 - DL	OW-307	101	104	100
660-72663-13	OW-307	101	102	100
660-72663-14 - DL	GZ-703R	101	102	100
660-72663-14	GZ-703R	101	101	100
660-72663-15	GZ-505R	103	100	98
660-72663-15 - DL	GZ-505R	100	101	100
660-72663-16	WB-3L	102	103	100
660-72663-17	WB-3L DUP	101	102	99
660-72663-17 - DL	WB-3L DUP	100	102	100
660-72663-18	WB-4L	100	101	98
660-72663-18 - DL	WB-4L	99	102	99
660-72663-19	WB-4L DUP	101	101	99
660-72663-19 - DL	WB-4L DUP	101	102	100
660-72663-20	WB-2U	102	100	99
660-72663-21	WB-2L	103	101	100

Surrogate Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-119)	(83-123)	(78-126)
660-72663-22	OW-404U	100	102	100
660-72663-23	OW-404R	102	101	100
660-72663-24 - DL	WB-1L	104	102	100
660-72663-24	WB-1L	103	100	98
660-72663-25	WB-1U	105	103	103
660-72663-26	TRIP BLANK 2	102	103	100
660-72697-1	Trip Blank	101	101	99
660-72697-2	Field Blank	103	99	100
660-72697-3 - DL	IW-1	101	103	100
660-72697-3	IW-1	101	101	98
660-72697-4 - DL	IW-2	97	103	98
660-72697-4	IW-2	101	103	99
660-72697-5	IW-3	104	100	99
660-72697-C-6 DU	660-72697-C-6 DU	98	98	100
660-72731-1	Purge Water	100	101	101
660-72731-1 MS	Purge Water	98	100	102
LCS 660-167472/4	Lab Control Sample	92	106	105
LCS 660-167531/13	Lab Control Sample	103	97	99
LCS 660-167632/4	Lab Control Sample	98	103	100
LCS 660-167670/4	Lab Control Sample	100	98	99
LCS 660-167707/4	Lab Control Sample	98	100	98
LCS 660-167767/4	Lab Control Sample	98	98	100
MB 660-167531/16	Method Blank	107	98	98
MB 660-167632/6	Method Blank	102	107	102
MB 660-167670/6	Method Blank	102	103	100
MB 660-167707/6	Method Blank	101	100	100
MB 660-167767/6	Method Blank	102	101	100

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID			
MB 660-167472/6	Method Blank			

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 660-167472/6
Matrix: Water
Analysis Batch: 167472

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/16/16 14:10	1
Bromoform	<1.0		1.0	0.63	ug/L			03/16/16 14:10	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/16/16 14:10	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/16/16 14:10	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/16/16 14:10	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/16/16 14:10	1
Chloroform	<1.0		1.0	0.90	ug/L			03/16/16 14:10	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/16/16 14:10	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/16/16 14:10	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/16/16 14:10	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/16/16 14:10	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/16/16 14:10	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/16/16 14:10	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 14:10	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/16/16 14:10	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/16/16 14:10	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/16/16 14:10	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 14:10	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/16/16 14:10	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/16/16 14:10	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/16/16 14:10	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/16/16 14:10	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/16/16 14:10	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/16/16 14:10	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/16/16 14:10	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/16/16 14:10	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 14:10	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/16/16 14:10	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/16/16 14:10	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/16/16 14:10	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/16/16 14:10	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/16/16 14:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene					*03/16/16 14:10*	*1*
Dibromofluoromethane					*03/16/16 14:10*	*1*
Toluene-d8 (Surr)					*03/16/16 14:10*	*1*

Lab Sample ID: LCS 660-167472/4
Matrix: Water
Analysis Batch: 167472

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	10.0	9.83		ug/L		98	58 - 151
Bromoform	10.0	8.71		ug/L		87	62 - 140
Bromomethane	10.0	8.30		ug/L		83	22 - 179
Carbon tetrachloride	10.0	11.9		ug/L		119	53 - 134
Chlorobenzene	10.0	10.1		ug/L		101	63 - 132

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

Lab Sample ID: LCS 660-167472/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167472

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	10.0	11.4		ug/L		114	53 - 144
Chloroform	10.0	10.5		ug/L		105	60 - 126
Chloromethane	10.0	8.21		ug/L		82	62 - 130
Dibromochloromethane	10.0	10.6		ug/L		106	55 - 134
Dibromomethane	10.0	10.3		ug/L		103	62 - 141
1,2-Dichlorobenzene	10.0	9.81		ug/L		98	60 - 154
1,3-Dichlorobenzene	10.0	9.93		ug/L		99	55 - 147
1,4-Dichlorobenzene	10.0	9.94		ug/L		99	58 - 151
Dichlorodifluoromethane	10.0	7.46		ug/L		75	28 - 133
1,1-Dichloroethane	10.0	10.5		ug/L		105	54 - 132
1,2-Dichloroethane	10.0	9.19		ug/L		92	51 - 167
cis-1,2-Dichloroethylene	10.0	9.69		ug/L		97	49 - 127
trans-1,2-Dichloroethene	10.0	11.2		ug/L		112	46 - 125
1,1-Dichloroethene	10.0	9.59		ug/L		96	43 - 118
1,2-Dichloropropane	10.0	9.67		ug/L		97	60 - 138
cis-1,3-Dichloropropene	10.0	9.59		ug/L		96	49 - 141
trans-1,3-Dichloropropene	10.0	9.13		ug/L		91	52 - 140
Methylene Chloride	10.0	11.3		ug/L		113	52 - 132
1,1,1,2-Tetrachloroethane	10.0	9.23		ug/L		92	60 - 134
1,1,2,2-Tetrachloroethane	10.0	8.33		ug/L		83	63 - 148
Tetrachloroethene	10.0	13.9	*	ug/L		139	48 - 136
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	58 - 136
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	60 - 140
Trichloroethene	10.0	11.9		ug/L		119	59 - 129
Trichlorofluoromethane	10.0	9.79		ug/L		98	62 - 138
1,2,3-Trichloropropane	10.0	9.26		ug/L		93	51 - 171
Vinyl chloride	10.0	9.21		ug/L		92	66 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*70 - 119*
Dibromofluoromethane	*106*		*83 - 123*
Toluene-d8 (Surr)	*105*		*78 - 126*

Lab Sample ID: MB 660-167531/16 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/17/16 15:48	1
Bromoform	<1.0		1.0	0.63	ug/L			03/17/16 15:48	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/17/16 15:48	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/17/16 15:48	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/17/16 15:48	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/17/16 15:48	1
Chloroform	<1.0		1.0	0.90	ug/L			03/17/16 15:48	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/17/16 15:48	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/17/16 15:48	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/17/16 15:48	1

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

Lab Sample ID: MB 660-167531/16
Matrix: Water
Analysis Batch: 167531

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/17/16 15:48	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/17/16 15:48	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/17/16 15:48	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/17/16 15:48	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/17/16 15:48	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/17/16 15:48	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/17/16 15:48	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/17/16 15:48	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/17/16 15:48	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/17/16 15:48	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/17/16 15:48	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/17/16 15:48	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/17/16 15:48	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/17/16 15:48	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/17/16 15:48	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/17/16 15:48	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/17/16 15:48	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/17/16 15:48	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/17/16 15:48	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/17/16 15:48	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/17/16 15:48	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/17/16 15:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 119*		*03/17/16 15:48*	*1*
Dibromofluoromethane	*98*		*83 - 123*		*03/17/16 15:48*	*1*
Toluene-d8 (Surr)	*98*		*78 - 126*		*03/17/16 15:48*	*1*

Lab Sample ID: LCS 660-167531/13
Matrix: Water
Analysis Batch: 167531

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	10.0	10.9		ug/L		109	58 - 151
Bromoform	10.0	11.0		ug/L		110	62 - 140
Bromomethane	10.0	13.0		ug/L		130	22 - 179
Carbon tetrachloride	10.0	10.9		ug/L		109	53 - 134
Chlorobenzene	10.0	10.8		ug/L		108	63 - 132
Chloroethane	10.0	10.4		ug/L		104	53 - 144
Chloroform	10.0	10.6		ug/L		106	60 - 126
Chloromethane	10.0	10.8		ug/L		108	62 - 130
Dibromochloromethane	10.0	10.5		ug/L		105	55 - 134
Dibromomethane	10.0	10.3		ug/L		103	62 - 141
1,2-Dichlorobenzene	10.0	10.6		ug/L		106	60 - 154
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	55 - 147
1,4-Dichlorobenzene	10.0	10.9		ug/L		109	58 - 151
Dichlorodifluoromethane	10.0	12.2		ug/L		122	28 - 133
1,1-Dichloroethane	10.0	10.7		ug/L		107	54 - 132

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

Lab Sample ID: LCS 660-167531/13 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	10.6		ug/L		106	51 - 167
cis-1,2-Dichloroethylene	10.0	11.4		ug/L		114	49 - 127
trans-1,2-Dichloroethene	10.0	11.5		ug/L		115	46 - 125
1,1-Dichloroethene	10.0	10.1		ug/L		101	43 - 118
1,2-Dichloropropane	10.0	10.7		ug/L		107	60 - 138
cis-1,3-Dichloropropene	10.0	9.06		ug/L		91	49 - 141
trans-1,3-Dichloropropene	10.0	8.98		ug/L		90	52 - 140
Methylene Chloride	10.0	10.7		ug/L		107	52 - 132
1,1,1,2-Tetrachloroethane	10.0	9.97		ug/L		100	60 - 134
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	63 - 148
Tetrachloroethene	10.0	10.9		ug/L		109	48 - 136
1,1,1-Trichloroethane	10.0	10.6		ug/L		106	58 - 136
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	60 - 140
Trichloroethene	10.0	10.9		ug/L		109	59 - 129
Trichlorofluoromethane	10.0	12.2		ug/L		122	62 - 138
1,2,3-Trichloropropane	10.0	10.4		ug/L		104	51 - 171
Vinyl chloride	10.0	11.8		ug/L		118	66 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 119*
Dibromofluoromethane	*97*		*83 - 123*
Toluene-d8 (Surr)	*99*		*78 - 126*

Lab Sample ID: MB 660-167632/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 09:07	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 09:07	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 09:07	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 09:07	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 09:07	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 09:07	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 09:07	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 09:07	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 09:07	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 09:07	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 09:07	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 09:07	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 09:07	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 09:07	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 09:07	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 09:07	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/21/16 09:07	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 09:07	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 09:07	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 09:07	1

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

Lab Sample ID: MB 660-167632/6
Matrix: Water
Analysis Batch: 167632

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 09:07	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 09:07	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 09:07	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 09:07	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 09:07	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 09:07	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 09:07	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 09:07	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/21/16 09:07	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 09:07	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 09:07	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 09:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/21/16 09:07*	*1*
Dibromofluoromethane	*107*		*83 - 123*		*03/21/16 09:07*	*1*
Toluene-d8 (Surr)	*102*		*78 - 126*		*03/21/16 09:07*	*1*

Lab Sample ID: LCS 660-167632/4
Matrix: Water
Analysis Batch: 167632

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	10.0	10.2		ug/L		102	58 - 151
Bromoform	10.0	10.2		ug/L		102	62 - 140
Bromomethane	10.0	7.06		ug/L		71	22 - 179
Carbon tetrachloride	10.0	10.4		ug/L		104	53 - 134
Chlorobenzene	10.0	9.22		ug/L		92	63 - 132
Chloroethane	10.0	11.1		ug/L		111	53 - 144
Chloroform	10.0	9.80		ug/L		98	60 - 126
Chloromethane	10.0	9.80		ug/L		98	62 - 130
Dibromochloromethane	10.0	10.3		ug/L		103	55 - 134
Dibromomethane	10.0	9.34		ug/L		93	62 - 141
1,2-Dichlorobenzene	10.0	10.1		ug/L		101	60 - 154
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	55 - 147
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	58 - 151
Dichlorodifluoromethane	10.0	6.68		ug/L		67	28 - 133
1,1-Dichloroethane	10.0	9.74		ug/L		97	54 - 132
1,2-Dichloroethane	10.0	9.94		ug/L		99	51 - 167
cis-1,2-Dichloroethylene	10.0	10.1		ug/L		101	49 - 127
trans-1,2-Dichloroethene	10.0	9.72		ug/L		97	46 - 125
1,1-Dichloroethene	10.0	9.38		ug/L		94	43 - 118
1,2-Dichloropropane	10.0	9.10		ug/L		91	60 - 138
cis-1,3-Dichloropropene	10.0	10.0		ug/L		100	49 - 141
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	52 - 140
Methylene Chloride	10.0	8.79		ug/L		88	52 - 132
1,1,1,2-Tetrachloroethane	10.0	10.2		ug/L		102	60 - 134
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	63 - 148

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

Lab Sample ID: LCS 660-167632/4
Matrix: Water
Analysis Batch: 167632

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	10.0	9.52		ug/L		95	48 - 136
1,1,1-Trichloroethane	10.0	10.8		ug/L		108	58 - 136
1,1,2-Trichloroethane	10.0	8.90		ug/L		89	60 - 140
Trichloroethene	10.0	10.7		ug/L		107	59 - 129
Trichlorofluoromethane	10.0	11.2		ug/L		112	62 - 138
1,2,3-Trichloropropane	10.0	11.2		ug/L		112	51 - 171
Vinyl chloride	10.0	9.57		ug/L		96	66 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 119*
Dibromofluoromethane	*103*		*83 - 123*
Toluene-d8 (Surr)	*100*		*78 - 126*

Lab Sample ID: MB 660-167670/6
Matrix: Water
Analysis Batch: 167670

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/21/16 16:07	1
Bromoform	<1.0		1.0	0.63	ug/L			03/21/16 16:07	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/21/16 16:07	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/21/16 16:07	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/21/16 16:07	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/21/16 16:07	1
Chloroform	<1.0		1.0	0.90	ug/L			03/21/16 16:07	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/21/16 16:07	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/21/16 16:07	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/21/16 16:07	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/21/16 16:07	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/21/16 16:07	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/21/16 16:07	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 16:07	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/21/16 16:07	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/21/16 16:07	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/21/16 16:07	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 16:07	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/21/16 16:07	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/21/16 16:07	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/21/16 16:07	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/21/16 16:07	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/21/16 16:07	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/21/16 16:07	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/21/16 16:07	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/21/16 16:07	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 16:07	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/21/16 16:07	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/21/16 16:07	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/21/16 16:07	1

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

Lab Sample ID: MB 660-167670/6
Matrix: Water
Analysis Batch: 167670

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/21/16 16:07	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/21/16 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/21/16 16:07*	*1*
Dibromofluoromethane	*103*		*83 - 123*		*03/21/16 16:07*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/21/16 16:07*	*1*

Lab Sample ID: LCS 660-167670/4
Matrix: Water
Analysis Batch: 167670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	10.0	10.4		ug/L		104	58 - 151
Bromoform	10.0	11.0		ug/L		110	62 - 140
Bromomethane	10.0	10.7		ug/L		107	22 - 179
Carbon tetrachloride	10.0	11.2		ug/L		112	53 - 134
Chlorobenzene	10.0	10.2		ug/L		102	63 - 132
Chloroethane	10.0	10.2		ug/L		102	53 - 144
Chloroform	10.0	10.0		ug/L		100	60 - 126
Chloromethane	10.0	10.9		ug/L		109	62 - 130
Dibromochloromethane	10.0	10.6		ug/L		106	55 - 134
Dibromomethane	10.0	10.2		ug/L		102	62 - 141
1,2-Dichlorobenzene	10.0	10.5		ug/L		105	60 - 154
1,3-Dichlorobenzene	10.0	10.4		ug/L		104	55 - 147
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	58 - 151
Dichlorodifluoromethane	10.0	8.82		ug/L		88	28 - 133
1,1-Dichloroethane	10.0	10.8		ug/L		108	54 - 132
1,2-Dichloroethane	10.0	10.2		ug/L		102	51 - 167
cis-1,2-Dichloroethylene	10.0	10.8		ug/L		108	49 - 127
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	46 - 125
1,1-Dichloroethene	10.0	9.52		ug/L		95	43 - 118
1,2-Dichloropropane	10.0	10.6		ug/L		106	60 - 138
cis-1,3-Dichloropropene	10.0	8.91		ug/L		89	49 - 141
trans-1,3-Dichloropropene	10.0	8.83		ug/L		88	52 - 140
Methylene Chloride	10.0	10.2		ug/L		102	52 - 132
1,1,1,2-Tetrachloroethane	10.0	9.96		ug/L		100	60 - 134
1,1,2,2-Tetrachloroethane	10.0	9.85		ug/L		99	63 - 148
Tetrachloroethene	10.0	11.4		ug/L		114	48 - 136
1,1,1-Trichloroethane	10.0	10.5		ug/L		105	58 - 136
1,1,2-Trichloroethane	10.0	11.2		ug/L		112	60 - 140
Trichloroethene	10.0	10.8		ug/L		108	59 - 129
Trichlorofluoromethane	10.0	10.3		ug/L		103	62 - 138
1,2,3-Trichloropropane	10.0	9.53		ug/L		95	51 - 171
Vinyl chloride	10.0	11.1		ug/L		111	66 - 121

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

Lab Sample ID: LCS 660-167670/4
Matrix: Water
Analysis Batch: 167670

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 119*
Dibromofluoromethane	*98*		*83 - 123*
Toluene-d8 (Surr)	*99*		*78 - 126*

Lab Sample ID: 660-72663-7 MS
Matrix: Water
Analysis Batch: 167670

Client Sample ID: OW-402U
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	<1.0		10.0	11.1		ug/L		111	70 - 139
Bromoform	<1.0		10.0	12.0		ug/L		120	49 - 150
Bromomethane	<5.0		10.0	10.6		ug/L		106	23 - 140
Carbon tetrachloride	<1.0		10.0	11.9		ug/L		119	50 - 162
Chlorobenzene	<1.0		10.0	11.0		ug/L		110	70 - 125
Chloroethane	<5.0		10.0	11.9		ug/L		119	43 - 165
Chloroform	<1.0		10.0	10.8		ug/L		108	70 - 124
Chloromethane	<4.0		10.0	11.6		ug/L		116	56 - 137
Dibromochloromethane	<1.0		10.0	11.9		ug/L		119	58 - 131
Dibromomethane	<1.0		10.0	11.8		ug/L		118	63 - 131
1,2-Dichlorobenzene	<1.0		10.0	10.9		ug/L		109	70 - 142
1,3-Dichlorobenzene	<1.0		10.0	11.0		ug/L		110	70 - 137
1,4-Dichlorobenzene	<1.0		10.0	10.6		ug/L		106	70 - 137
Dichlorodifluoromethane	<5.0		10.0	12.2		ug/L		122	37 - 139
1,1-Dichloroethane	<1.0		10.0	11.2		ug/L		112	70 - 126
1,2-Dichloroethane	<1.0		10.0	11.2		ug/L		112	65 - 150
cis-1,2-Dichloroethylene	19		10.0	29.8		ug/L		104	70 - 122
trans-1,2-Dichloroethene	1.2		10.0	12.8		ug/L		116	64 - 127
1,1-Dichloroethene	<1.0		10.0	10.1		ug/L		101	60 - 127
1,2-Dichloropropane	<1.0		10.0	11.3		ug/L		113	66 - 135
cis-1,3-Dichloropropene	<1.0		10.0	9.13		ug/L		91	46 - 131
trans-1,3-Dichloropropene	<1.0		10.0	9.46		ug/L		95	40 - 137
Methylene Chloride	<5.0		10.0	10.4		ug/L		104	61 - 134
1,1,1,2-Tetrachloroethane	<1.0		10.0	10.7		ug/L		107	59 - 140
1,1,2,2-Tetrachloroethane	<1.0		10.0	11.4		ug/L		114	41 - 149
Tetrachloroethene	<1.0		10.0	11.0		ug/L		110	62 - 128
1,1,1-Trichloroethane	<1.0		10.0	11.3		ug/L		113	61 - 152
1,1,2-Trichloroethane	<1.0		10.0	12.0		ug/L		120	60 - 132
Trichloroethene	62		10.0	72.2	4	ug/L		106	70 - 131
Trichlorofluoromethane	<5.0		10.0	12.0		ug/L		120	60 - 157
1,2,3-Trichloropropane	<1.0		10.0	10.8		ug/L		108	35 - 164
Vinyl chloride	<1.0	F1	10.0	12.8	F1	ug/L		128	63 - 126

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 119*
Dibromofluoromethane	*99*		*83 - 123*
Toluene-d8 (Surr)	*101*		*78 - 126*

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

Lab Sample ID: 660-72663-7 MSD
Matrix: Water
Analysis Batch: 167670

Client Sample ID: OW-402U
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	<1.0		10.0	11.6		ug/L		116	70 - 139	4	19
Bromoform	<1.0		10.0	12.9		ug/L		129	49 - 150	7	20
Bromomethane	<5.0		10.0	11.2		ug/L		112	23 - 140	6	41
Carbon tetrachloride	<1.0		10.0	12.7		ug/L		127	50 - 162	7	28
Chlorobenzene	<1.0		10.0	11.6		ug/L		116	70 - 125	5	23
Chloroethane	<5.0		10.0	12.2		ug/L		122	43 - 165	2	45
Chloroform	<1.0		10.0	10.7		ug/L		107	70 - 124	0	21
Chloromethane	<4.0		10.0	12.2		ug/L		122	56 - 137	5	16
Dibromochloromethane	<1.0		10.0	11.7		ug/L		117	58 - 131	1	18
Dibromomethane	<1.0		10.0	11.8		ug/L		118	63 - 131	0	21
1,2-Dichlorobenzene	<1.0		10.0	11.5		ug/L		115	70 - 142	5	24
1,3-Dichlorobenzene	<1.0		10.0	11.1		ug/L		111	70 - 137	1	24
1,4-Dichlorobenzene	<1.0		10.0	11.4		ug/L		114	70 - 137	7	25
Dichlorodifluoromethane	<5.0		10.0	13.2		ug/L		132	37 - 139	8	31
1,1-Dichloroethane	<1.0		10.0	11.7		ug/L		117	70 - 126	5	29
1,2-Dichloroethane	<1.0		10.0	11.1		ug/L		111	65 - 150	1	19
cis-1,2-Dichloroethylene	19		10.0	30.3		ug/L		109	70 - 122	2	22
trans-1,2-Dichloroethene	1.2		10.0	13.4		ug/L		122	64 - 127	4	21
1,1-Dichloroethene	<1.0		10.0	10.7		ug/L		107	60 - 127	6	33
1,2-Dichloropropane	<1.0		10.0	11.5		ug/L		115	66 - 135	2	22
cis-1,3-Dichloropropene	<1.0		10.0	9.69		ug/L		97	46 - 131	6	25
trans-1,3-Dichloropropene	<1.0		10.0	9.94		ug/L		99	40 - 137	5	25
Methylene Chloride	<5.0		10.0	10.4		ug/L		104	61 - 134	0	21
1,1,1,2-Tetrachloroethane	<1.0		10.0	11.2		ug/L		112	59 - 140	4	22
1,1,2,2-Tetrachloroethane	<1.0		10.0	11.5		ug/L		115	41 - 149	1	23
Tetrachloroethene	<1.0		10.0	11.6		ug/L		116	62 - 128	5	26
1,1,1-Trichloroethane	<1.0		10.0	11.9		ug/L		119	61 - 152	5	21
1,1,2-Trichloroethane	<1.0		10.0	11.6		ug/L		116	60 - 132	3	22
Trichloroethene	62		10.0	71.1	4	ug/L		95	70 - 131	2	28
Trichlorofluoromethane	<5.0		10.0	12.5		ug/L		125	60 - 157	4	20
1,2,3-Trichloropropane	<1.0		10.0	11.1		ug/L		111	35 - 164	2	24
Vinyl chloride	<1.0	F1	10.0	13.9	F1	ug/L		139	63 - 126	9	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 119*
Dibromofluoromethane	*100*		*83 - 123*
Toluene-d8 (Surr)	*100*		*78 - 126*

Lab Sample ID: MB 660-167707/6
Matrix: Water
Analysis Batch: 167707

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/22/16 13:59	1
Bromoform	<1.0		1.0	0.63	ug/L			03/22/16 13:59	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/22/16 13:59	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/22/16 13:59	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/22/16 13:59	1

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

Lab Sample ID: MB 660-167707/6
Matrix: Water
Analysis Batch: 167707

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<5.0		5.0	2.5	ug/L			03/22/16 13:59	1
Chloroform	<1.0		1.0	0.90	ug/L			03/22/16 13:59	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/22/16 13:59	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/22/16 13:59	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/22/16 13:59	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/22/16 13:59	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/22/16 13:59	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/22/16 13:59	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 13:59	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/22/16 13:59	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/22/16 13:59	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/22/16 13:59	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 13:59	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/22/16 13:59	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/22/16 13:59	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/22/16 13:59	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/22/16 13:59	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/22/16 13:59	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/22/16 13:59	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/22/16 13:59	1
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/22/16 13:59	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 13:59	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/22/16 13:59	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/22/16 13:59	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/22/16 13:59	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/22/16 13:59	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/22/16 13:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 119*		*03/22/16 13:59*	*1*
Dibromofluoromethane	*100*		*83 - 123*		*03/22/16 13:59*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/22/16 13:59*	*1*

Lab Sample ID: LCS 660-167707/4
Matrix: Water
Analysis Batch: 167707

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	10.0	10.1		ug/L		101	58 - 151
Bromoform	10.0	10.9		ug/L		109	62 - 140
Bromomethane	10.0	11.9		ug/L		119	22 - 179
Carbon tetrachloride	10.0	10.9		ug/L		109	53 - 134
Chlorobenzene	10.0	10.3		ug/L		103	63 - 132
Chloroethane	10.0	10.4		ug/L		104	53 - 144
Chloroform	10.0	10.0		ug/L		100	60 - 126
Chloromethane	10.0	10.6		ug/L		106	62 - 130
Dibromochloromethane	10.0	9.78		ug/L		98	55 - 134
Dibromomethane	10.0	10.5		ug/L		105	62 - 141

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

Lab Sample ID: LCS 660-167707/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	60 - 154
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	55 - 147
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	58 - 151
Dichlorodifluoromethane	10.0	9.06		ug/L		91	28 - 133
1,1-Dichloroethane	10.0	10.3		ug/L		103	54 - 132
1,2-Dichloroethane	10.0	10.0		ug/L		100	51 - 167
cis-1,2-Dichloroethylene	10.0	10.7		ug/L		107	49 - 127
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	46 - 125
1,1-Dichloroethene	10.0	9.53		ug/L		95	43 - 118
1,2-Dichloropropane	10.0	10.8		ug/L		108	60 - 138
cis-1,3-Dichloropropene	10.0	8.74		ug/L		87	49 - 141
trans-1,3-Dichloropropene	10.0	8.66		ug/L		87	52 - 140
Methylene Chloride	10.0	10.2		ug/L		102	52 - 132
1,1,1,2-Tetrachloroethane	10.0	9.74		ug/L		97	60 - 134
1,1,2,2-Tetrachloroethane	10.0	9.90		ug/L		99	63 - 148
Tetrachloroethene	10.0	10.7		ug/L		107	48 - 136
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	58 - 136
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	60 - 140
Trichloroethene	10.0	10.9		ug/L		109	59 - 129
Trichlorofluoromethane	10.0	10.2		ug/L		102	62 - 138
1,2,3-Trichloropropane	10.0	9.02		ug/L		90	51 - 171
Vinyl chloride	10.0	10.9		ug/L		109	66 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 119*
Dibromofluoromethane	*100*		*83 - 123*
Toluene-d8 (Surr)	*98*		*78 - 126*

Lab Sample ID: 660-72663-10 MS — **Client Sample ID: OW-101L**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	<1.0		10.0	10.7		ug/L		107	70 - 139
Bromoform	<1.0		10.0	11.1		ug/L		111	49 - 150
Bromomethane	<5.0	F1	10.0	12.9		ug/L		129	23 - 140
Carbon tetrachloride	<1.0		10.0	11.4		ug/L		114	50 - 162
Chlorobenzene	<1.0		10.0	10.5		ug/L		105	70 - 125
Chloroethane	<5.0		10.0	10.5		ug/L		105	43 - 165
Chloroform	<1.0		10.0	10.1		ug/L		101	70 - 124
Chloromethane	<4.0		10.0	10.6		ug/L		106	56 - 137
Dibromochloromethane	<1.0		10.0	10.9		ug/L		109	58 - 131
Dibromomethane	<1.0		10.0	10.4		ug/L		104	63 - 131
1,2-Dichlorobenzene	<1.0		10.0	10.6		ug/L		106	70 - 142
1,3-Dichlorobenzene	<1.0		10.0	10.6		ug/L		106	70 - 137
1,4-Dichlorobenzene	<1.0		10.0	10.5		ug/L		105	70 - 137
Dichlorodifluoromethane	<5.0		10.0	12.6		ug/L		126	37 - 139
1,1-Dichloroethane	<1.0		10.0	11.7		ug/L		117	70 - 126

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

Lab Sample ID: 660-72663-10 MS — **Client Sample ID: OW-101L**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	<1.0		10.0	10.6		ug/L		106	65 - 150
cis-1,2-Dichloroethylene	54		10.0	65.0	4	ug/L		110	70 - 122
trans-1,2-Dichloroethene	0.90	J	10.0	12.3		ug/L		114	64 - 127
1,1-Dichloroethene	<1.0		10.0	10.5		ug/L		105	60 - 127
1,2-Dichloropropane	<1.0		10.0	10.8		ug/L		108	66 - 135
cis-1,3-Dichloropropene	<1.0		10.0	9.16		ug/L		92	46 - 131
trans-1,3-Dichloropropene	<1.0		10.0	9.16		ug/L		92	40 - 137
Methylene Chloride	<5.0		10.0	9.63		ug/L		96	61 - 134
1,1,1,2-Tetrachloroethane	<1.0		10.0	10.1		ug/L		101	59 - 140
1,1,2,2-Tetrachloroethane	<1.0		10.0	9.96		ug/L		100	41 - 149
Tetrachloroethene	<1.0		10.0	11.2		ug/L		112	62 - 128
1,1,1-Trichloroethane	<1.0		10.0	11.0		ug/L		110	61 - 152
1,1,2-Trichloroethane	<1.0		10.0	11.0		ug/L		110	60 - 132
Trichloroethene	3.2		10.0	14.2		ug/L		110	70 - 131
Trichlorofluoromethane	<5.0		10.0	11.7		ug/L		117	60 - 157
1,2,3-Trichloropropane	<1.0		10.0	9.75		ug/L		98	35 - 164
Vinyl chloride	<1.0	F1	10.0	13.0	F1	ug/L		130	63 - 126

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*70 - 119*
Dibromofluoromethane	*99*		*83 - 123*
Toluene-d8 (Surr)	*100*		*78 - 126*

Lab Sample ID: 660-72663-10 MSD — **Client Sample ID: OW-101L**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167707

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	<1.0		10.0	11.4		ug/L		114	70 - 139	7	19
Bromoform	<1.0		10.0	11.9		ug/L		119	49 - 150	7	20
Bromomethane	<5.0	F1	10.0	14.1	F1	ug/L		141	23 - 140	9	41
Carbon tetrachloride	<1.0		10.0	12.5		ug/L		125	50 - 162	9	28
Chlorobenzene	<1.0		10.0	11.3		ug/L		113	70 - 125	7	23
Chloroethane	<5.0		10.0	11.8		ug/L		118	43 - 165	11	45
Chloroform	<1.0		10.0	10.9		ug/L		109	70 - 124	8	21
Chloromethane	<4.0		10.0	11.7		ug/L		117	56 - 137	10	16
Dibromochloromethane	<1.0		10.0	11.2		ug/L		112	58 - 131	3	18
Dibromomethane	<1.0		10.0	11.4		ug/L		114	63 - 131	9	21
1,2-Dichlorobenzene	<1.0		10.0	11.2		ug/L		112	70 - 142	5	24
1,3-Dichlorobenzene	<1.0		10.0	11.2		ug/L		112	70 - 137	6	24
1,4-Dichlorobenzene	<1.0		10.0	11.1		ug/L		111	70 - 137	6	25
Dichlorodifluoromethane	<5.0		10.0	13.7		ug/L		137	37 - 139	8	31
1,1-Dichloroethane	<1.0		10.0	12.2		ug/L		122	70 - 126	5	29
1,2-Dichloroethane	<1.0		10.0	10.9		ug/L		109	65 - 150	3	19
cis-1,2-Dichloroethylene	54		10.0	66.8	4	ug/L		127	70 - 122	3	22
trans-1,2-Dichloroethene	0.90	J	10.0	13.3		ug/L		124	64 - 127	8	21
1,1-Dichloroethene	<1.0		10.0	11.4		ug/L		114	60 - 127	8	33
1,2-Dichloropropane	<1.0		10.0	11.8		ug/L		118	66 - 135	9	22

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

Lab Sample ID: 660-72663-10 MSD — **Client Sample ID: OW-101L**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167707

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<1.0		10.0	9.74		ug/L		97	46 - 131	6	25
trans-1,3-Dichloropropene	<1.0		10.0	9.73		ug/L		97	40 - 137	6	25
Methylene Chloride	<5.0		10.0	10.1		ug/L		101	61 - 134	5	21
1,1,1,2-Tetrachloroethane	<1.0		10.0	11.1		ug/L		111	59 - 140	9	22
1,1,2,2-Tetrachloroethane	<1.0		10.0	10.6		ug/L		106	41 - 149	6	23
Tetrachloroethene	<1.0		10.0	12.0		ug/L		120	62 - 128	7	26
1,1,1-Trichloroethane	<1.0		10.0	11.3		ug/L		113	61 - 152	3	21
1,1,2-Trichloroethane	<1.0		10.0	11.5		ug/L		115	60 - 132	5	22
Trichloroethene	3.2		10.0	14.8		ug/L		116	70 - 131	5	28
Trichlorofluoromethane	<5.0		10.0	13.5		ug/L		135	60 - 157	14	20
1,2,3-Trichloropropane	<1.0		10.0	10.5		ug/L		105	35 - 164	7	24
Vinyl chloride	<1.0	F1	10.0	13.6	F1	ug/L		136	63 - 126	5	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 119*
Dibromofluoromethane	*98*		*83 - 123*
Toluene-d8 (Surr)	*100*		*78 - 126*

Lab Sample ID: MB 660-167767/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 167767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<1.0		1.0	0.58	ug/L			03/23/16 14:03	1
Bromoform	<1.0		1.0	0.63	ug/L			03/23/16 14:03	1
Bromomethane	<5.0		5.0	2.5	ug/L			03/23/16 14:03	1
Carbon tetrachloride	<1.0		1.0	0.43	ug/L			03/23/16 14:03	1
Chlorobenzene	<1.0		1.0	0.63	ug/L			03/23/16 14:03	1
Chloroethane	<5.0		5.0	2.5	ug/L			03/23/16 14:03	1
Chloroform	<1.0		1.0	0.90	ug/L			03/23/16 14:03	1
Chloromethane	<4.0		4.0	1.0	ug/L			03/23/16 14:03	1
Dibromochloromethane	<1.0		1.0	0.31	ug/L			03/23/16 14:03	1
Dibromomethane	<1.0		1.0	0.46	ug/L			03/23/16 14:03	1
1,2-Dichlorobenzene	<1.0		1.0	0.49	ug/L			03/23/16 14:03	1
1,3-Dichlorobenzene	<1.0		1.0	0.64	ug/L			03/23/16 14:03	1
1,4-Dichlorobenzene	<1.0		1.0	0.60	ug/L			03/23/16 14:03	1
Dichlorodifluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 14:03	1
1,1-Dichloroethane	<1.0		1.0	0.52	ug/L			03/23/16 14:03	1
1,2-Dichloroethane	<1.0		1.0	0.57	ug/L			03/23/16 14:03	1
cis-1,2-Dichloroethylene	<1.0		1.0	0.65	ug/L			03/23/16 14:03	1
trans-1,2-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 14:03	1
1,1-Dichloroethene	<1.0		1.0	0.67	ug/L			03/23/16 14:03	1
1,2-Dichloropropane	<1.0		1.0	0.52	ug/L			03/23/16 14:03	1
cis-1,3-Dichloropropene	<1.0		1.0	0.39	ug/L			03/23/16 14:03	1
trans-1,3-Dichloropropene	<1.0		1.0	0.27	ug/L			03/23/16 14:03	1
Methylene Chloride	<5.0		5.0	4.0	ug/L			03/23/16 14:03	1
1,1,1,2-Tetrachloroethane	<1.0		1.0	0.63	ug/L			03/23/16 14:03	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.17	ug/L			03/23/16 14:03	1

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

Lab Sample ID: MB 660-167767/6
Matrix: Water
Analysis Batch: 167767

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<1.0		1.0	0.50	ug/L			03/23/16 14:03	1
1,1,1-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 14:03	1
1,1,2-Trichloroethane	<1.0		1.0	0.47	ug/L			03/23/16 14:03	1
Trichloroethene	<1.0		1.0	0.61	ug/L			03/23/16 14:03	1
Trichlorofluoromethane	<5.0		5.0	2.5	ug/L			03/23/16 14:03	1
1,2,3-Trichloropropane	<1.0		1.0	0.44	ug/L			03/23/16 14:03	1
Vinyl chloride	<1.0		1.0	0.71	ug/L			03/23/16 14:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 119*		*03/23/16 14:03*	*1*
Dibromofluoromethane	*101*		*83 - 123*		*03/23/16 14:03*	*1*
Toluene-d8 (Surr)	*100*		*78 - 126*		*03/23/16 14:03*	*1*

Lab Sample ID: LCS 660-167767/4
Matrix: Water
Analysis Batch: 167767

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	10.0	11.0		ug/L		110	58 - 151
Bromoform	10.0	11.9		ug/L		119	62 - 140
Bromomethane	10.0	12.4		ug/L		124	22 - 179
Carbon tetrachloride	10.0	10.6		ug/L		106	53 - 134
Chlorobenzene	10.0	10.4		ug/L		104	63 - 132
Chloroethane	10.0	10.3		ug/L		103	53 - 144
Chloroform	10.0	10.2		ug/L		102	60 - 126
Chloromethane	10.0	10.2		ug/L		102	62 - 130
Dibromochloromethane	10.0	10.9		ug/L		109	55 - 134
Dibromomethane	10.0	10.8		ug/L		108	62 - 141
1,2-Dichlorobenzene	10.0	10.9		ug/L		109	60 - 154
1,3-Dichlorobenzene	10.0	10.5		ug/L		105	55 - 147
1,4-Dichlorobenzene	10.0	10.7		ug/L		107	58 - 151
Dichlorodifluoromethane	10.0	10.3		ug/L		103	28 - 133
1,1-Dichloroethane	10.0	10.8		ug/L		108	54 - 132
1,2-Dichloroethane	10.0	10.3		ug/L		103	51 - 167
cis-1,2-Dichloroethylene	10.0	11.4		ug/L		114	49 - 127
trans-1,2-Dichloroethene	10.0	11.5		ug/L		115	46 - 125
1,1-Dichloroethene	10.0	9.48		ug/L		95	43 - 118
1,2-Dichloropropane	10.0	10.3		ug/L		103	60 - 138
cis-1,3-Dichloropropene	10.0	9.33		ug/L		93	49 - 141
trans-1,3-Dichloropropene	10.0	9.17		ug/L		92	52 - 140
Methylene Chloride	10.0	10.3		ug/L		103	52 - 132
1,1,1,2-Tetrachloroethane	10.0	10.3		ug/L		103	60 - 134
1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	63 - 148
Tetrachloroethene	10.0	12.0		ug/L		120	48 - 136
1,1,1-Trichloroethane	10.0	10.5		ug/L		105	58 - 136
1,1,2-Trichloroethane	10.0	10.7		ug/L		107	60 - 140
Trichloroethene	10.0	11.1		ug/L		111	59 - 129
Trichlorofluoromethane	10.0	10.4		ug/L		104	62 - 138

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

Lab Sample ID: LCS 660-167767/4
Matrix: Water
Analysis Batch: 167767

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			10.0	10.1		ug/L		101	51 - 171		
Vinyl chloride			10.0	10.9		ug/L		109	66 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 119*
Dibromofluoromethane	*98*		*83 - 123*
Toluene-d8 (Surr)	*100*		*78 - 126*

Lab Sample ID: 660-72731-1 MS
Matrix: Water
Analysis Batch: 167767

Client Sample ID: Purge Water
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Bromobenzene	<1.0		10.0	11.3		ug/L		113	70 - 139		
Bromoform	<1.0		10.0	11.7		ug/L		117	49 - 150		
Bromomethane	<5.0		10.0	11.6		ug/L		116	23 - 140		
Carbon tetrachloride	<1.0		10.0	11.7		ug/L		117	50 - 162		
Chlorobenzene	<1.0		10.0	11.2		ug/L		112	70 - 125		
Chloroethane	<5.0		10.0	11.4		ug/L		114	43 - 165		
Chloroform	<1.0		10.0	10.9		ug/L		109	70 - 124		
Chloromethane	<4.0		10.0	12.2		ug/L		122	56 - 137		
Dibromochloromethane	<1.0		10.0	11.3		ug/L		113	58 - 131		
Dibromomethane	<1.0		10.0	10.9		ug/L		109	63 - 131		
1,2-Dichlorobenzene	<1.0		10.0	10.9		ug/L		109	70 - 142		
1,3-Dichlorobenzene	<1.0		10.0	11.1		ug/L		111	70 - 137		
1,4-Dichlorobenzene	<1.0		10.0	10.7		ug/L		107	70 - 137		
Dichlorodifluoromethane	<5.0		10.0	11.7		ug/L		117	37 - 139		
1,1-Dichloroethane	<1.0		10.0	11.5		ug/L		115	70 - 126		
1,2-Dichloroethane	<1.0		10.0	10.7		ug/L		107	65 - 150		
cis-1,2-Dichloroethylene	<1.0		10.0	11.4		ug/L		114	70 - 122		
trans-1,2-Dichloroethene	<1.0		10.0	11.9		ug/L		119	64 - 127		
1,1-Dichloroethene	<1.0		10.0	10.5		ug/L		105	60 - 127		
1,2-Dichloropropane	<1.0		10.0	11.5		ug/L		115	66 - 135		
cis-1,3-Dichloropropene	<1.0		10.0	9.35		ug/L		93	46 - 131		
trans-1,3-Dichloropropene	<1.0		10.0	8.92		ug/L		89	40 - 137		
Methylene Chloride	<5.0		10.0	10.4		ug/L		104	61 - 134		
1,1,1,2-Tetrachloroethane	<1.0		10.0	11.0		ug/L		110	59 - 140		
1,1,2,2-Tetrachloroethane	<1.0		10.0	10.7		ug/L		107	41 - 149		
Tetrachloroethene	<1.0		10.0	11.7		ug/L		117	62 - 128		
1,1,1-Trichloroethane	<1.0		10.0	11.7		ug/L		117	61 - 152		
1,1,2-Trichloroethane	<1.0		10.0	11.5		ug/L		115	60 - 132		
Trichloroethene	<1.0		10.0	12.3		ug/L		123	70 - 131		
Trichlorofluoromethane	<5.0		10.0	12.2		ug/L		122	60 - 157		
1,2,3-Trichloropropane	<1.0		10.0	10.5		ug/L		105	35 - 164		
Vinyl chloride	<1.0		10.0	12.6		ug/L		126	63 - 126		

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

Lab Sample ID: 660-72731-1 MS
Matrix: Water
Analysis Batch: 167767

Client Sample ID: Purge Water
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 119*
Dibromofluoromethane	*100*		*83 - 123*
Toluene-d8 (Surr)	*102*		*78 - 126*

Lab Sample ID: 660-72697-C-6 DU
Matrix: Water
Analysis Batch: 167767

Client Sample ID: 660-72697-C-6 DU
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bromobenzene	<1.0			<1.0		ug/L				NC	30
Bromoform	<1.0			<1.0		ug/L				NC	30
Bromomethane	<5.0			<5.0		ug/L				NC	30
Carbon tetrachloride	<1.0			<1.0		ug/L				NC	30
Chlorobenzene	<1.0			<1.0		ug/L				NC	30
Chloroethane	<5.0			<5.0		ug/L				NC	30
Chloroform	<1.0			<1.0		ug/L				NC	30
Chloromethane	<4.0			<4.0		ug/L				NC	30
Dibromochloromethane	<1.0			<1.0		ug/L				NC	30
Dibromomethane	<1.0			<1.0		ug/L				NC	30
1,2-Dichlorobenzene	<1.0			<1.0		ug/L				NC	30
1,3-Dichlorobenzene	<1.0			<1.0		ug/L				NC	30
1,4-Dichlorobenzene	<1.0			<1.0		ug/L				NC	30
Dichlorodifluoromethane	<5.0			<5.0		ug/L				NC	30
1,1-Dichloroethane	<1.0			<1.0		ug/L				NC	30
1,2-Dichloroethane	<1.0			<1.0		ug/L				NC	30
cis-1,2-Dichloroethylene	<1.0			<1.0		ug/L				NC	30
trans-1,2-Dichloroethene	<1.0			<1.0		ug/L				NC	30
1,1-Dichloroethene	<1.0			<1.0		ug/L				NC	30
1,2-Dichloropropane	<1.0			<1.0		ug/L				NC	30
cis-1,3-Dichloropropene	<1.0			<1.0		ug/L				NC	30
trans-1,3-Dichloropropene	<1.0			<1.0		ug/L				NC	30
Methylene Chloride	<5.0			<5.0		ug/L				NC	30
1,1,1,2-Tetrachloroethane	<1.0			<1.0		ug/L				NC	30
1,1,2,2-Tetrachloroethane	<1.0			<1.0		ug/L				NC	30
Tetrachloroethene	<1.0			<1.0		ug/L				NC	30
1,1,1-Trichloroethane	<1.0			<1.0		ug/L				NC	30
1,1,2-Trichloroethane	<1.0			<1.0		ug/L				NC	30
Trichloroethene	<1.0			<1.0		ug/L				NC	30
Trichlorofluoromethane	<5.0			<5.0		ug/L				NC	30
1,2,3-Trichloropropane	<1.0			<1.0		ug/L				NC	30
Vinyl chloride	<1.0			<1.0		ug/L				NC	30

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 119*
Dibromofluoromethane	*98*		*83 - 123*
Toluene-d8 (Surr)	*100*		*78 - 126*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 680-425405/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 425405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/16/16 17:08	1
Ethylene	<1.0		1.0	0.50	ug/L			03/16/16 17:08	1
Methane	<0.58		0.58	0.29	ug/L			03/16/16 17:08	1
Methane (TCD)	<390		390	39	ug/L			03/16/16 17:08	1

Lab Sample ID: LCS 680-425405/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 425405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	341		ug/L		118	75 - 125
Ethylene	269	321		ug/L		119	75 - 125
Methane	154	178		ug/L		116	75 - 125

Lab Sample ID: LCS 680-425405/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 425405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	2110		ug/L		110	75 - 125

Lab Sample ID: LCSD 680-425405/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 425405

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	314		ug/L		109	75 - 125	8	30
Ethylene	269	294		ug/L		109	75 - 125	9	30
Methane	154	165		ug/L		107	75 - 125	8	30

Lab Sample ID: LCSD 680-425405/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 425405

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	2060		ug/L		107	75 - 125	2	30

Lab Sample ID: MB 680-426011/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 426011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	<1.1		1.1	0.55	ug/L			03/21/16 22:48	1
Ethylene	<1.0		1.0	0.50	ug/L			03/21/16 22:48	1
Methane	<0.58		0.58	0.29	ug/L			03/21/16 22:48	1
Methane (TCD)	<390		390	39	ug/L			03/21/16 22:48	1

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

Lab Sample ID: LCS 680-426011/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 426011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	288	272		ug/L		94	75 - 125
Ethylene	269	260		ug/L		97	75 - 125
Methane	154	144		ug/L		93	75 - 125

Lab Sample ID: LCS 680-426011/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 426011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane (TCD)	1920	1820		ug/L		95	75 - 125

Lab Sample ID: LCSD 680-426011/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 426011

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	288	296		ug/L		103	75 - 125	8	30
Ethylene	269	280		ug/L		104	75 - 125	7	30
Methane	154	156		ug/L		101	75 - 125	8	30

Lab Sample ID: LCSD 680-426011/7 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 426011

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane (TCD)	1920	1860		ug/L		96	75 - 125	2	30

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-167635/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 167653 — **Prep Batch: 167635**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/21/16 07:10	03/21/16 11:28	1

Lab Sample ID: LCS 660-167635/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 167653 — **Prep Batch: 167635**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Iron	1000	1050		ug/L		105	80 - 120

Lab Sample ID: MB 660-167756/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 167751 — **Prep Batch: 167756**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Iron	<200		200	50	ug/L		03/23/16 09:30	03/23/16 15:51	1

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

Lab Sample ID: LCS 660-167756/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 167751 — **Prep Batch: 167756**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Iron	1000	1010		ug/L		101	80 - 120

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

Lab Sample ID: MB 400-298179/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.0		1.0	0.50	mg/L			03/19/16 13:53	1

Lab Sample ID: LCS 400-298179/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.75		mg/L		98	80 - 120

Lab Sample ID: MRL 400-298179/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298179

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.00	1.32		mg/L		132	50 - 150

Lab Sample ID: MB 400-298224/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.0		1.0	0.50	mg/L			03/19/16 21:27	1

Lab Sample ID: LCS 400-298224/36 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.82		mg/L		98	80 - 120

Lab Sample ID: MRL 400-298224/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 298224

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.00	1.32		mg/L		132	50 - 150

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

Lab Sample ID: MB 400-300212/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300212

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.0		1.0	0.50	mg/L			04/02/16 17:23	1

Lab Sample ID: LCS 400-300212/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300212

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

Lab Sample ID: MRL 400-300212/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300212

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.00	1.32		mg/L		132	50 - 150

Lab Sample ID: MB 400-300788/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300788

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.0		1.0	0.50	mg/L			04/06/16 16:13	1

Lab Sample ID: LCS 400-300788/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.72		mg/L		97	80 - 120

Lab Sample ID: MRL 400-300788/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 300788

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.00	1.48		mg/L		148	50 - 150

QC Association Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

GC/MS VOA

Analysis Batch: 167472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-1	Trip Blank	Total/NA	Water	8260B	
660-72606-2	Field Blank	Total/NA	Water	8260B	
660-72606-3	GZ-501L	Total/NA	Water	8260B	
660-72606-4	GZ-503L	Total/NA	Water	8260B	
660-72606-5	GZ-504U	Total/NA	Water	8260B	
660-72606-6	GZ-504L	Total/NA	Water	8260B	
660-72606-7	GZ-504R	Total/NA	Water	8260B	
660-72606-8	GZ-601R	Total/NA	Water	8260B	
660-72606-9	GZ-701L	Total/NA	Water	8260B	
660-72606-10	GZ-701R	Total/NA	Water	8260B	
660-72606-11	GZ-702U	Total/NA	Water	8260B	
660-72606-12	GZ-702R	Total/NA	Water	8260B	
LCS 660-167472/4	Lab Control Sample	Total/NA	Water	8260B	
MB 660-167472/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 167531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-3 - RA	GZ-501L	Total/NA	Water	8260B	
660-72606-4 - RA	GZ-503L	Total/NA	Water	8260B	
660-72606-7 - RA	GZ-504R	Total/NA	Water	8260B	
LCS 660-167531/13	Lab Control Sample	Total/NA	Water	8260B	
MB 660-167531/16	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 167632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-1	Trip Blank 1	Total/NA	Water	8260B	
660-72663-2	Field Blank 1	Total/NA	Water	8260B	
660-72663-3 - DL	OW-304L	Total/NA	Water	8260B	
660-72663-3	OW-304L	Total/NA	Water	8260B	
660-72663-4 - DL	OW-304R	Total/NA	Water	8260B	
660-72663-4	OW-304R	Total/NA	Water	8260B	
LCS 660-167632/4	Lab Control Sample	Total/NA	Water	8260B	
MB 660-167632/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 167670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-5	GZ-506R	Total/NA	Water	8260B	
660-72663-6	GZ-519U	Total/NA	Water	8260B	
660-72663-7	OW-402U	Total/NA	Water	8260B	
660-72663-7 MS	OW-402U	Total/NA	Water	8260B	
660-72663-7 MSD	OW-402U	Total/NA	Water	8260B	
660-72663-8	OW-402U DUP	Total/NA	Water	8260B	
660-72663-9 - DL	OW-101	Total/NA	Water	8260B	
660-72663-9	OW-101	Total/NA	Water	8260B	
660-72663-12	OW-101L DUP	Total/NA	Water	8260B	
660-72663-13 - DL	OW-307	Total/NA	Water	8260B	
660-72663-13	OW-307	Total/NA	Water	8260B	
660-72663-14 - DL	GZ-703R	Total/NA	Water	8260B	
660-72663-14	GZ-703R	Total/NA	Water	8260B	
660-72663-15	GZ-505R	Total/NA	Water	8260B	
660-72663-16	WB-3L	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 167670 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-17	WB-3L DUP	Total/NA	Water	8260B	
LCS 660-167670/4	Lab Control Sample	Total/NA	Water	8260B	
MB 660-167670/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 167707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-6 - DL	GZ-519U	Total/NA	Water	8260B	
660-72663-10	OW-101L	Total/NA	Water	8260B	
660-72663-10 MS	OW-101L	Total/NA	Water	8260B	
660-72663-10 MSD	OW-101L	Total/NA	Water	8260B	
660-72663-15 - DL	GZ-505R	Total/NA	Water	8260B	
660-72663-17 - DL	WB-3L DUP	Total/NA	Water	8260B	
660-72663-18	WB-4L	Total/NA	Water	8260B	
660-72663-19	WB-4L DUP	Total/NA	Water	8260B	
660-72663-20	WB-2U	Total/NA	Water	8260B	
660-72663-21	WB-2L	Total/NA	Water	8260B	
660-72663-22	OW-404U	Total/NA	Water	8260B	
660-72663-23	OW-404R	Total/NA	Water	8260B	
660-72663-24 - DL	WB-1L	Total/NA	Water	8260B	
660-72663-24	WB-1L	Total/NA	Water	8260B	
660-72663-25	WB-1U	Total/NA	Water	8260B	
660-72663-26	TRIP BLANK 2	Total/NA	Water	8260B	
LCS 660-167707/4	Lab Control Sample	Total/NA	Water	8260B	
MB 660-167707/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 167767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-18 - DL	WB-4L	Total/NA	Water	8260B	
660-72663-19 - DL	WB-4L DUP	Total/NA	Water	8260B	
660-72697-1	Trip Blank	Total/NA	Water	8260B	
660-72697-2	Field Blank	Total/NA	Water	8260B	
660-72697-3 - DL	IW-1	Total/NA	Water	8260B	
660-72697-3	IW-1	Total/NA	Water	8260B	
660-72697-4 - DL	IW-2	Total/NA	Water	8260B	
660-72697-4	IW-2	Total/NA	Water	8260B	
660-72697-5	IW-3	Total/NA	Water	8260B	
660-72697-C-6 DU	660-72697-C-6 DU	Total/NA	Water	8260B	
660-72731-1	Purge Water	Total/NA	Water	8260B	
660-72731-1 MS	Purge Water	Total/NA	Water	8260B	
LCS 660-167767/4	Lab Control Sample	Total/NA	Water	8260B	
MB 660-167767/6	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 425405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-4	GZ-503L	Total/NA	Water	RSK-175	
660-72606-6	GZ-504L	Total/NA	Water	RSK-175	
660-72606-7	GZ-504R	Total/NA	Water	RSK-175	
LCS 680-425405/3	Lab Control Sample	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 425405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-425405/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-425405/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-425405/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 680-425405/10	Method Blank	Total/NA	Water	RSK-175	

Analysis Batch: 426011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-3	OW-304L	Total/NA	Water	RSK-175	
660-72663-5	GZ-506R	Total/NA	Water	RSK-175	
660-72663-6	GZ-519U	Total/NA	Water	RSK-175	
660-72663-9	OW-101	Total/NA	Water	RSK-175	
660-72663-13	OW-307	Total/NA	Water	RSK-175	
660-72663-15	GZ-505R	Total/NA	Water	RSK-175	
660-72663-16	WB-3L	Total/NA	Water	RSK-175	
660-72663-18	WB-4L	Total/NA	Water	RSK-175	
660-72697-3	IW-1	Total/NA	Water	RSK-175	
660-72697-4	IW-2	Total/NA	Water	RSK-175	
660-72697-5	IW-3	Total/NA	Water	RSK-175	
LCS 680-426011/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCS 680-426011/6	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 680-426011/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
LCSD 680-426011/7	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 680-426011/9	Method Blank	Total/NA	Water	RSK-175	

Metals

Prep Batch: 167635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-4	GZ-503L	Dissolved	Water	3005A	
660-72606-6	GZ-504L	Dissolved	Water	3005A	
660-72606-7	GZ-504R	Dissolved	Water	3005A	
LCS 660-167635/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-167635/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 167653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-4	GZ-503L	Dissolved	Water	6010B	167635
660-72606-6	GZ-504L	Dissolved	Water	6010B	167635
660-72606-7	GZ-504R	Dissolved	Water	6010B	167635
CRI 660-167653/5	DL		Water	6010B	
ICSA 660-167653/7	ICS		Water	6010B	
ICSAB 660-167653/8	ICS		Water	6010B	
LCS 660-167635/2-A	Lab Control Sample	Total Recoverable	Water	6010B	167635
MB 660-167635/1-A	Method Blank	Total Recoverable	Water	6010B	167635

Analysis Batch: 167751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-3	OW-304L	Dissolved	Water	6010B	167756
660-72663-5	GZ-506R	Dissolved	Water	6010B	167756
660-72663-6	GZ-519U	Dissolved	Water	6010B	167756

Metals (Continued)

Analysis Batch: 167751 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-9	OW-101	Dissolved	Water	6010B	167756
660-72663-13	OW-307	Dissolved	Water	6010B	167756
660-72663-15	GZ-505R	Dissolved	Water	6010B	167756
660-72663-16	WB-3L	Dissolved	Water	6010B	167756
660-72663-18	WB-4L	Dissolved	Water	6010B	167756
660-72697-3	IW-1	Dissolved	Water	6010B	167756
660-72697-4	IW-2	Dissolved	Water	6010B	167756
660-72697-5	IW-3	Dissolved	Water	6010B	167756
CRI 660-167751/5	DL		Water	6010B	
ICSA 660-167751/7	ICS		Water	6010B	
ICSAB 660-167751/8	ICS		Water	6010B	
LCS 660-167756/2-A	Lab Control Sample	Total Recoverable	Water	6010B	167756
MB 660-167756/1-A	Method Blank	Total Recoverable	Water	6010B	167756

Prep Batch: 167756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-3	OW-304L	Dissolved	Water	3005A	
660-72663-5	GZ-506R	Dissolved	Water	3005A	
660-72663-6	GZ-519U	Dissolved	Water	3005A	
660-72663-9	OW-101	Dissolved	Water	3005A	
660-72663-13	OW-307	Dissolved	Water	3005A	
660-72663-15	GZ-505R	Dissolved	Water	3005A	
660-72663-16	WB-3L	Dissolved	Water	3005A	
660-72663-18	WB-4L	Dissolved	Water	3005A	
660-72697-3	IW-1	Dissolved	Water	3005A	
660-72697-4	IW-2	Dissolved	Water	3005A	
660-72697-5	IW-3	Dissolved	Water	3005A	
LCS 660-167756/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-167756/1-A	Method Blank	Total Recoverable	Water	3005A	

General Chemistry

Analysis Batch: 298179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-4	GZ-503L	Total/NA	Water	SM 5310B	
660-72606-6	GZ-504L	Total/NA	Water	SM 5310B	
LCS 400-298179/5	Lab Control Sample	Total/NA	Water	SM 5310B	
MB 400-298179/4	Method Blank	Total/NA	Water	SM 5310B	
MRL 400-298179/2	Lab Control Sample	Total/NA	Water	SM 5310B	

Analysis Batch: 298224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72606-7	GZ-504R	Total/NA	Water	SM 5310B	
LCS 400-298224/36	Lab Control Sample	Total/NA	Water	SM 5310B	
MB 400-298224/35	Method Blank	Total/NA	Water	SM 5310B	
MRL 400-298224/2	Lab Control Sample	Total/NA	Water	SM 5310B	

Analysis Batch: 300212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72697-3	IW-1	Total/NA	Water	SM 5310B	

General Chemistry (Continued)

Analysis Batch: 300212 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-300212/5	Lab Control Sample	Total/NA	Water	SM 5310B	
MB 400-300212/4	Method Blank	Total/NA	Water	SM 5310B	
MRL 400-300212/2	Lab Control Sample	Total/NA	Water	SM 5310B	

Analysis Batch: 300788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-72663-3	OW-304L	Total/NA	Water	SM 5310B	
660-72663-5	GZ-506R	Total/NA	Water	SM 5310B	
660-72663-6	GZ-519U	Total/NA	Water	SM 5310B	
660-72663-9	OW-101	Total/NA	Water	SM 5310B	
660-72663-13	OW-307	Total/NA	Water	SM 5310B	
660-72663-15	GZ-505R	Total/NA	Water	SM 5310B	
660-72663-16	WB-3L	Total/NA	Water	SM 5310B	
660-72663-18	WB-4L	Total/NA	Water	SM 5310B	
660-72697-4	IW-2	Total/NA	Water	SM 5310B	
660-72697-5	IW-3	Total/NA	Water	SM 5310B	
LCS 400-300788/5	Lab Control Sample	Total/NA	Water	SM 5310B	
MB 400-300788/4	Method Blank	Total/NA	Water	SM 5310B	
MRL 400-300788/2	Lab Control Sample	Total/NA	Water	SM 5310B	

Lab Chronicle

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: Trip Blank — Lab Sample ID: 660-72606-1

Date Collected: 03/11/16 06:30
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 17:45	TGP	TAL TAM

Client Sample ID: Field Blank — Lab Sample ID: 660-72606-2

Date Collected: 03/11/16 06:35
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 18:03	TGP	TAL TAM

Client Sample ID: GZ-501L — Lab Sample ID: 660-72606-3

Date Collected: 03/11/16 07:50
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 20:31	TGP	TAL TAM
Total/NA	Analysis	8260B	RA	1	167531	03/17/16 17:48	TGP	TAL TAM

Client Sample ID: GZ-503L — Lab Sample ID: 660-72606-4

Date Collected: 03/11/16 08:15
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 20:49	TGP	TAL TAM
Total/NA	Analysis	8260B	RA	1	167531	03/17/16 18:06	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	425405	03/16/16 17:36	SMC	TAL SAV
Dissolved	Prep	3005A			167635	03/21/16 07:10	GAF	TAL TAM
Dissolved	Analysis	6010B		1	167653	03/21/16 11:55	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	298179	03/19/16 20:50	CLM	TAL PEN

Client Sample ID: GZ-504U — Lab Sample ID: 660-72606-5

Date Collected: 03/11/16 08:00
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 18:22	TGP	TAL TAM

Lab Chronicle

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-504L — Lab Sample ID: 660-72606-6

Date Collected: 03/11/16 07:05
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 18:40	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	425405	03/16/16 17:49	SMC	TAL SAV
Dissolved	Prep	3005A			167635	03/21/16 07:10	GAF	TAL TAM
Dissolved	Analysis	6010B		1	167653	03/21/16 12:04	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	298179	03/19/16 21:04	CLM	TAL PEN

Client Sample ID: GZ-504R — Lab Sample ID: 660-72606-7

Date Collected: 03/11/16 07:10
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 18:59	TGP	TAL TAM
Total/NA	Analysis	8260B	RA	1	167531	03/17/16 17:29	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	425405	03/16/16 18:01	SMC	TAL SAV
Dissolved	Prep	3005A			167635	03/21/16 07:10	GAF	TAL TAM
Dissolved	Analysis	6010B		1	167653	03/21/16 12:07	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	298224	03/20/16 03:20	CLM	TAL PEN

Client Sample ID: GZ-601R — Lab Sample ID: 660-72606-8

Date Collected: 03/11/16 09:45
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 19:17	TGP	TAL TAM

Client Sample ID: GZ-701L — Lab Sample ID: 660-72606-9

Date Collected: 03/11/16 10:45
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 19:36	TGP	TAL TAM

Client Sample ID: GZ-701R — Lab Sample ID: 660-72606-10

Date Collected: 03/11/16 09:45
Date Received: 03/12/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 19:54	TGP	TAL TAM

Client Sample ID: GZ-702U — Lab Sample ID: 660-72606-11

Date Collected: 03/11/16 11:00 — **Matrix: Water**
Date Received: 03/12/16 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 20:12	TGP	TAL TAM

Client Sample ID: GZ-702R — Lab Sample ID: 660-72606-12

Date Collected: 03/11/16 10:30 — **Matrix: Water**
Date Received: 03/12/16 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167472	03/16/16 21:08	TGP	TAL TAM

Client Sample ID: Trip Blank 1 — Lab Sample ID: 660-72663-1

Date Collected: 03/15/16 05:45 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167632	03/21/16 12:04	ECC	TAL TAM

Client Sample ID: Field Blank 1 — Lab Sample ID: 660-72663-2

Date Collected: 03/15/16 05:55 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167632	03/21/16 12:22	ECC	TAL TAM

Client Sample ID: OW-304L — Lab Sample ID: 660-72663-3

Date Collected: 03/15/16 06:15 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	20	167632	03/21/16 15:00	ECC	TAL TAM
Total/NA	Analysis	8260B		2	167632	03/21/16 15:36	ECC	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/21/16 23:01	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:18	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 17:14	CLM	TAL PEN

Client Sample ID: OW-304R — Lab Sample ID: 660-72663-4

Date Collected: 03/15/16 06:00 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	20	167632	03/21/16 15:18	ECC	TAL TAM
Total/NA	Analysis	8260B		2	167632	03/21/16 15:53	ECC	TAL TAM

Client Sample ID: GZ-506R — Lab Sample ID: 660-72663-5

Date Collected: 03/15/16 06:55 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 18:35	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/21/16 23:14	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:27	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 17:29	CLM	TAL PEN

Client Sample ID: GZ-519U — Lab Sample ID: 660-72663-6

Date Collected: 03/15/16 07:15 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 18:53	TGP	TAL TAM
Total/NA	Analysis	8260B	DL	5	167707	03/22/16 19:50	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/21/16 23:27	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:30	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 17:43	CLM	TAL PEN

Client Sample ID: OW-402U — Lab Sample ID: 660-72663-7

Date Collected: 03/15/16 08:00 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 19:12	TGP	TAL TAM

Client Sample ID: OW-402U DUP — Lab Sample ID: 660-72663-8

Date Collected: 03/15/16 08:00 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 20:26	TGP	TAL TAM

Client Sample ID: OW-101 — Lab Sample ID: 660-72663-9

Date Collected: 03/15/16 08:05 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	167670	03/21/16 21:59	TGP	TAL TAM
Total/NA	Analysis	8260B		5	167670	03/22/16 00:09	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/21/16 23:40	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM

Lab Chronicle

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: OW-101
Lab Sample ID: 660-72663-9
Date Collected: 03/15/16 08:05
Matrix: Water
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1	167751	03/23/16 16:33	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 17:54	CLM	TAL PEN

Client Sample ID: OW-101L
Lab Sample ID: 660-72663-10
Date Collected: 03/15/16 09:25
Matrix: Water
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 16:08	TGP	TAL TAM

Client Sample ID: OW-101L DUP
Lab Sample ID: 660-72663-12
Date Collected: 03/15/16 09:25
Matrix: Water
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 20:45	TGP	TAL TAM

Client Sample ID: OW-307
Lab Sample ID: 660-72663-13
Date Collected: 03/15/16 09:30
Matrix: Water
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	167670	03/21/16 22:18	TGP	TAL TAM
Total/NA	Analysis	8260B		1	167670	03/21/16 23:32	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/21/16 23:53	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:36	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 18:11	CLM	TAL PEN

Client Sample ID: GZ-703R
Lab Sample ID: 660-72663-14
Date Collected: 03/15/16 10:05
Matrix: Water
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	167670	03/21/16 22:36	TGP	TAL TAM
Total/NA	Analysis	8260B		1	167670	03/21/16 22:55	TGP	TAL TAM

Lab Chronicle

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Client Sample ID: GZ-505R — Lab Sample ID: 660-72663-15

Date Collected: 03/15/16 10:10
Date Received: 03/16/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 21:03	TGP	TAL TAM
Total/NA	Analysis	8260B	DL	5	167707	03/22/16 20:09	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/22/16 00:05	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:39	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 18:48	CLM	TAL PEN

Client Sample ID: WB-3L — Lab Sample ID: 660-72663-16

Date Collected: 03/15/16 11:35
Date Received: 03/16/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 21:22	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/22/16 00:18	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:43	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 19:03	CLM	TAL PEN

Client Sample ID: WB-3L DUP — Lab Sample ID: 660-72663-17

Date Collected: 03/15/16 11:35
Date Received: 03/16/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167670	03/21/16 21:41	TGP	TAL TAM
Total/NA	Analysis	8260B	DL	5	167707	03/22/16 20:27	TGP	TAL TAM

Client Sample ID: WB-4L — Lab Sample ID: 660-72663-18

Date Collected: 03/15/16 11:30
Date Received: 03/16/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 19:13	TGP	TAL TAM
Total/NA	Analysis	8260B	DL	5	167767	03/23/16 20:13	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/22/16 00:31	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:46	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 19:17	CLM	TAL PEN

Client Sample ID: WB-4L DUP — Lab Sample ID: 660-72663-19

Date Collected: 03/15/16 11:30 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 19:32	TGP	TAL TAM
Total/NA	Analysis	8260B	DL	5	167767	03/23/16 20:31	TGP	TAL TAM

Client Sample ID: WB-2U — Lab Sample ID: 660-72663-20

Date Collected: 03/15/16 12:20 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 17:41	TGP	TAL TAM

Client Sample ID: WB-2L — Lab Sample ID: 660-72663-21

Date Collected: 03/15/16 12:30 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 18:55	TGP	TAL TAM

Client Sample ID: OW-404U — Lab Sample ID: 660-72663-22

Date Collected: 03/15/16 13:05 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 17:59	TGP	TAL TAM

Client Sample ID: OW-404R — Lab Sample ID: 660-72663-23

Date Collected: 03/15/16 13:20 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 18:18	TGP	TAL TAM

Client Sample ID: WB-1L — Lab Sample ID: 660-72663-24

Date Collected: 03/15/16 14:15 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	167707	03/22/16 20:46	TGP	TAL TAM
Total/NA	Analysis	8260B		1	167707	03/22/16 21:04	TGP	TAL TAM

Client Sample ID: WB-1U — Lab Sample ID: 660-72663-25

Date Collected: 03/15/16 14:30 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 18:36	TGP	TAL TAM

Client Sample ID: TRIP BLANK 2 — Lab Sample ID: 660-72663-26

Date Collected: 03/15/16 05:45 — **Matrix: Water**
Date Received: 03/16/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167707	03/22/16 17:22	TGP	TAL TAM

Client Sample ID: Trip Blank — Lab Sample ID: 660-72697-1

Date Collected: 03/16/16 07:30 — **Matrix: Water**
Date Received: 03/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167767	03/23/16 14:58	TGP	TAL TAM

Client Sample ID: Field Blank — Lab Sample ID: 660-72697-2

Date Collected: 03/16/16 08:30 — **Matrix: Water**
Date Received: 03/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167767	03/23/16 15:17	TGP	TAL TAM

Client Sample ID: IW-1 — Lab Sample ID: 660-72697-3

Date Collected: 03/16/16 13:00 — **Matrix: Water**
Date Received: 03/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	10	167767	03/23/16 20:50	TGP	TAL TAM
Total/NA	Analysis	8260B		1	167767	03/23/16 22:04	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/22/16 00:44	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:49	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300212	04/02/16 20:26	CLM	TAL PEN

Client Sample ID: IW-2 — Lab Sample ID: 660-72697-4

Date Collected: 03/16/16 10:15 — **Matrix: Water**
Date Received: 03/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	167767	03/23/16 21:08	TGP	TAL TAM
Total/NA	Analysis	8260B		1	167767	03/23/16 21:27	TGP	TAL TAM

Lab Chronicle

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	426011	03/22/16 00:57	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:52	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 19:31	CLM	TAL PEN

Client Sample ID: IW-3

Lab Sample ID: 660-72697-5

Date Collected: 03/16/16 11:15

Matrix: Water

Date Received: 03/17/16 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167767	03/23/16 15:36	TGP	TAL TAM
Total/NA	Analysis	RSK-175		1	426011	03/22/16 01:10	SMC	TAL SAV
Dissolved	Prep	3005A			167756	03/23/16 09:30	ASD	TAL TAM
Dissolved	Analysis	6010B		1	167751	03/23/16 16:55	GAF	TAL TAM
Total/NA	Analysis	SM 5310B		1	300788	04/06/16 20:39	CLM	TAL PEN

Client Sample ID: Purge Water

Lab Sample ID: 660-72731-1

Date Collected: 03/18/16 13:00

Matrix: Water

Date Received: 03/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	167767	03/23/16 16:31	TGP	TAL TAM

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Laboratory: TestAmerica Tampa

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E84282	06-30-16

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	05-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87052	06-30-16 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL TAM
RSK-175	Dissolved Gases (GC)	RSK	TAL SAV
6010B	Metals (ICP)	SW846	TAL TAM
SM 5310B	Organic Carbon, Total (TOC)	SM	TAL PEN

Protocol References:

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Sample Summary

Client: GZA GeoEnvironmental, Inc.
Project/Site: HP-San German IB

TestAmerica Job ID: 660-72606-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-72606-1	Trip Blank	Water	03/11/16 06:30	03/12/16 09:15
660-72606-2	Field Blank	Water	03/11/16 06:35	03/12/16 09:15
660-72606-3	GZ-501L	Water	03/11/16 07:50	03/12/16 09:15
660-72606-4	GZ-503L	Water	03/11/16 08:15	03/12/16 09:15
660-72606-5	GZ-504U	Water	03/11/16 08:00	03/12/16 09:15
660-72606-6	GZ-504L	Water	03/11/16 07:05	03/12/16 09:15
660-72606-7	GZ-504R	Water	03/11/16 07:10	03/12/16 09:15
660-72606-8	GZ-601R	Water	03/11/16 09:45	03/12/16 09:15
660-72606-9	GZ-701L	Water	03/11/16 10:45	03/12/16 09:15
660-72606-10	GZ-701R	Water	03/11/16 09:45	03/12/16 09:15
660-72606-11	GZ-702U	Water	03/11/16 11:00	03/12/16 09:15
660-72606-12	GZ-702R	Water	03/11/16 10:30	03/12/16 09:15
660-72663-1	Trip Blank 1	Water	03/15/16 05:45	03/16/16 10:20
660-72663-2	Field Blank 1	Water	03/15/16 05:55	03/16/16 10:20
660-72663-3	OW-304L	Water	03/15/16 06:15	03/16/16 10:20
660-72663-4	OW-304R	Water	03/15/16 06:00	03/16/16 10:20
660-72663-5	GZ-506R	Water	03/15/16 06:55	03/16/16 10:20
660-72663-6	GZ-519U	Water	03/15/16 07:15	03/16/16 10:20
660-72663-7	OW-402U	Water	03/15/16 08:00	03/16/16 10:20
660-72663-8	OW-402U DUP	Water	03/15/16 08:00	03/16/16 10:20
660-72663-9	OW-101	Water	03/15/16 08:05	03/16/16 10:20
660-72663-10	OW-101L	Water	03/15/16 09:25	03/16/16 10:20
660-72663-12	OW-101L DUP	Water	03/15/16 09:25	03/16/16 10:20
660-72663-13	OW-307	Water	03/15/16 09:30	03/16/16 10:20
660-72663-14	GZ-703R	Water	03/15/16 10:05	03/16/16 10:20
660-72663-15	GZ-505R	Water	03/15/16 10:10	03/16/16 10:20
660-72663-16	WB-3L	Water	03/15/16 11:35	03/16/16 10:20
660-72663-17	WB-3L DUP	Water	03/15/16 11:35	03/16/16 10:20
660-72663-18	WB-4L	Water	03/15/16 11:30	03/16/16 10:20
660-72663-19	WB-4L DUP	Water	03/15/16 11:30	03/16/16 10:20
660-72663-20	WB-2U	Water	03/15/16 12:20	03/16/16 10:20
660-72663-21	WB-2L	Water	03/15/16 12:30	03/16/16 10:20
660-72663-22	OW-404U	Water	03/15/16 13:05	03/16/16 10:20
660-72663-23	OW-404R	Water	03/15/16 13:20	03/16/16 10:20
660-72663-24	WB-1L	Water	03/15/16 14:15	03/16/16 10:20
660-72663-25	WB-1U	Water	03/15/16 14:30	03/16/16 10:20
660-72663-26	TRIP BLANK 2	Water	03/15/16 05:45	03/16/16 10:20
660-72697-1	Trip Blank	Water	03/16/16 07:30	03/17/16 09:00
660-72697-2	Field Blank	Water	03/16/16 08:30	03/17/16 09:00
660-72697-3	IW-1	Water	03/16/16 13:00	03/17/16 09:00
660-72697-4	IW-2	Water	03/16/16 10:15	03/17/16 09:00
660-72697-5	IW-3	Water	03/16/16 11:15	03/17/16 09:00
660-72731-1	Purge Water	Water	03/18/16 13:00	03/19/16 09:20

Shipping and Receiving Documents

TestAmerica Tampa
6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig / Matt Dion	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581.3
Client Contact: Mr. James Roehrig	Phone: 781-636-8867	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 3 of 6
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: ~~new PO need for Oct 2015~~			
Email: james.roehrig@gza.com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

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

Loc: 660
72606

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp; G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOH	6010B - Dissolved Iron	RSK_175 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A	S		
~~OW-304L~~ Temperature Blank				Water								
~~OW-307~~ Trip Blank	3/11/16	0630	G	Water								
~~WB-0L~~ Field Blank		0635		Water								
~~WB-4L~~ GZ-501L		0750		Water			X					
~~IW-2~~ GZ-503L		0815		Water			X	X	X	X		
~~IW-3~~ GZ-504U		0800		Water			X					
~~GZ-504R~~ GZ-504L		0705		Water			X	X	X	X		
~~GZ-505R~~ GZ-504R		0710		Water			X	X	X	X		
~~GZ-506R~~ GZ-601R		0945		Water			X					
GZ-701L		1045		Water			X					
GZ-701R	3/11/16	0945	G	Water			X					

660-72606 Chain of Custody

Page 18 of 68

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: Kristin Southers | Date: 3/2/16 | Time: 1655 | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/11/16 1225		[signature]	3/12/16 0511	TATPA
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: 4 / 6 / 1

05/03/2016

TestAmerica Tampa
6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig + Matt Dion	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581.2
Client Contact: Mr. James Roehrig	Phone: 781-635-8867	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 2 of 6
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: ~~new PO need for Oct 2015~~			
Email: james.roehrig@gza.com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, 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)	8260B - VOH	6010B - Dissolved Iron	RSK_176 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A	S		
~~GZ-601R~~ GZ-702V	3/11/16	1100	G	Water			X					
~~GZ-701R~~ GZ-702R	3/11/16	1030	G	Water			X					
~~GZ-702R~~				Water								
~~GZ-703R~~				Water								
~~OW-304R~~				Water								
~~OW-404R~~				Water								
~~GZ-519W~~				Water								
~~OW-101~~				Water								
~~IW-1~~				Water								
~~GZ-503~~				Water								
~~GZ-504~~				Water								

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Kristin Southers | Date: 3/2/16 | Time: 1655 | Method of Shipment:

Relinquished by:	Date/Time: 3/10/16 1225	Company	Received by:	Date/Time: 3/12/16 09:15	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.7/1.1

TestAmerica Tampa
6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-86316.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 660-72606-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/11/2016			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - 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)	SM5310B/ TOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
W-1 (660-72697-3)	3/16/16	13:00 Eastern		Water			X	3	☆ Give to John Harris For TOC

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)

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/30/16 1700	TA TAT		3/31/16 1005	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.0°C, 0.2°C

TestAmerica Tampa
6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s)	COC No 660-85835.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 660-72606-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 4/4/2016			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #			
Email	WO #			
Project Name: HP-San German IB	Project #: 66009297			
Site	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, 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)	RSK_175/ MEE (Dissolved Gasses)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GZ-503L (660-72606-4)	3/11/16	08:15 Eastern		Water			X	3	
GZ-504L (660-72606-6)	3/11/16	07:05 Eastern		Water			X	3	
GZ-504R (660-72606-7)	3/11/16	07:10 Eastern		Water			X	3	

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)

Special Instructions/QC Requirements: 4.0/4.4 1.5/1.9

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

Relinquished by:	Date/Time: 3/14/16 1600	Company: TAM	Received by:	Date/Time: 3-15-16 6:09 AM	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

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

TestAmerica Tampa
6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581.1
Client Contact: Mr. James Roehrig	Phone: 781-636-8867	E-Mail: haukur.gudnason@testamericainc.com		Page: ~~Page 1 of 6~~ 1/3
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: ~~new PO need for Oct 2015~~			
Email: james.roehrig@gza.com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Loc: 660
72663

660-72663 Chain of Custody

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOH	6010B - Dissolved Iron	RSK_175 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A	S		
~~GZ-504U~~ Temp Blank 1		3/15/16		Water								
~~GZ-702U~~ Trip Blank 1	0545		G	Water			X				3	
~~OW402-U~~ Field Blank	0555			Water			X				3	
~~OW-404U~~ OW-304L	0615			Water			X	X	X	X	10	Metals were filtered
~~WB-1U~~ OW-304R	0600			Water			X				3	
~~WB-2U~~ GZ-506R	0655			Water			X	X	X	X	10	Metals were filtered
~~GZ-501L~~ GZ-519U	0715			Water			X	X	X	X	10	Metals were filtered
~~GZ-701L~~ OW-402U	0800			Water			X				3	
~~OW-401L~~ OW-402U DUP	0800			Water			X				3	
~~WB-1L~~ OW-402U MS/MSD	0800			Water			X				3	Run 8260 MS/MSD
~~WB-2L~~ OW-101	0805	03/15/16	G	Water			X	X	X	X	10	Metals were filtered

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: Kristin Southers	Date: 3/2/16	Time: 1655	Method of Shipment		
Relinquished by:	Date/Time: 3/15/16 1445	Company	Received by:	Date/Time: 3/16/16 1020	Company TATPA
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: 1.2/0.1, 1.8/1.5 cw-09

05/05/2016

TestAmerica Tampa
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Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581.1
Client Contact: Mr. James Roehrig	Phone: 781-636-8867	E-Mail: haukur.gudnason@testamericainc.com		Page: ~~Page 1 of 6~~ 2/3
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: ~~new PO need for Oct 2015~~			
Email: james.roehrig@gza com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, 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)	8260B - VOH	6010B - Dissolved Iron	RSK_175 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A	S		
~~GZ-504U~~ OW-101L	0925 ET	3/15/16	G	Water			X	~~X~~	~~X~~	~~X~~	10	Metals were filtered
~~OW-102U~~ OW-101L DUP	0925 ET	3/15/16		Water			X				3	
~~OW-102-U~~ OW-101L MS/MSD	0925 ET	3/15/16		Water			X				3	Run 8260 MS/MSD
~~OW-104U~~ OW-307	3/15/16	0930		Water			X	X	X	X	10	Metals were filtered
~~WB-1U~~ GZ-703R		1005		Water			X				3	
~~WB-2U~~ GZ-505R		1010		Water			X	X	X	X	10	Metals were filtered
~~GZ-501L~~ WB-3L		1135		Water			X	X	X	X	10	Metals were filtered
~~GZ-701L~~ WB-3L DUP		1135		Water			X				3	
~~OW-101L~~ WB-4L		1130		Water			X	X	X	X	10	Metals were filtered
~~WB-1L~~ WB-4L DUP		1130		Water			X				3	
~~WB-2L~~ WB-2U	3/15/16	1220	G	Water			X				3	

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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: Kristin Southers	Date: 3/2/16	Time: 1655	Method of Shipment:		
Relinquished by:	Date/Time: 3/15/16 1445	Company	Received by:	Date/Time: 3/16/16 1020	Company TA TBA
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: 1.2/0.9, 1.8/1.5 CW-09		

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Tampa, FL 33634
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581.1
Client Contact: Mr. James Roehrig	Phone: 781-636-5867	E-Mail: haukur.gudnason@testamericainc.com		Page: ~~Page 1 of 6~~ 3/3
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: new PO need for Oct 2015			
Email: james.roehrig@gza.com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, 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)	8260B - VOH	6010B - Dissolved Iron	RSK_175 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A	S		
~~GZ-504U~~ WB-2L	3/15/16	1230	G	Water			X				3	
~~GZ-702U~~ OW-404U		1305		Water			X					
~~OW-402-U~~ OW-404R		1300		Water			X					
~~OW-404U~~ WB-1L		1415		Water			X					
~~WB-1U~~ WB-1U		1430	G	Water			X				3	
~~WB-2U~~ Temp Blank 2				Water								
~~GZ-501L~~ Trip Blank 2	3/15/16	0595	G	Water			X				3	
~~GZ-701L~~				Water								
~~OW-101L~~				Water								
~~WB-1L~~				Water								
~~WB-2L~~				Water								

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Kristin Southers	Date: 3/2/16	Time: 1655	Method of Shipment:		
Relinquished by:	Date/Time: 3/15/16 1445	Company	Received by:	Date/Time: 3/16/16 1070	Company TA TPA
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: 2.0-4, 1.8/1.5 · cw-09

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No. 660-85892.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 660-72663-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 4/7/2016			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175/ MEE (Dissolved Gases)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
OW-304L (660-72663-3)	3/15/16	06:15 Eastern		Water			X	3	
GZ-506R (660-72663-5)	3/15/16	06:55 Eastern		Water			X	3	
GZ-519U (660-72663-6)	3/15/16	07 15 Eastern		Water			X	3	
OW-101 (660-72663-9)	3/15/16	08 05 Eastern		Water			X	3	
OW-307 (660-72663-13)	3/15/16	09:30 Eastern		Water			X	3	
GZ-505R (660-72663-15)	3/15/16	10:10 Eastern		Water			X	3	
WB-3L (660-72663-16)	3/15/16	11:35 Eastern		Water			X	3	
WB-4L (660-72663-18)	3/15/16	11:30 Eastern		Water			X	3	

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Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 3/16/16 1700	Company: TA TPA	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: Thomas Murray	Date/Time: 3-17-16 07:00	Company: TASAV
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.5/2.9 2.6/3.0 3.1/3.5		

05/03/2016

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581.1
Client Contact: Mr. James Roehrig	Phone: 781-636-5865	E-Mail: haukur.gudnason@testamericainc.com		Page: ~~Page 1 of 6~~ 1/1
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: new PO need for Oct 2015			
Email: james.roehrig@gza.com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, 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)	8260B - VOH	6010B - Dissolved Iron	RSK_175 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	D	A	S		
~~GZ-504U~~ Temp Blank				Water							1	
~~GZ-702U~~ Trip Blank	3/16/16	0730	G	Water			X				3	
~~GW-102U~~ Field Blank		0830		Water			X				3	
~~GW-104U~~ IW-1		1300		Water			X	X	X	X	10	Metals were filtered
~~WB-1U~~ IW-2		1015		Water			X	X	X	X	10	Metals were filtered
~~WB-2U~~ IW-3	3/16/16	1115	G	Water			X	X	X	X	10	Metals were filtered.
~~GZ-501L~~ Purge Water	3/16/16	1330	G	Water			X				3	
~~GZ-701L~~				Water								
~~GW-101L~~				Water								
~~WB-1L~~				Water								
~~WB-2L~~				Water								

Loc: 660 72697
660-72697 Chain of Custody

Page 5 of 6

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: Kristin Southers	Date: 3/2/16	Time: 1655	Method of Shipment:	
Relinquished by:	Date/Time: 3/16/16 1400	Company	Received by: Rehl	Date/Time: 3-17-16 @ 0900 Company TA TPA
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: 3.6 / 4.0 CU-09

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-85945.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 660-72606-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/8/2016			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - 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)	SM5310B/ TOC												Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
W-1 (660-72697-3)	3/16/16	13:00 Eastern		Water			X												3	
W-2 (660-72697-4)	3/16/16	10:15 Eastern		Water			X												3	
W-3 (660-72697-5)	3/16/16	11:15 Eastern		Water			X												3	

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 3/17/16 1600	Company: TAT	Received by:	Date/Time: 3/18/16	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IRG

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-86316.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 660-72606-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/11/2016			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - 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)	SM5310B/ TOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
RV-1 (660-72697-3)	3/16/16	13:00 Eastern		Water			X	3	* Give to John Harris For TOC

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 3/30/16 1700	Company: TA TPA	Received by: [signature]	Date/Time: 3/31/16 1005	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.0°C, 0.2°C IR6

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Tampa, FL 33634
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No 660-85941.1
Client Contact: Shipping/Receiving	Phone	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 660-72606-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 4/8/2016			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#			

Analysis Requested

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175/ MEE (Dissolved Gases)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
IW-1 (660-72697-3)	3/16/16	13:00 Eastern		Water			X	3	
IW-2 (660-72697-4)	3/16/16	10:15 Eastern		Water			X	3	
IW-3 (660-72697-5)	3/16/16	11:15 Eastern		Water			X	3	

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by:	Date/Time: 3/18/16 1600	Company: TAJAV	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time: 3-18-16 09:38	Company: TAJAV
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 3.1 / 3.5		

05/03/2016

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6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: James Roehrig	Lab PM: Gudnason, Haukur M	Carrier Tracking No(s):	COC No: 660-67763-21581 1
Client Contact: Mr. James Roehrig	Phone: 781-636-5567	E-Mail: haukur.gudnason@testamericainc.com		Page: Page 1 of 6
Company: GZA GeoEnvironmental, Inc.				Job #:
Address: 249 Vanderbilt Ave	Due Date Requested:			
City: Norwood	TAT Requested (days):			
State, Zip: MA, 02062				
Phone: 781-278-5833(Tel) 781-278-5701(Fax)	PO #: new PO need for Oct 2015			
Email: james.roehrig@gza.com	WO #:			
Project Name: HP-San German IB	Project #: 66009297			
Site:	SSOW#:			

Analysis Requested

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

Loc: 660
72731

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOH	6010B - Dissolved Iron	RSK_175 - MEE (Dissolved Gases)	SM5310_TOC_B - Total Organic Carbon	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A	S		
~~GZ-504U~~ Purge Water	3/15/16	1200	G	Water			X					
~~GZ-702U~~				Water								
~~OW402-U~~				Water								
~~OW-404U~~				Water								
~~WB-1U~~				Water								
~~WB-2U~~				Water								
~~GZ-501L~~				Water								
~~GZ-701L~~				Water								
~~OW-101L~~				Water								
~~WB-1L~~				Water								
~~WB-2L~~				Water								

660-72731 Chain of Custody

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: Kristin Southers	Date: 3/2/16	Time: 1655	Method of Shipment:		
Relinquished by:	Date/Time: 3/15/16 1445	Company	Received by:	Date/Time: 3/16/16 09:20	Company TATDA
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: 2.6/2.1		

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72606
List Number: 1
Creator: Betancourt, Jonathan

List Source: TestAmerica Tampa

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

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72606
List Number: 2
Creator: White, Menica R

List Source: TestAmerica Savannah
List Creation: 03/15/16 09:49 AM

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

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72663
List Number: 1
Creator: Betancourt, Jonathan

List Source: TestAmerica Tampa

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

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72663
List Number: 3
Creator: Perez, Trina M

List Source: TestAmerica Pensacola
List Creation: 03/17/16 09:18 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.7°C, 3.7°C, 3.5°C, 1.8°C,2.7°C, 2.6°C, 1.6°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72663
List Number: 2
Creator: Murray, Thomas J

List Source: TestAmerica Savannah
List Creation: 03/17/16 09:04 AM

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

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72697
List Number: 1
Creator: Southers, Kristin B

List Source: TestAmerica Tampa

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

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72697
List Number: 2
Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola
List Creation: 03/18/16 04:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1°C IR-6
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72697
List Number: 4
Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola
List Creation: 03/31/16 03:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 0.2°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72697
List Number: 3
Creator: Murray, Thomas J

List Source: TestAmerica Savannah
List Creation: 03/18/16 05:36 PM

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

Login Sample Receipt Checklist

Client: GZA GeoEnvironmental, Inc.

Job Number: 660-72606-1

Login Number: 72731
List Number: 1
Creator: Betancourt, Jonathan

List Source: TestAmerica Tampa

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

APPENDIX E

VOC (MOLARITY) TIME SERIES PLOT

Index of VOC Molarity Trend Analysis Charts
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

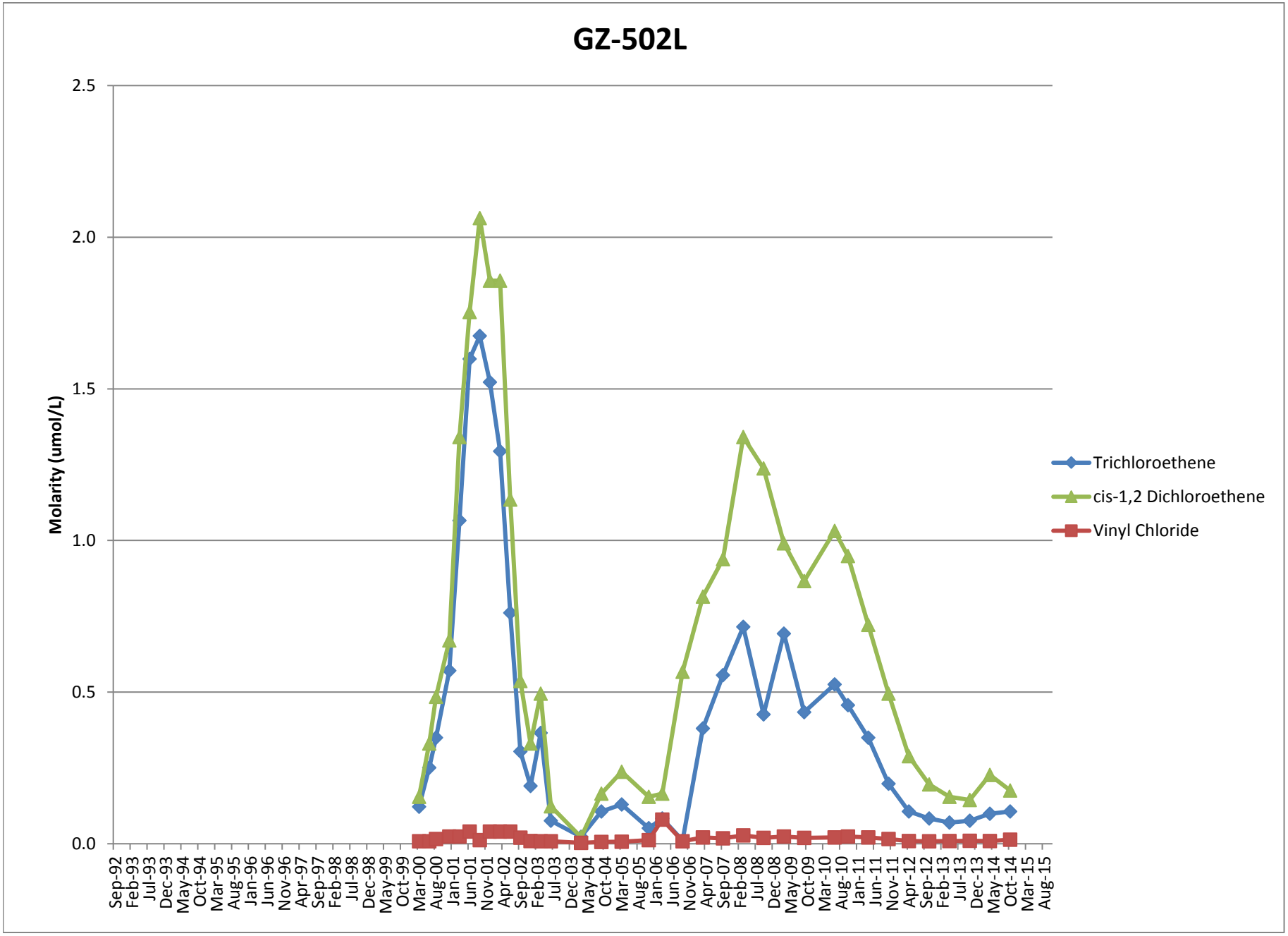
File No. 01.0024065.17

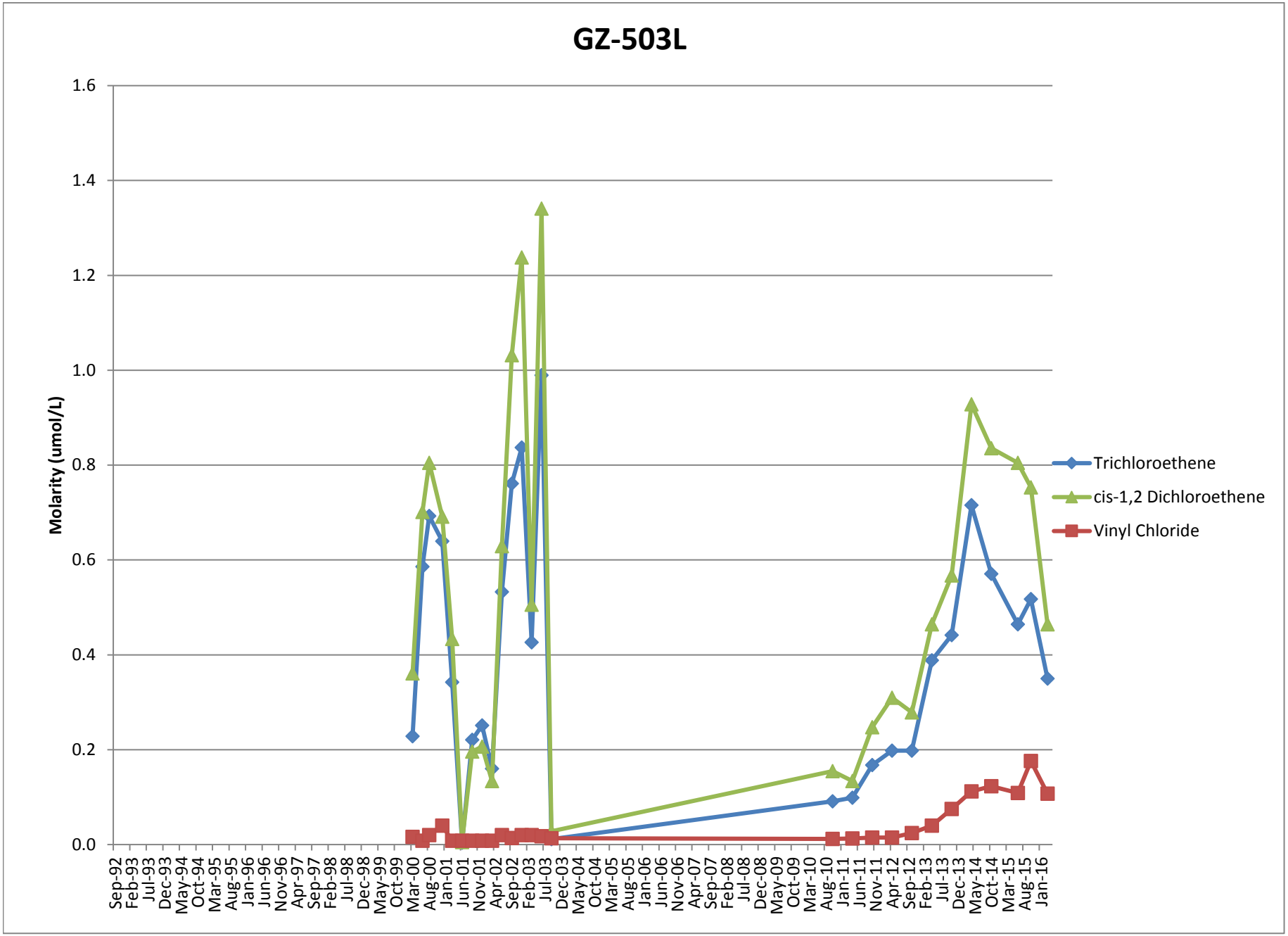
GZ-502L: Screened in the Saprolite Unit	Page 1
GZ-503L: Screened in the Saprolite Unit	Page 2
GZ-504R: Screened in the Bedrock Unit	Page 3
GZ-505L: Screened in the Saprolite Unit	Page 4
GZ-505R: Screened in the Bedrock Unit	Page 5
GZ-506R: Screened in the Bedrock Unit	Page 6
GZ-515U: Screened in the Alluvium Unit	Page 7
OW-101: Screened in the Fill Unit	Page 8
OW-301: Screened in the Saprolite Unit	Page 9
OW-304L: Screened in the Saprolite Unit	Page 10
OW-304R: Screened in the Bedrock Unit	Page 11
OW-305I: Screened in the Alluvium Unit	Page 12
OW-307: Screened in the Saprolite Unit	Page 13
OW-401: Screened in the Saprolite Unit	Page 14
OW-402U: Screened in the Fill Unit	Page 15
OW-402L: Screened in the Saprolite Unit	Page 16
OW-402R: Screened in the Bedrock Unit	Page 17
OW-403L: Screened in the Saprolite Unit	Page 18
OW-404L: Screened in the Saprolite Unit	Page 19
OW-404R: Screened in the Bedrock Unit	Page 20
OW-404U: Screened in the Fill Unit	Page 21
WB-1U: Screened in the Fill Unit	Page 22
WB-1L: Screened in the Saprolite Unit	Page 23
WB-2L: Screened in the Saprolite Unit	Page 24
WB-3L: Screened in the Saprolite Unit	Page 25
WB-4L: Screened in the Saprolite Unit	Page 26

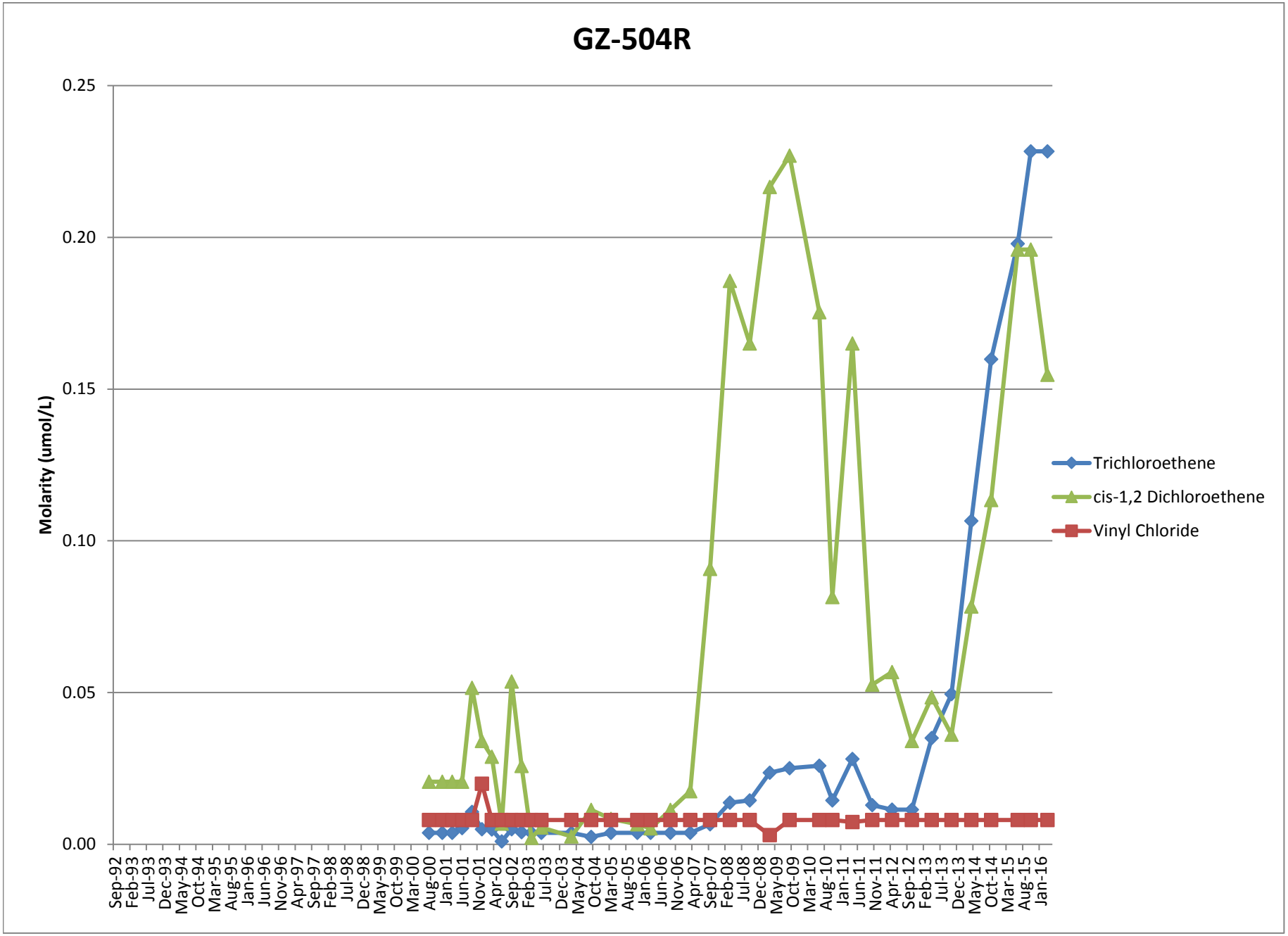
Index of VOC Molarity Trend Analysis Charts
Hewlett-Packard Voluntary Remediation Project
San German, Puerto Rico

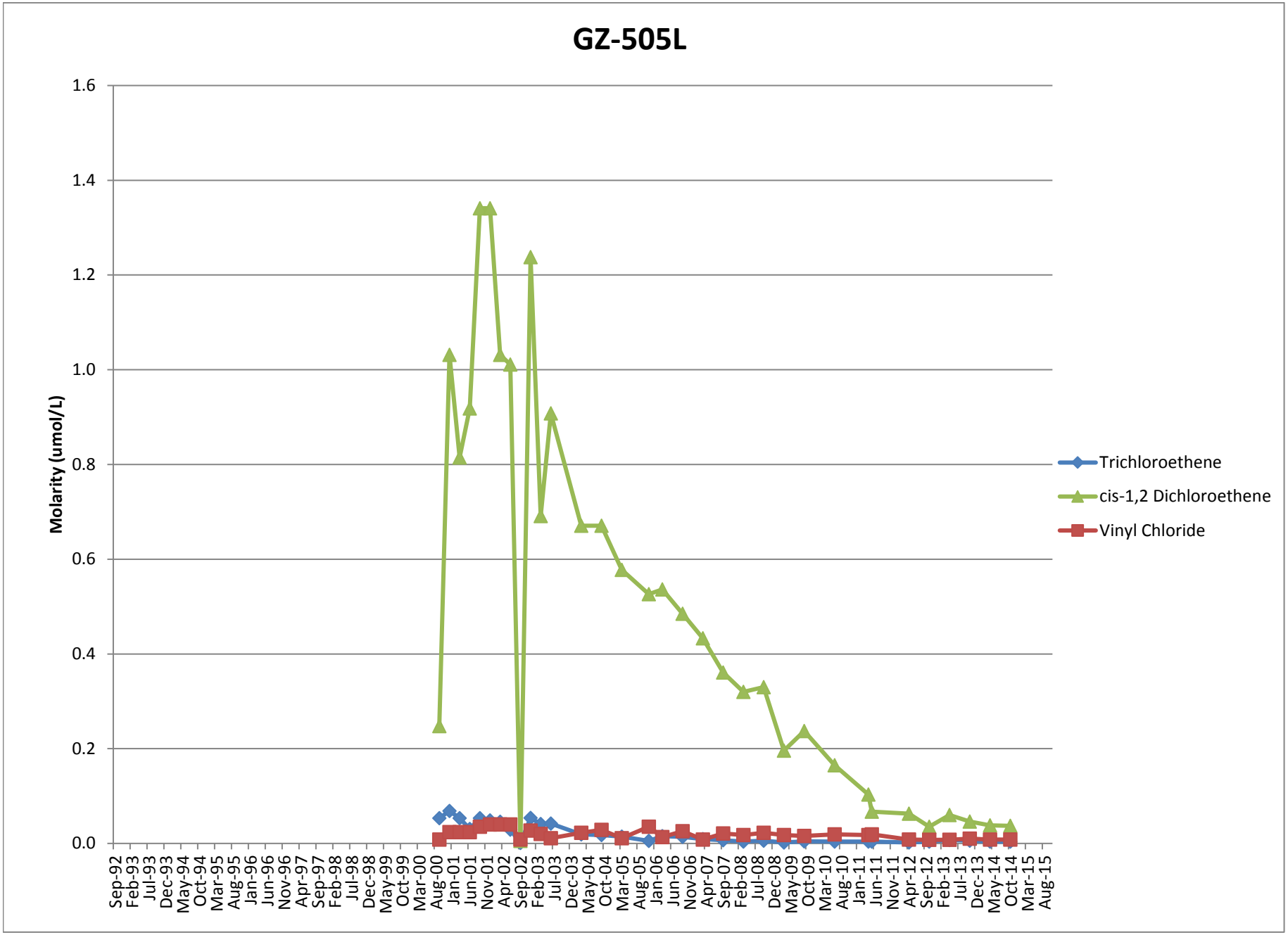
Notes:

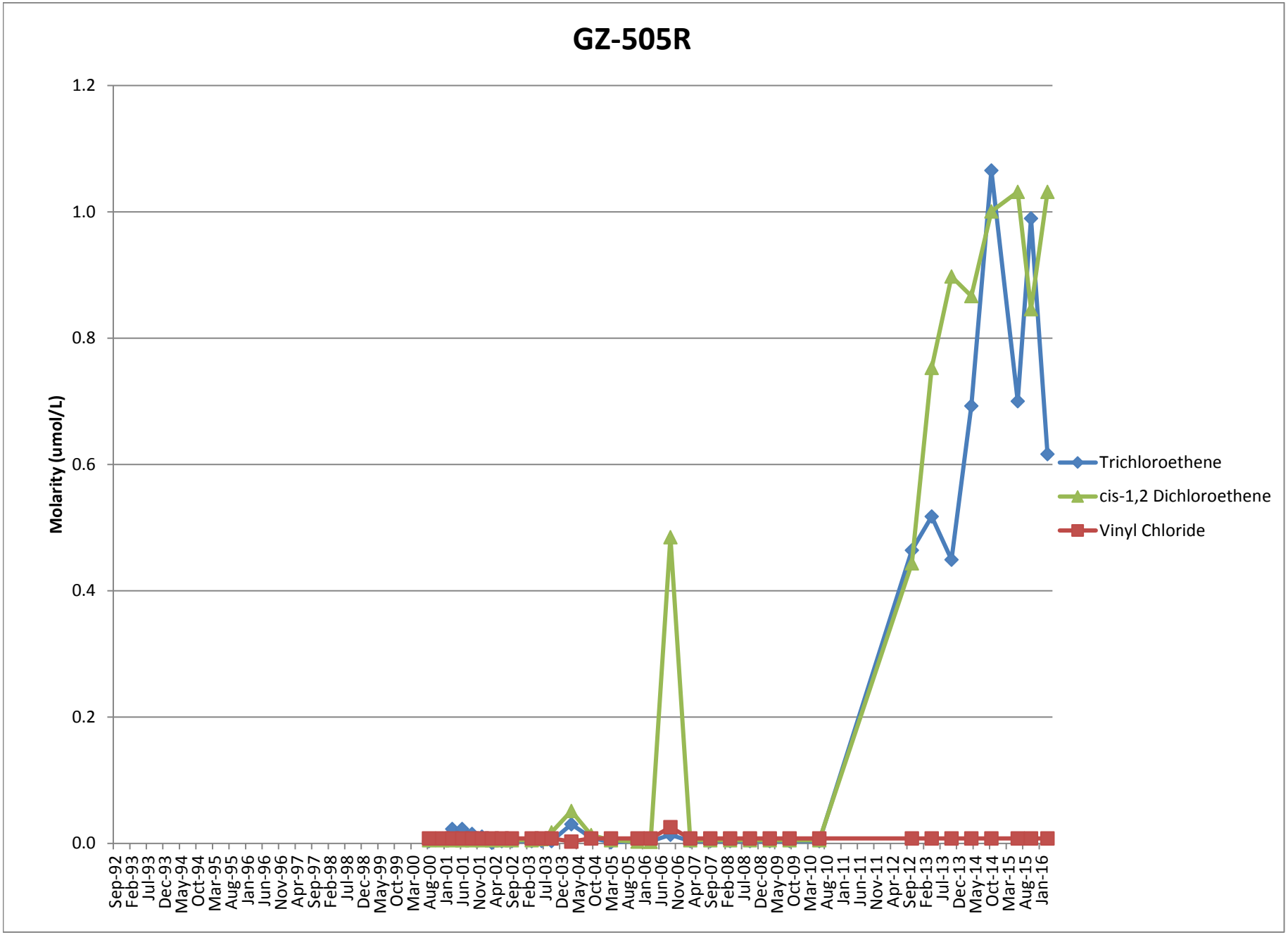
1. In instances where a constituent was not detected, half of the reporting limit was used as the molarity.
2. Data that were reported with qualifiers were treated as if they were not reported with qualifiers in this analysis. In general, this led to a more conservative analysis.
3. VOC = Volatile Organic Compounds; TCE = Trichloroethene; DCE = cis-1,2-Dichloroethene; VC = Vinyl Chloride; ug/L = micrograms per liter; ug/umol = micrograms per micromole.
4. For several wells (GZ-504R, WB-1L, OW-404L, OW-402U, OW-402R, WB-2L, WB-4L, GZ-515U, GZ-506R, and OW-301) the VC analysis was based exclusively on non-detect and qualified results. For two wells (GZ-515U and OW-301) this is true for the TCE and the DCE analyses as well. For OW-101, OW-304L, OW-403L, and OW-304R for VC, many of the reporting limits are very high compared to the detected molarities.
5. Molecular weights for the carbon (C – 12.01 ug/umol), hydrogen (H – 1.01 ug/umol), and chloride (Cl – 35.45 ug/umol) atoms were used to calculate the molecular weights of TCE (C_2HCl_3 – 131.38 ug/umol), DCE ($C_2H_2Cl_2$ – 96.94 ug/umol), and VC (C_2H_3Cl – 62.50 ug/umol).
6. Molarity (in umol/L) was calculated by dividing the concentration (in ug/L) by the molecular weight (in ug/umol).

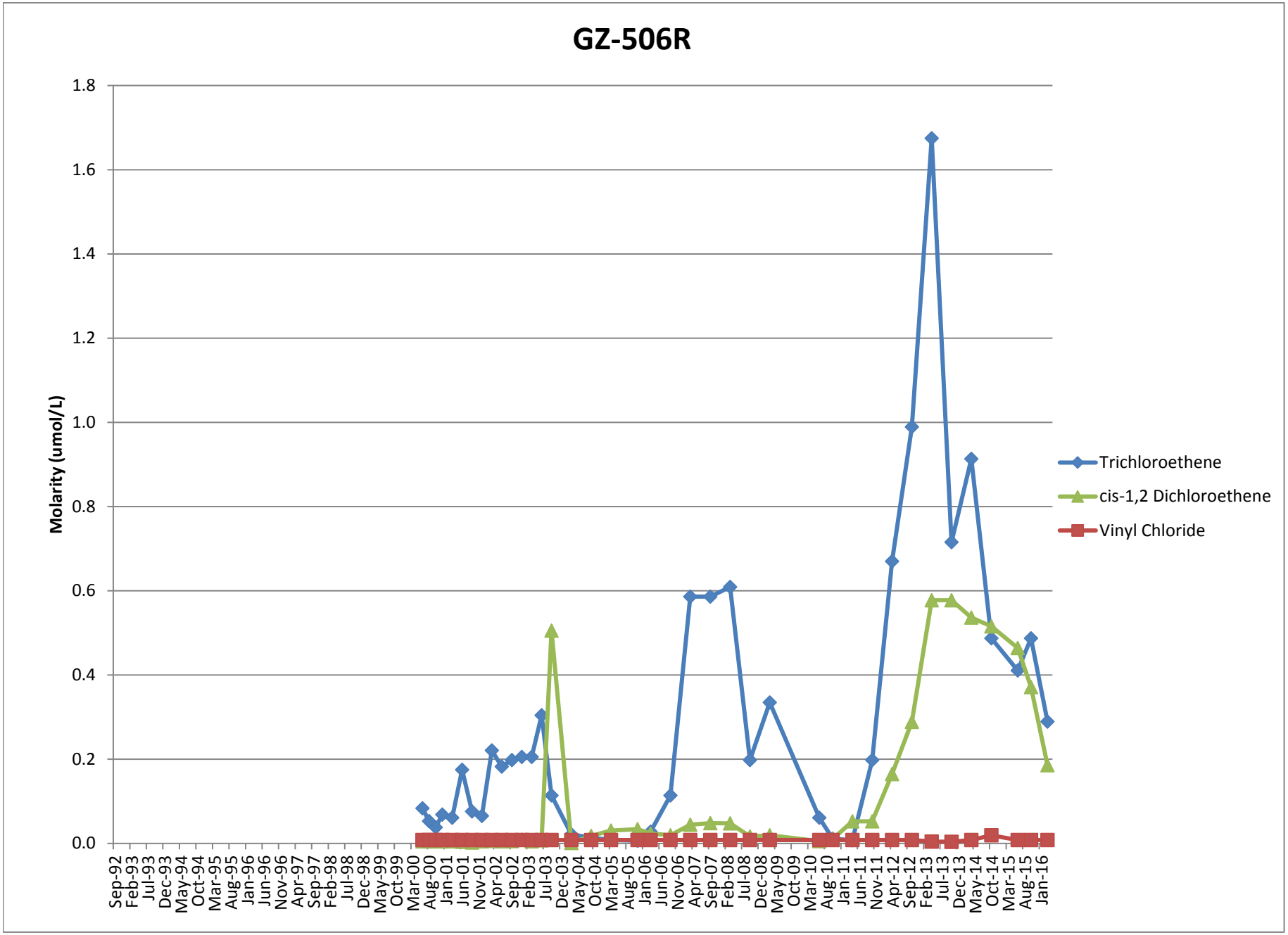

GZ-502L
Molarity (umol/L)
2.5
2.0
1.5
1.0
0.5
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


GZ-503L
Molarity (umol/L)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


GZ-504R
Molarity (umol/L)
0.25
0.20
0.15
0.10
0.05
0.00
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


GZ-505L
Molarity (umol/L)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


GZ-505R
Molarity (umol/L)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


GZ-506R
Molarity (umol/L)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride

GZ-515U
Molarity (umol/L)
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
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Mar-00
Aug-00
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Feb-03
Jul-03
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May-04
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Jan-06
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Apr-07
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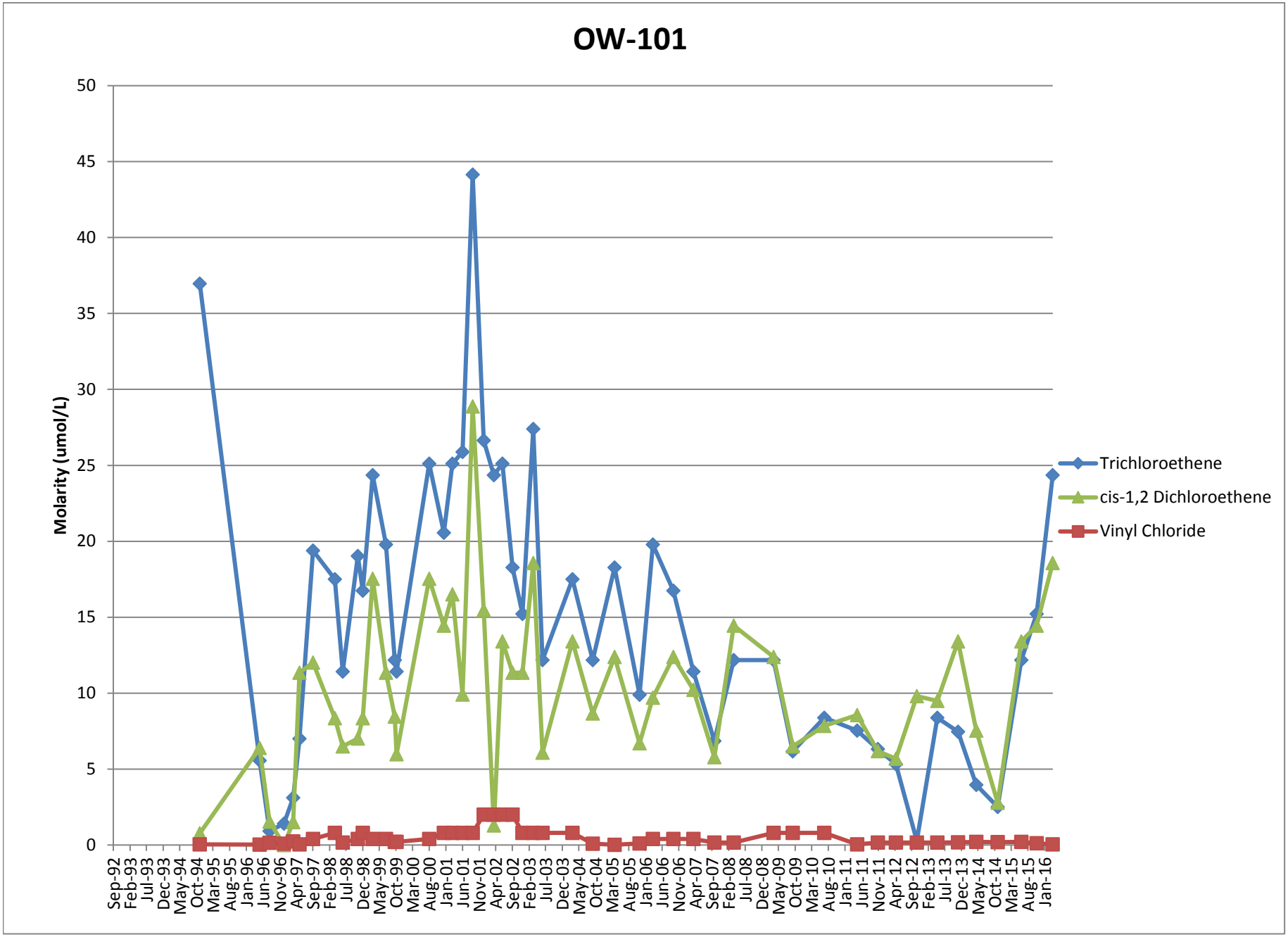
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-101
Molarity (umol/L)
50
45
40
35
30
25
20
15
10
5
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
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Jan-06
Jun-06
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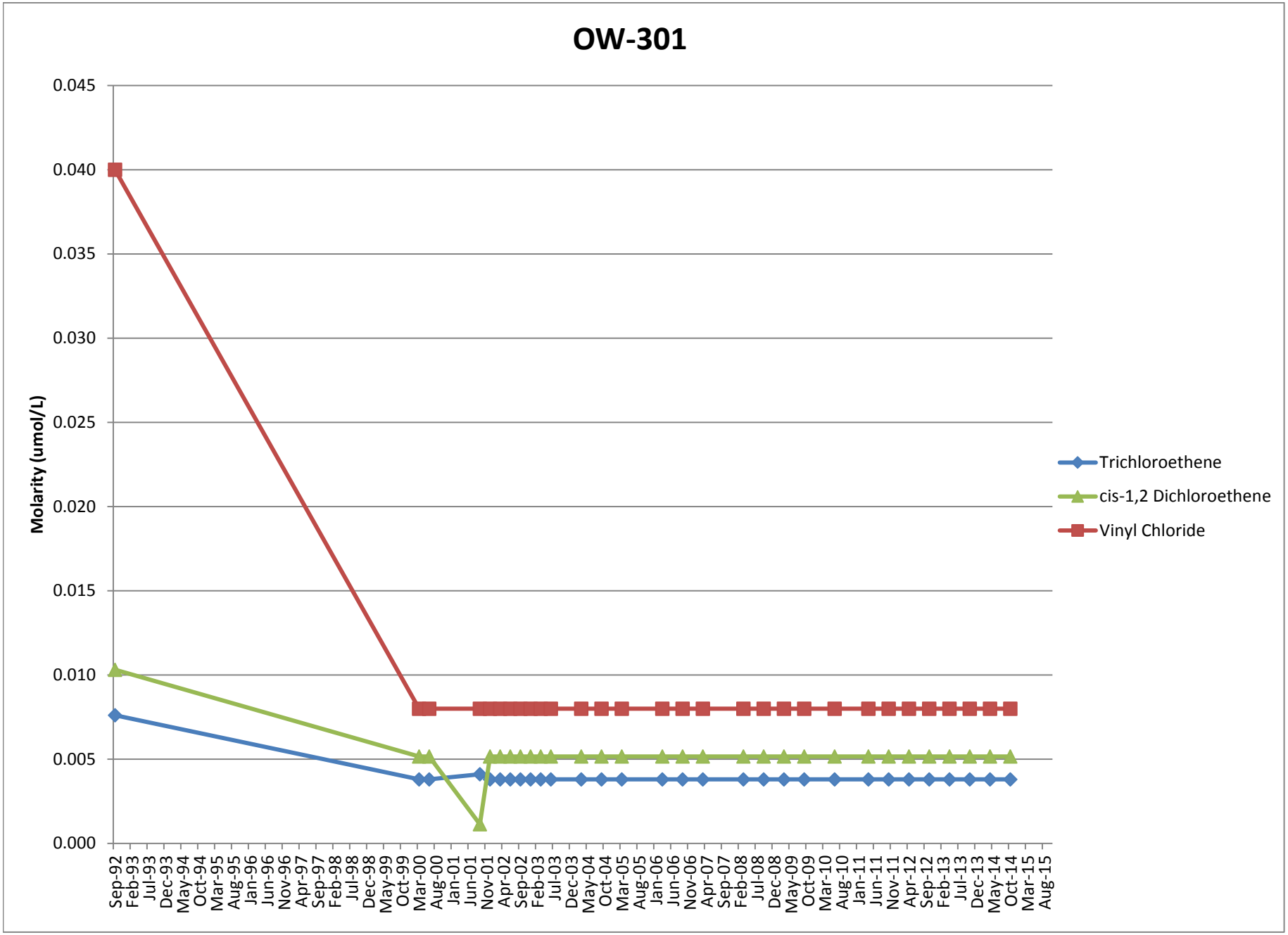
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-301
Molarity (umol/L)
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
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Jul-03
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May-04
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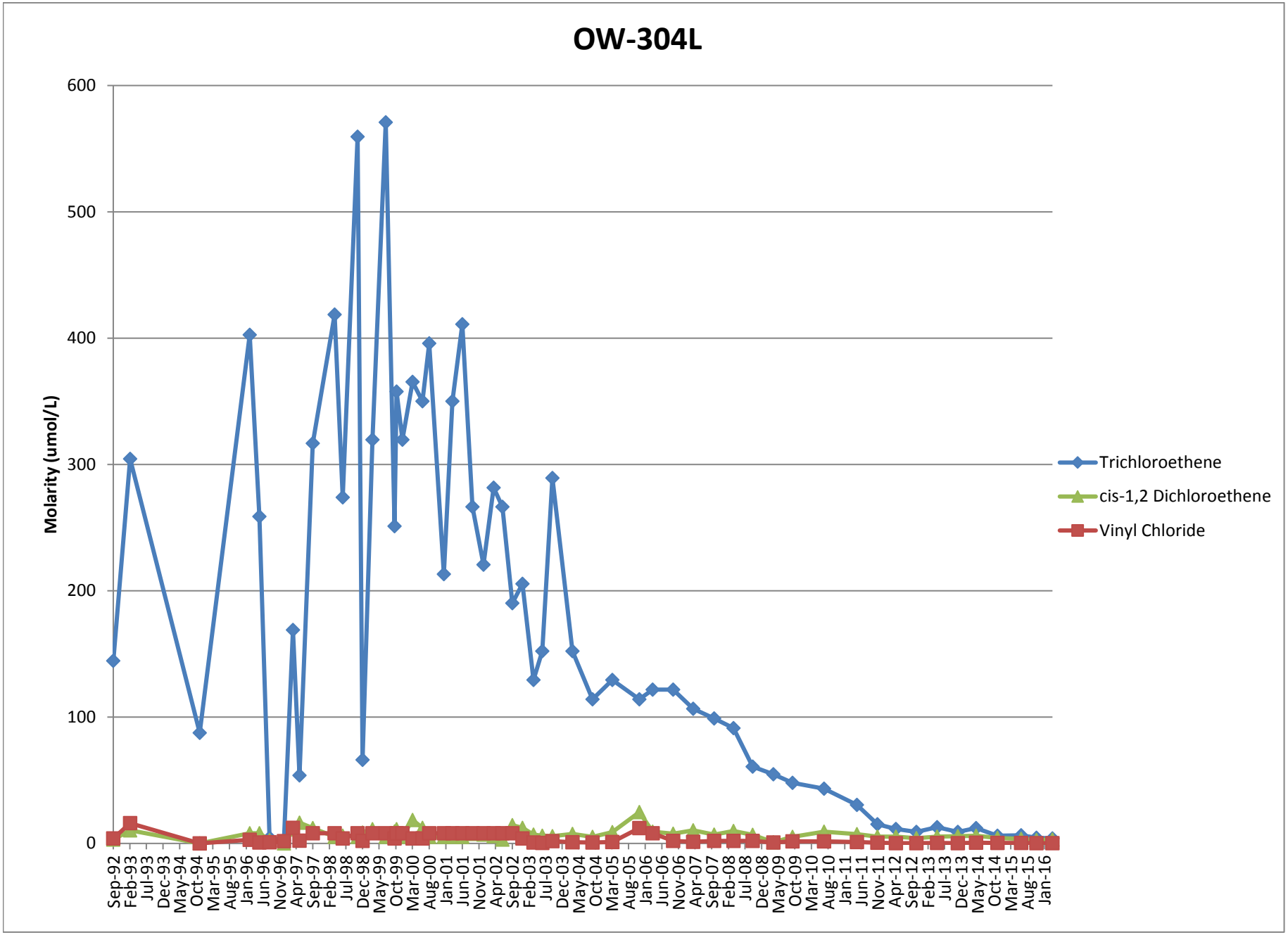
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-304L
Molarity (umol/L)
600
500
400
300
200
100
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
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Jul-08
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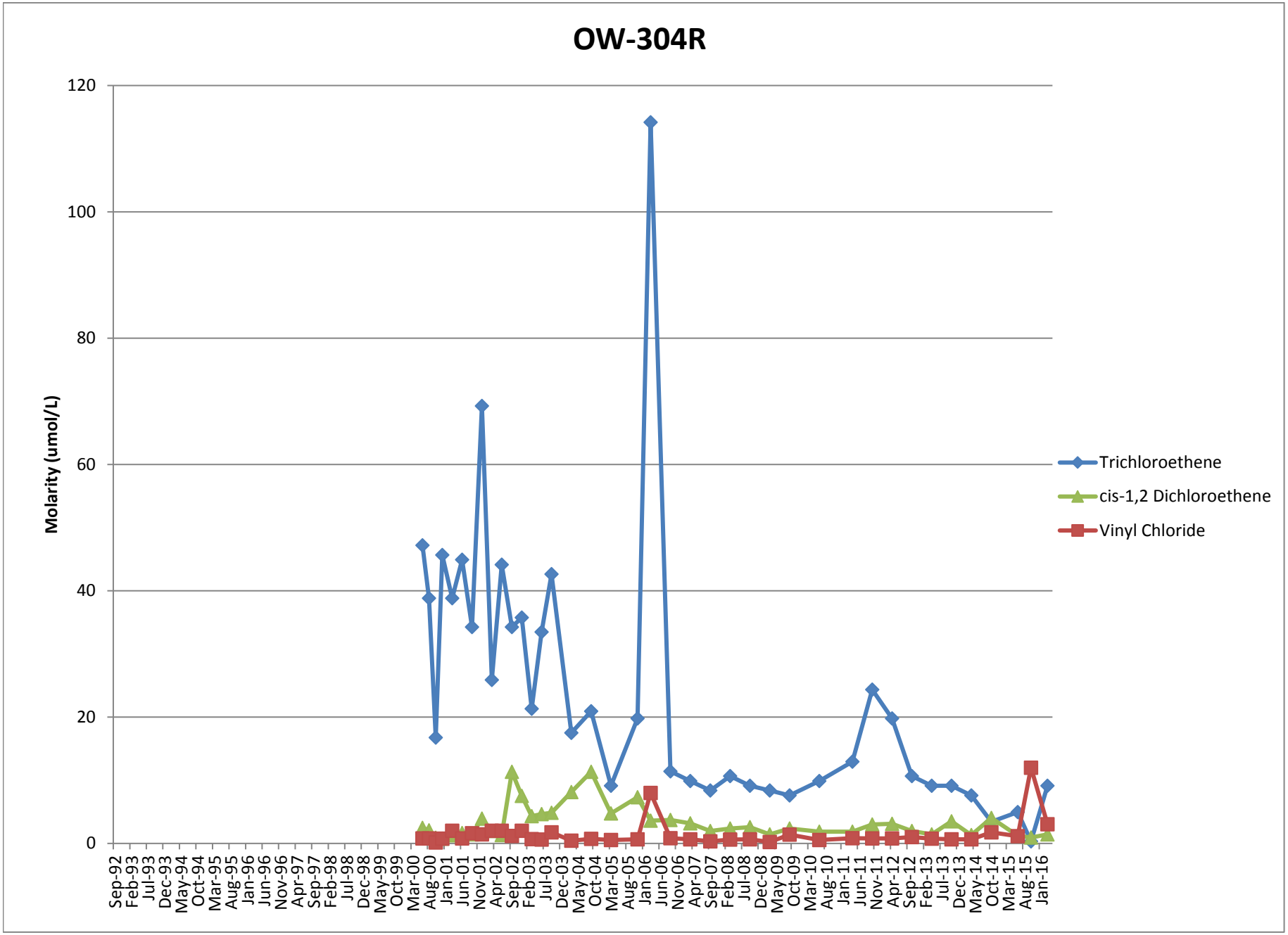
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-304R
Molarity (umol/L)
120
100
80
60
40
20
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
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May-09
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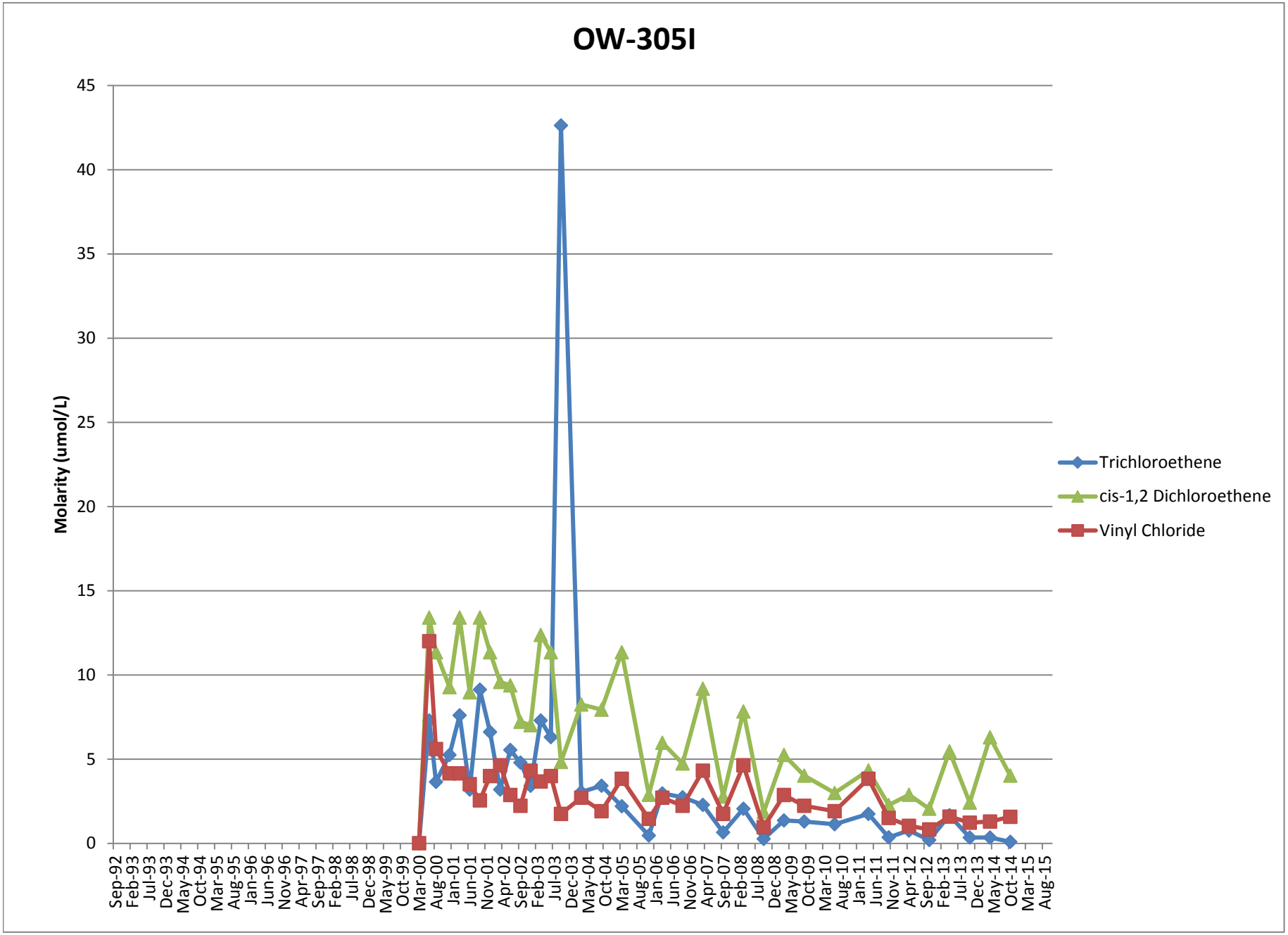
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-305I
Molarity (umol/L)
45
40
35
30
25
20
15
10
5
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
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Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
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Jun-06
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Apr-07
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May-09
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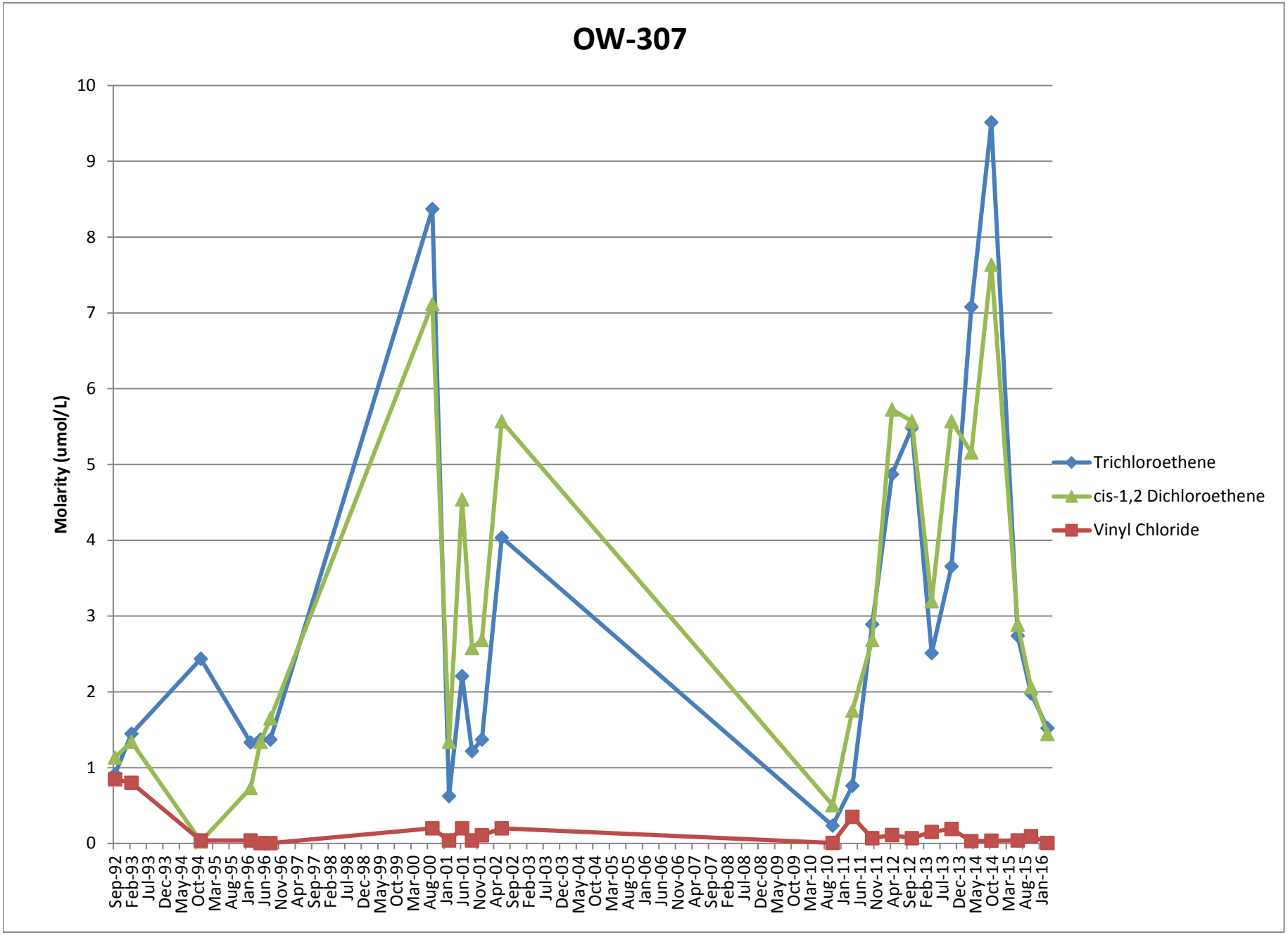
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-307
Molarity (umol/L)
0
1
2
3
4
5
6
7
8
9
10
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
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May-99
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Mar-00
Aug-00
Jan-01
Jun-01
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Apr-02
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Feb-08
Jul-08
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May-09
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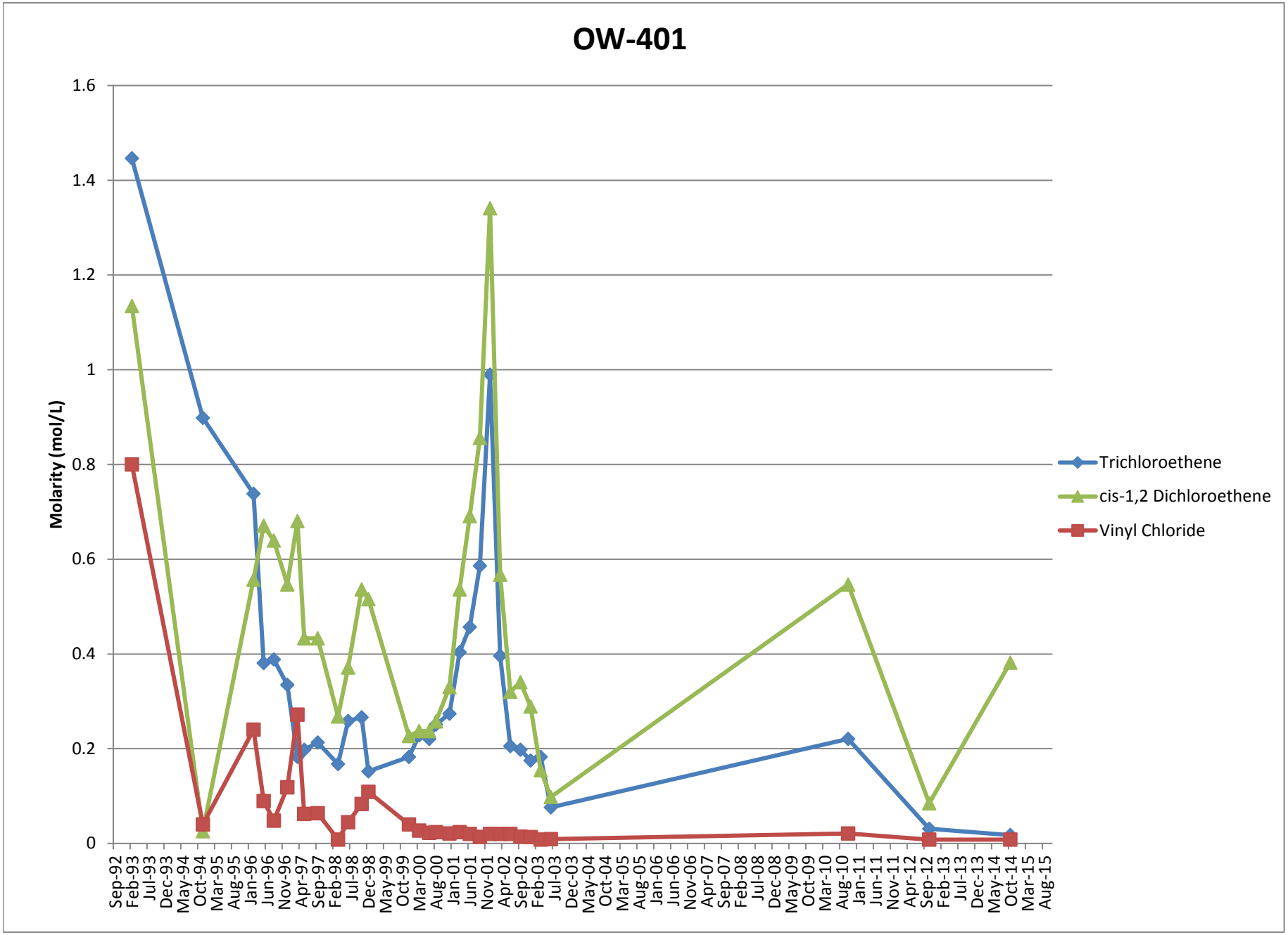
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-401
Molarity (mol/L)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
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Feb-03
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May-04
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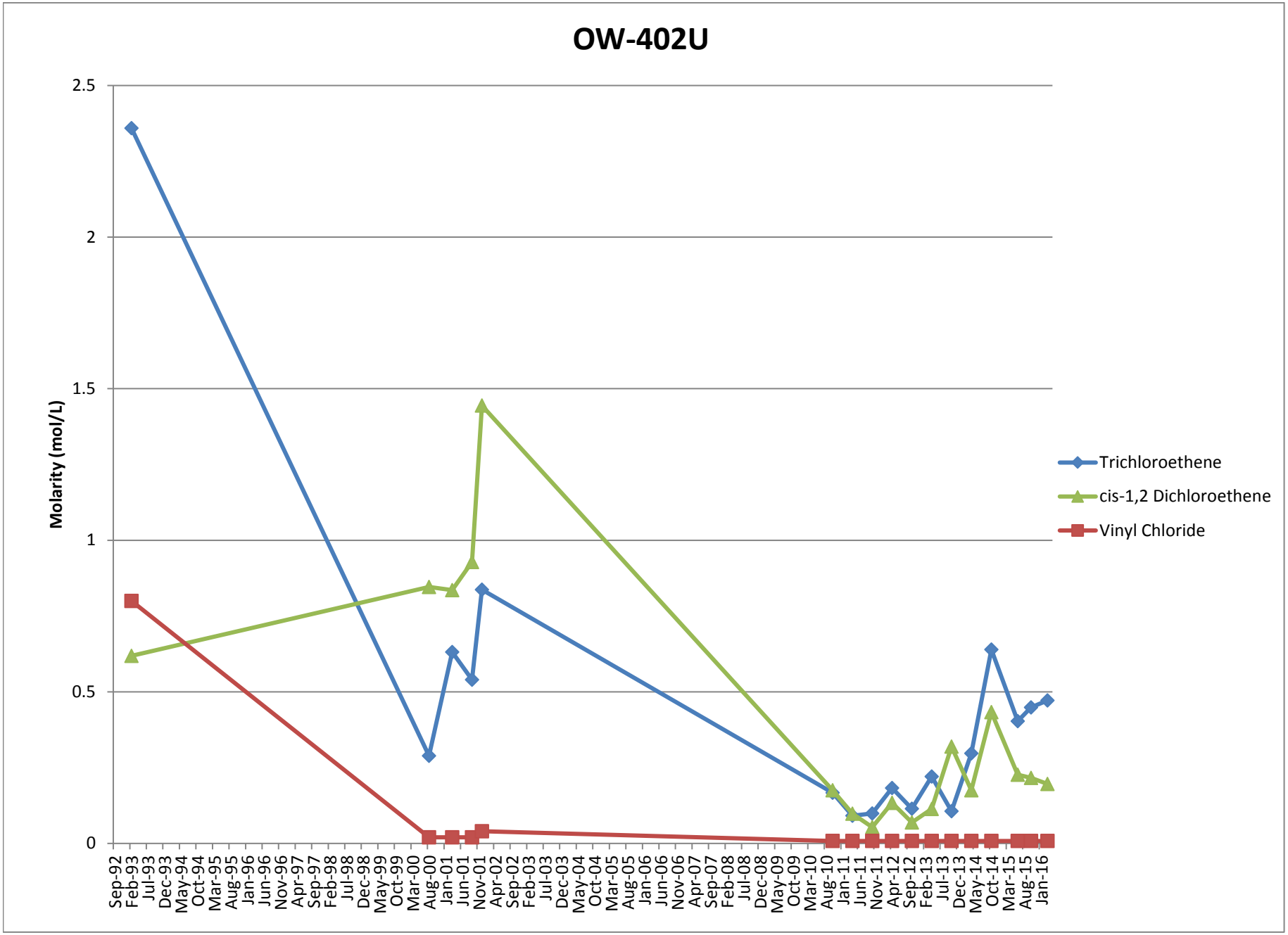
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-402U
Molarity (mol/L)
2.5
2
1.5
1
0.5
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
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May-99
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Mar-00
Aug-00
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Jun-01
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May-09
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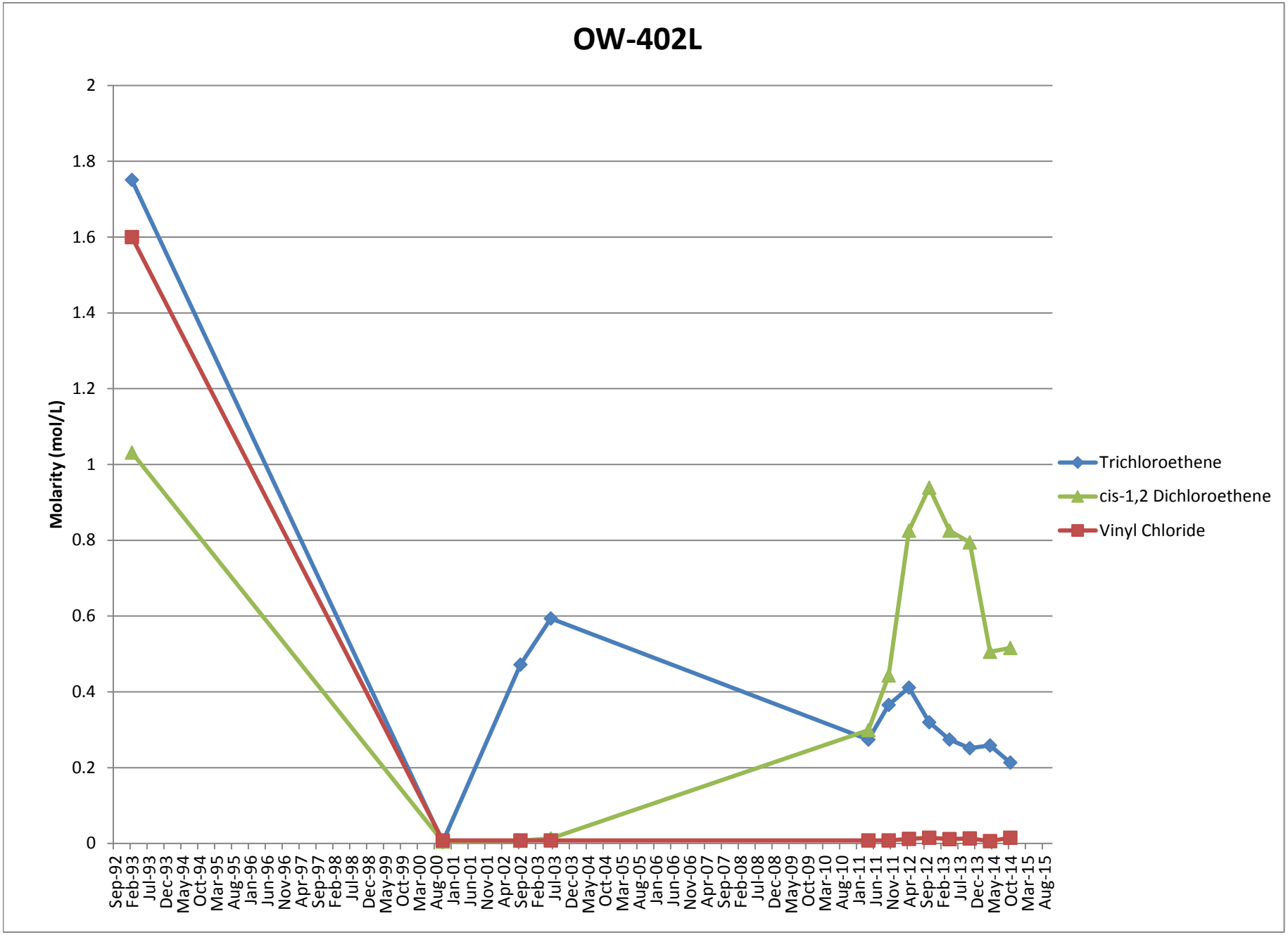
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-402L
Molarity (mol/L)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
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Jun-06
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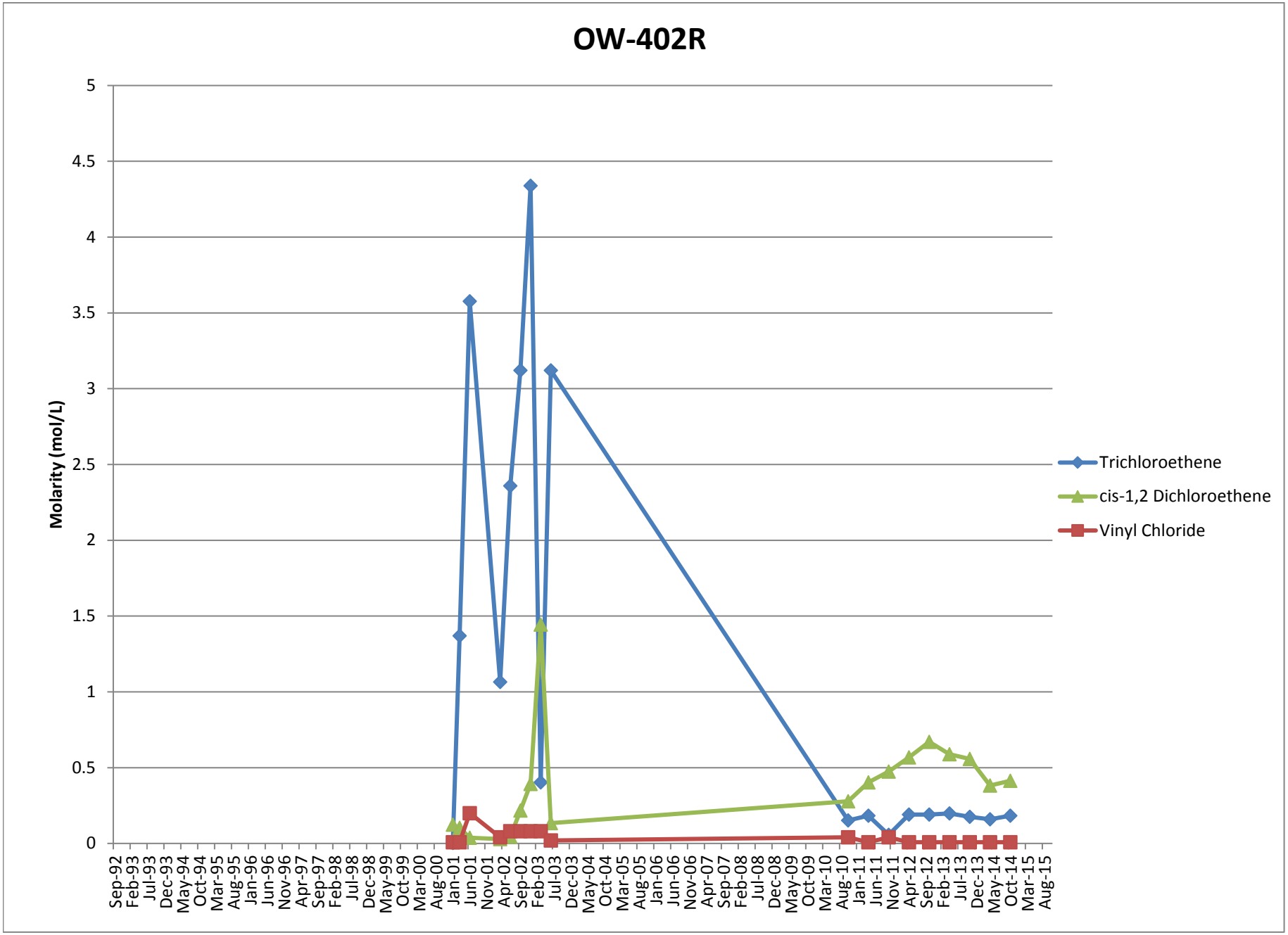
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-402R
Molarity (mol/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
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Aug-10
Jan-11
Jun-11
Nov-11
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Sep-12
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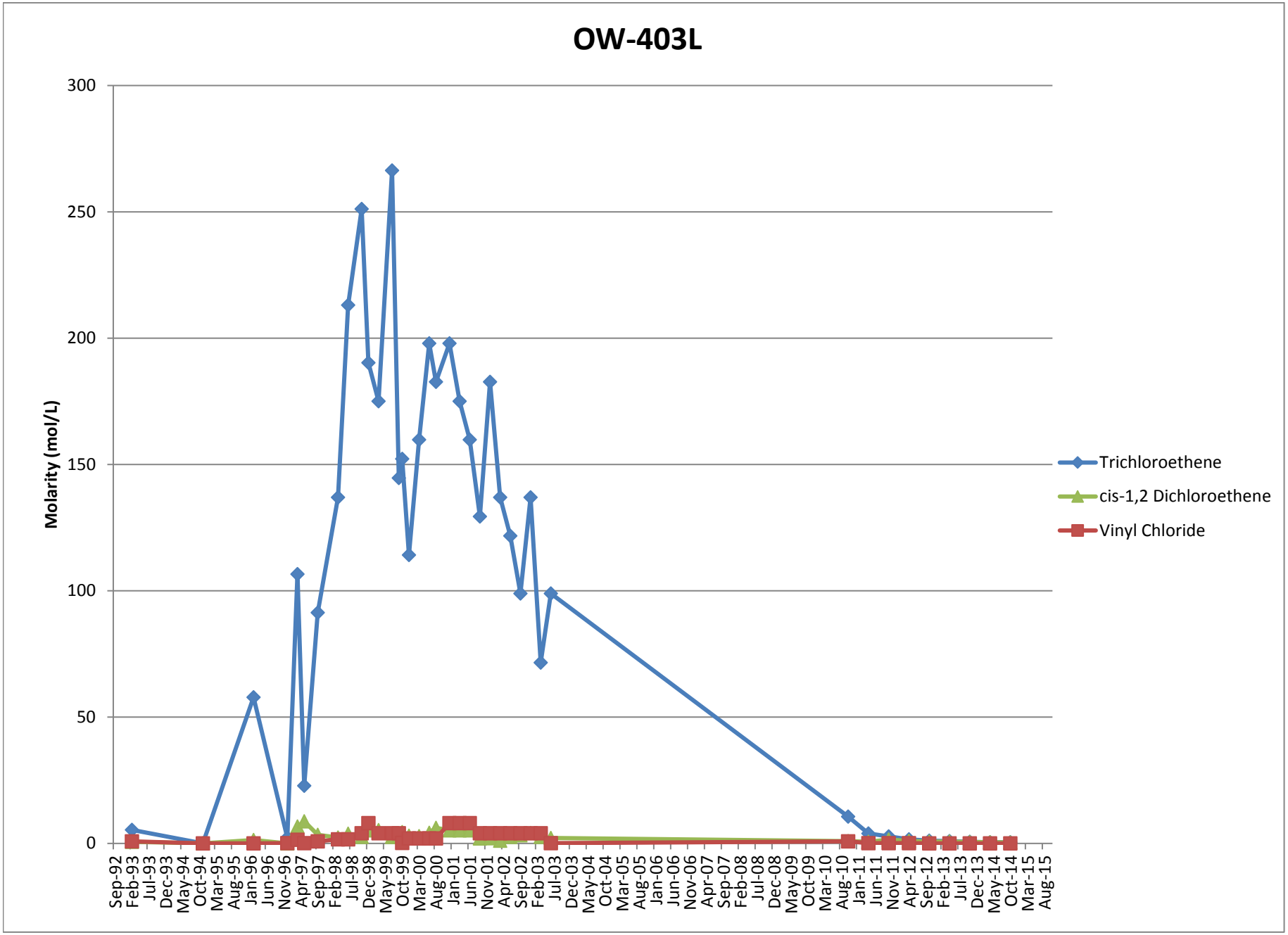
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-403L
Molarity (mol/L)
300
250
200
150
100
50
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
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Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
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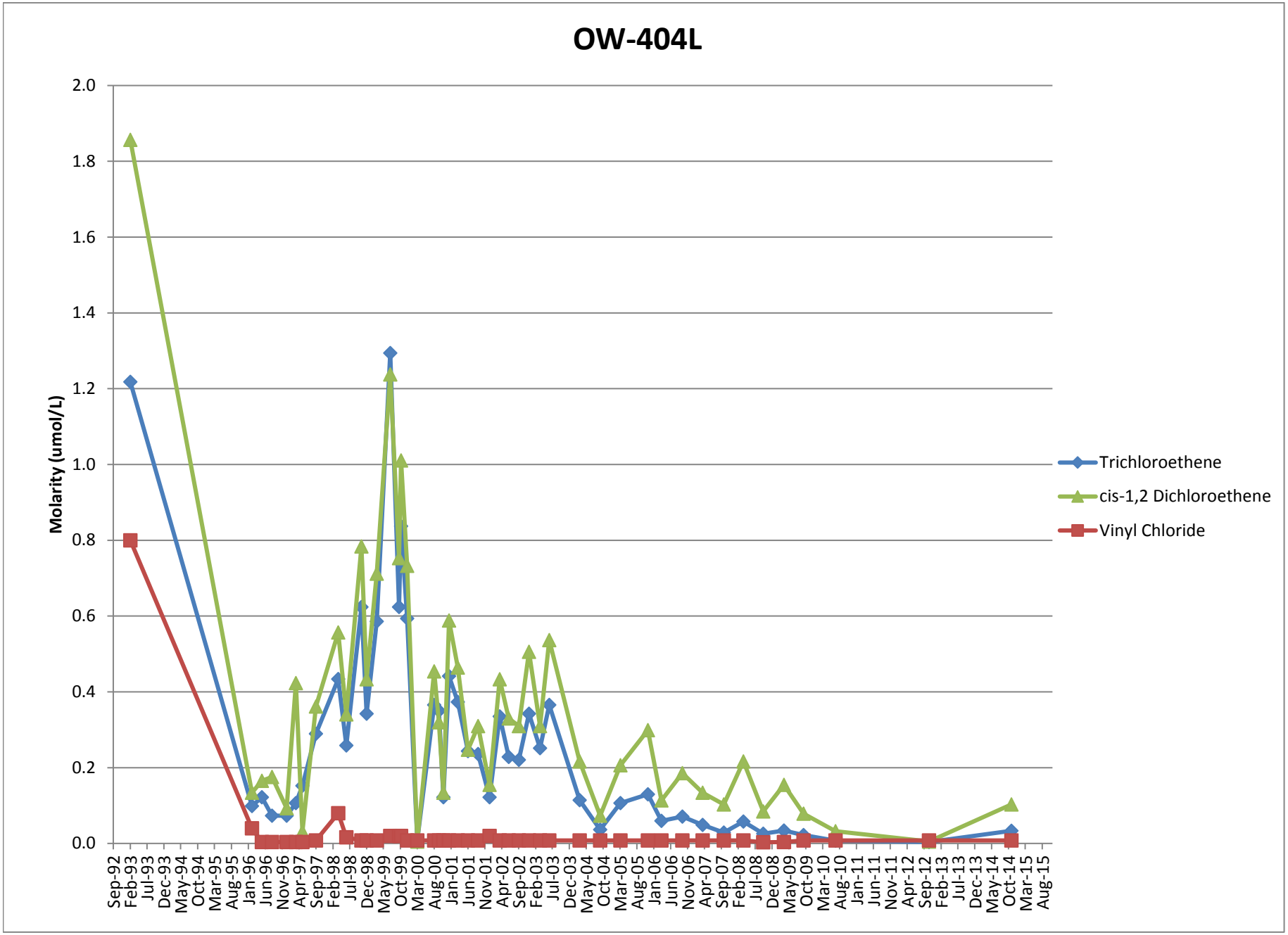
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-404L
Molarity (umol/L)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
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Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
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Jul-13
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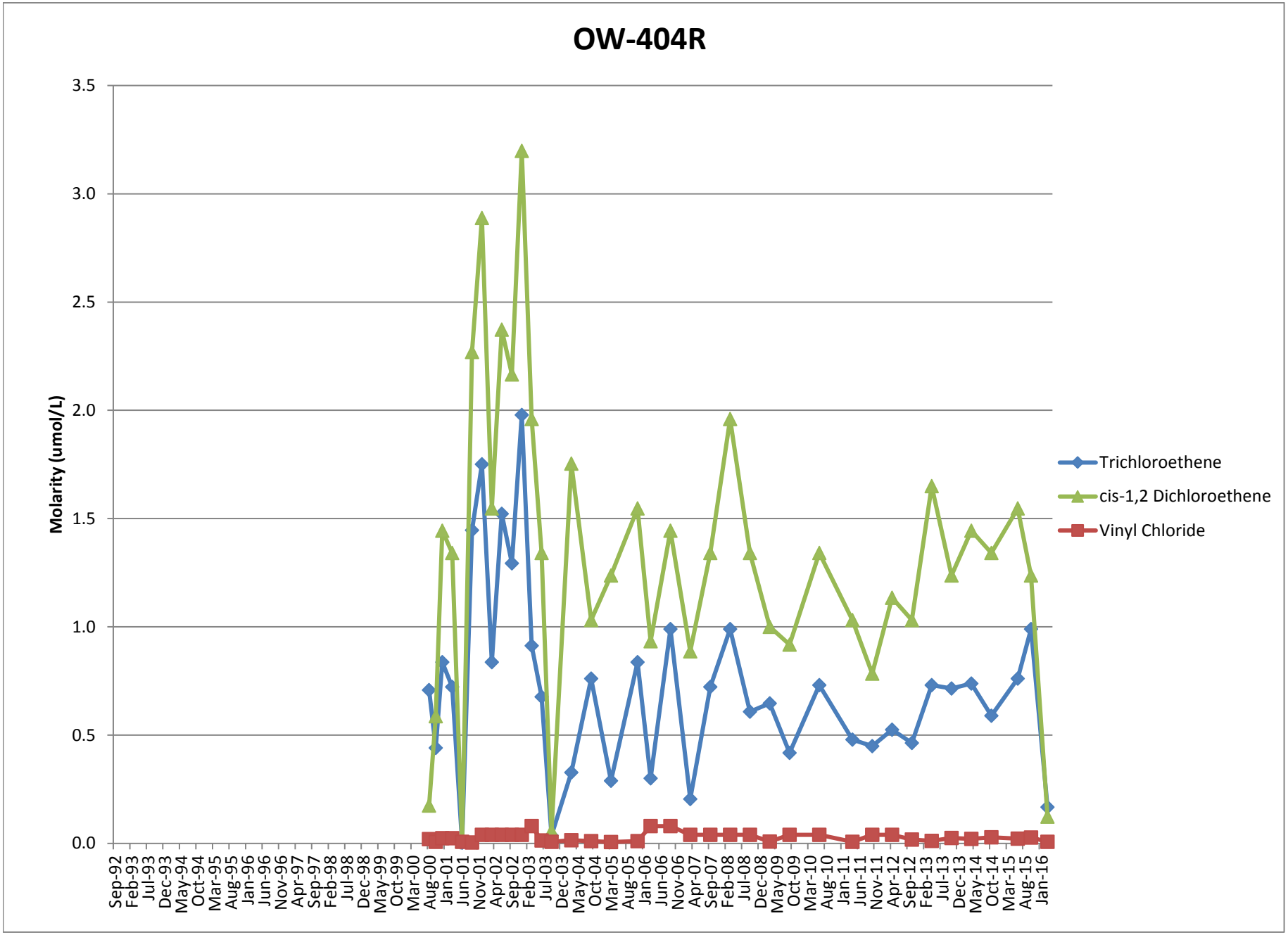
May-14
Oct-14
Mar-15
Aug-15
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-404R
Molarity (umol/L)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
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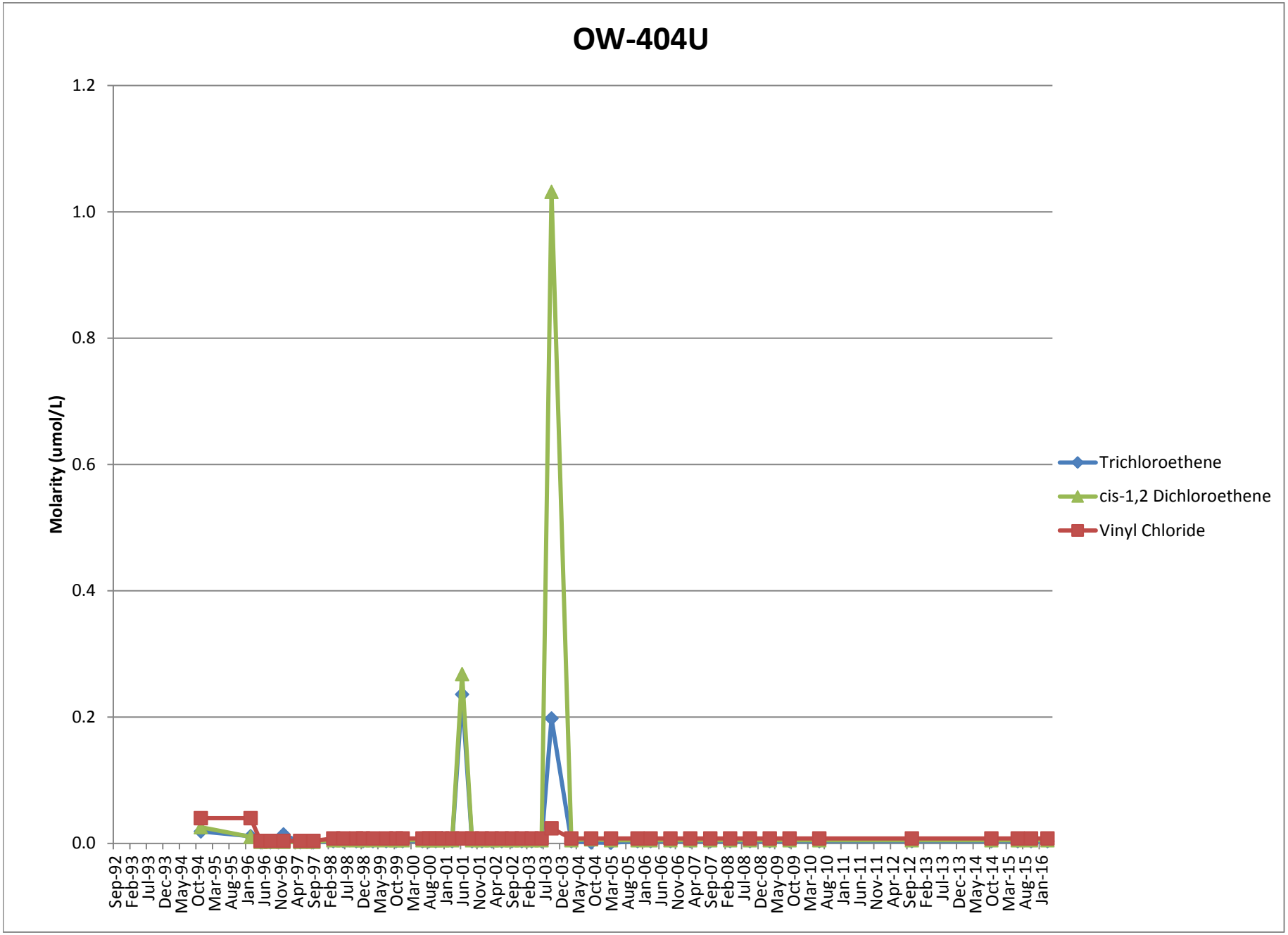
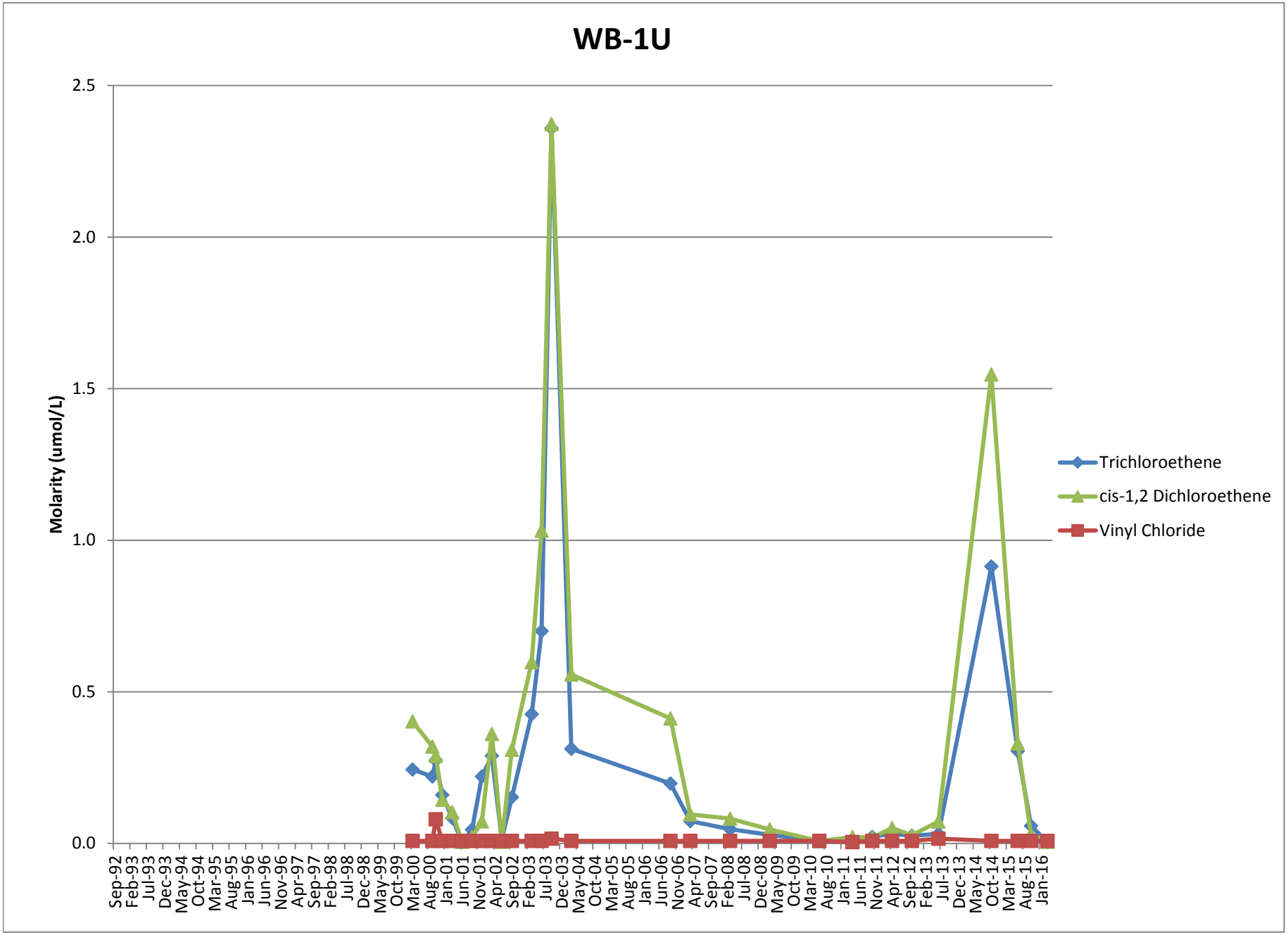
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


OW-404U
Molarity (umol/L)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
Sep-02
Feb-03
Jul-03
Dec-03
May-04
Oct-04
Mar-05
Aug-05
Jan-06
Jun-06
Nov-06
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


WB-1U
Molarity (umol/L)
2.5
2.0
1.5
1.0
0.5
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
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Jun-06
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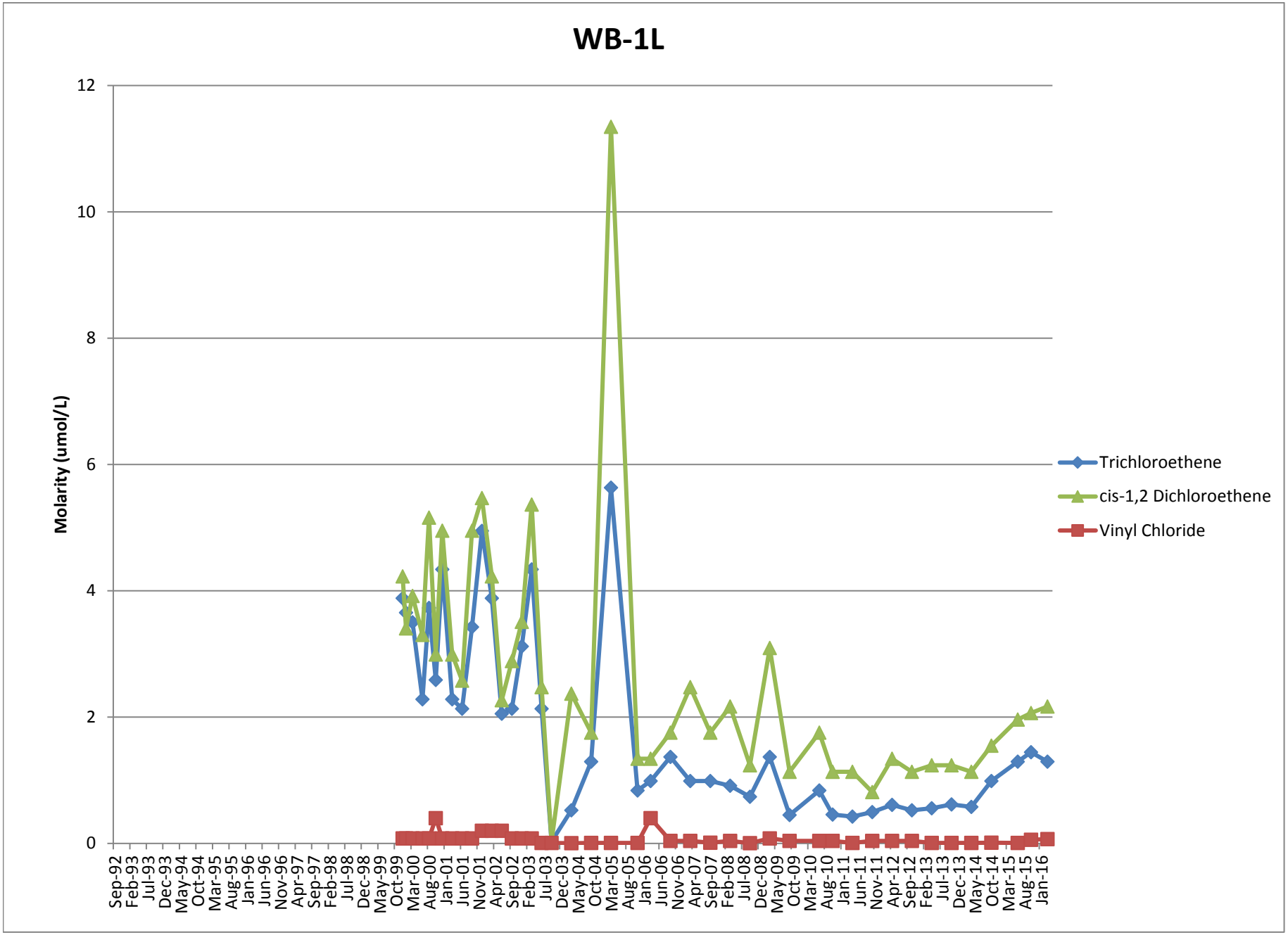
Apr-07
Sep-07
Feb-08
Jul-08
Dec-08
May-09
Oct-09
Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


WB-1L
Molarity (umol/L)
0
2
4
6
8
10
12
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
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Jul-08
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May-09
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Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
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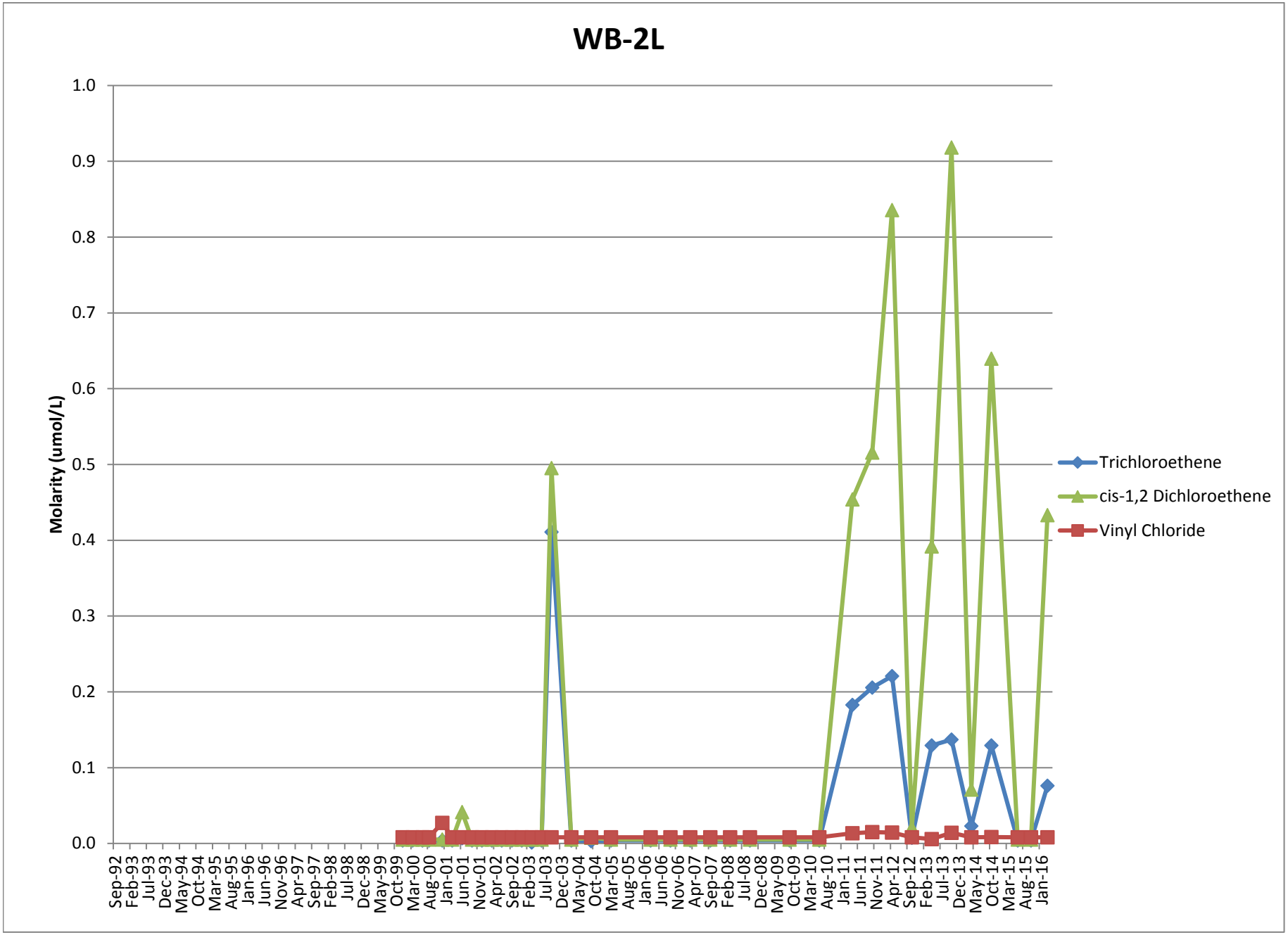
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


WB-2L
Molarity (umol/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
Jan-01
Jun-01
Nov-01
Apr-02
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Mar-10
Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
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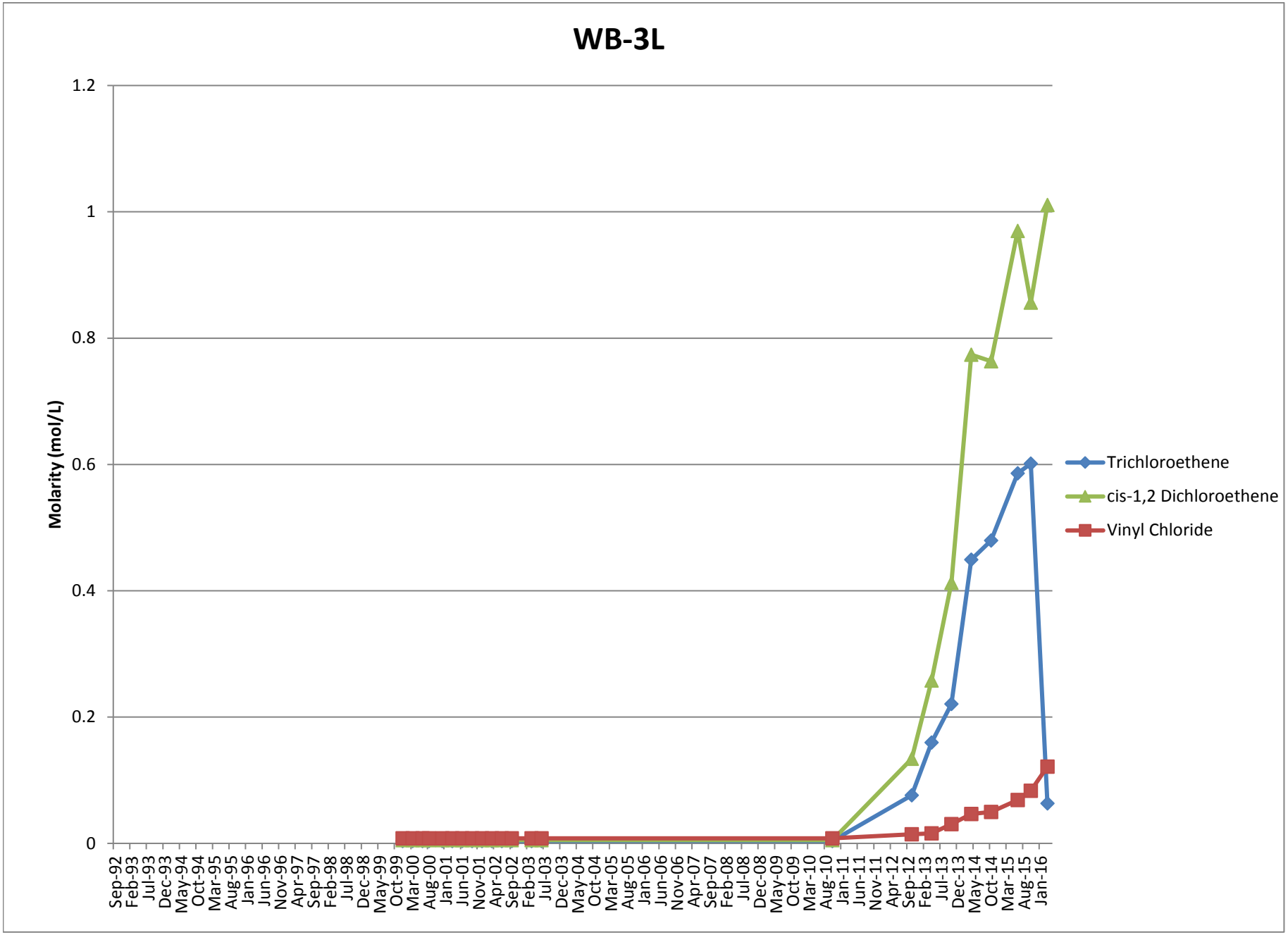
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


WB-3L
Molarity (mol/L)
1.2
1
0.8
0.6
0.4
0.2
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
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Jan-01
Jun-01
Nov-01
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May-04
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Jul-08
Dec-08
May-09
Oct-09
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Aug-10
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
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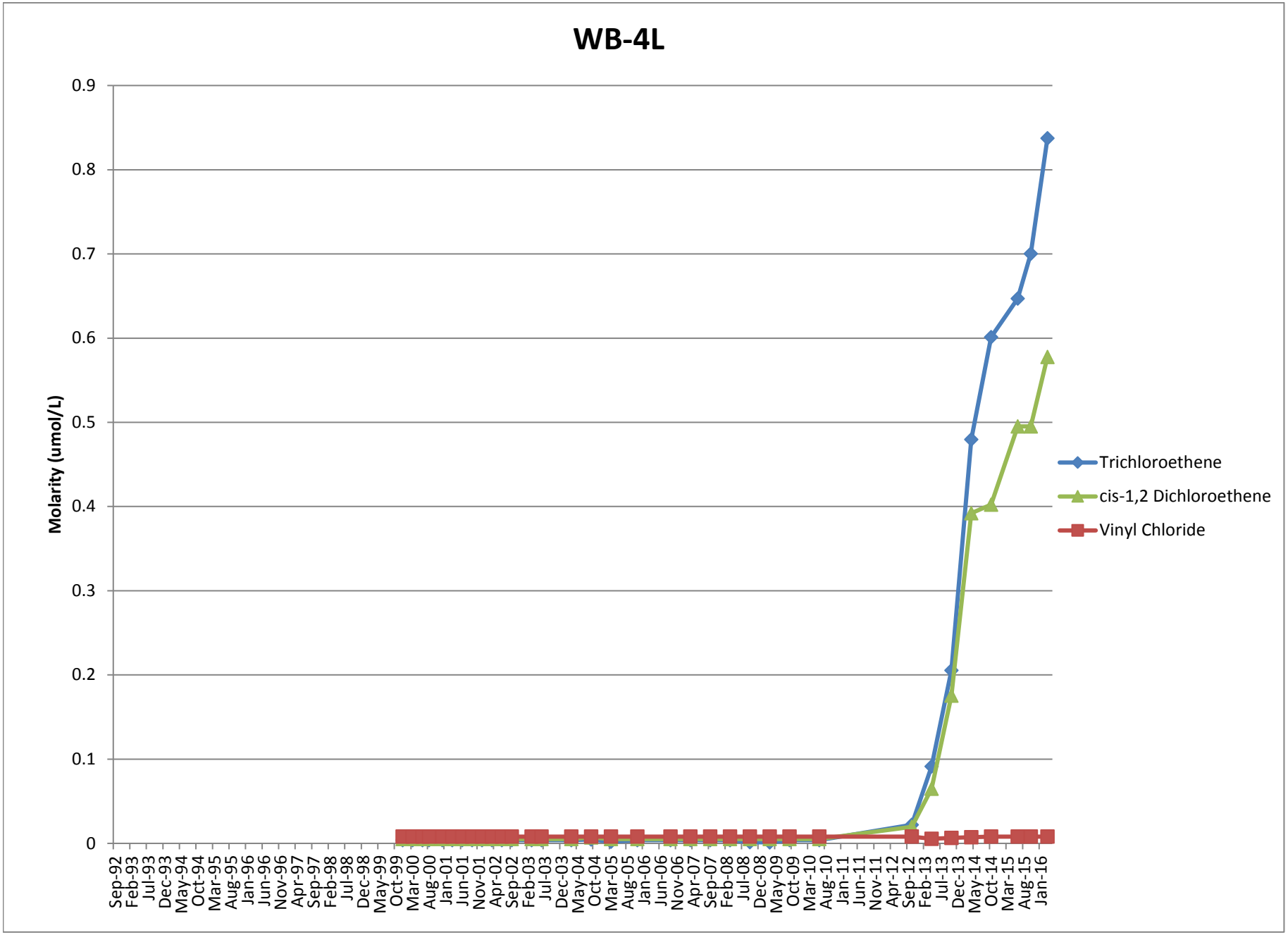
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride


WB-4L
Molarity (umol/L)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Sep-92
Feb-93
Jul-93
Dec-93
May-94
Oct-94
Mar-95
Aug-95
Jan-96
Jun-96
Nov-96
Apr-97
Sep-97
Feb-98
Jul-98
Dec-98
May-99
Oct-99
Mar-00
Aug-00
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Nov-01
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Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Jan-16
Trichloroethene
cis-1,2 Dichloroethene
Vinyl Chloride

APPENDIX F

DATA VALIDATION

Appendix F
Data Validation

GZA performed a data validation for the groundwater samples collected in March 2016 from the Former Digital Equipment Corporation facility in San German, Puerto Rico (the "Site"). In accordance with Revision 4 of the Quality Assurance Project Plan (QAPP) submitted by GZA GeoEnvironmental, Inc. (GZA) in April 2015 and Revised in October 2015, the groundwater samples collected in March 2016 were analyzed for volatile organic compounds (VOCs) by TestAmerica Laboratories, Inc. in Tampa, Florida (NELAP E84282), certified by a Puerto Rico-certified chemist, and validated by a GZA chemist. GZA performed a data validation in accordance with the U.S. Environmental Protection Agency (EPA) Region II Data Validation Standard Operating Procedure (SOP) #HW-33 Revision 3 (located on the EPA Region II webpage at https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures).

The criteria for accepting, rejecting, or qualifying data are included in the SOP. The intrinsic biodegradation (IB) results presented in Table 2 were not certified by a Puerto Rico-certified chemist or validated by a GZA chemist. Only the target analytes and their associated quality assurance/quality control (QA/QC) components were reviewed in the data validation. Overall, the QA/QC results met the limits established by the QAPP with the exception of some minor deficiencies discussed in this appendix. The minor deficiencies would not affect the usability of the data evaluated in this data validation.

For the March 2016 sampling event, groundwater samples[1] were collected from 31 wells on March 10th, 11th, 15th, and 16th. Samples were collected from 18 wells on Thursday, March 10th, 2016, packaged in accordance with Puerto Rico Environmental Quality Board (PREQB) guidance, and transported to FedEx for overnight shipment; however, FedEx did not deliver the samples to the laboratory until Monday, March 14th. Because the samples had not been refrigerated beyond the sample cooler packaging during that time, the cooler temperature upon receipt by the laboratory was between 10°C and 14°C and above the acceptable limit. Consequently, all samples collected on March 10th were discarded and recollected on March 15th.

The samples were analyzed via the USEPA 8260B Method. The data were reported in sample delivery group (SDG) 72606[2]. This data validation includes evaluations of QA/QC results, surrogate recoveries, holding time, preservation, laboratory reporting limits (RLs), internal standard area counts and retention times, initial calibration (ICAL) relative response factors (RRFs) and relative standard deviations (RSDs), continuing calibration verification (CCV) RRFs, and percent differences (%D) to assess precision, accuracy, completeness, and data usability. The QA/QC results included the results for temperature blanks, trip blanks, field blanks, field duplicate samples, laboratory method blanks, Laboratory Control Samples (LCS), and Matrix Spike (MS)/Matrix Spike Duplicate (MSD) samples, which were collected/prepared and analyzed to assess the potential effects of field sampling conditions, storage and transportation of samples, nature of sample matrix, and laboratory conditions and analysis. An LCSD was not included, even though one is required by the QAPP, as the laboratory considered the MS/MSD samples sufficient to assess precision. The raw data and mass spectra were spot checked for transcription accuracy and analyte identification. A note will be added to future chains of custody requiring a LCSD once per every twenty samples collected.

[1] Only VOC results were validated and therefore, unless otherwise specified, only VOC results were discussed in this data validation.
[2] Samples were combined into one SDG for Puerto Rico certification purposes. Samples were analyzed in batches of fewer than 20 samples.

The laboratory reported that the sample shipments were received in good condition, and the samples were properly preserved at temperatures within the acceptable range.

The reporting limits were based on the sample-specific dilution factor and the lowest calibration standard except that for certain compounds (e.g., trichloroethene (TCE)) the reporting limits were set higher as these compounds occasionally displayed problems on some instruments at low levels. The reporting limits for the following analytes were elevated compared to the Puerto Rico Water Quality Standard (PRWQS) or USEPA Maximum Contaminant Level (MCL). The reporting limit for vinyl chloride was elevated in all samples as the lowest calibration standard was 1.0 µg/L vs. the PRWQS of 0.25 µg/L. Other reporting limits were elevated due to dilution requirements needed to obtain on-scale results.

- 1,1,2,2-Tetrachloroethane in samples OW-304L (2 µg/L), OW-304R (2 µg/L), and OW-101 (5 µg/L) vs. 1.7 µg/L;
- 1,2-Dichloroethane in sample OW-101 (5 µg/L) vs. 3.80 µg/L;
- Carbon tetrachloride in sample OW-101 (5 µg/L) vs. 2.30 µg/L;
- cis-1,3-Dichloropropene in sample OW-101 (5 µg/L) vs. 3.40 µg/L;
- Dibromochloromethane in sample OW-101 (5 µg/L) vs. 4.00 µg/L;
- trans-1,3-Dichloropropene in sample OW-101 (5 µg/L) vs. 3.40 µg/L;
- Trichloroethene in samples OW-304L (20 µg/L), OW-304R (20 µg/L), OW-101 (50 µg/L), and IW-1 (10 µg/L) vs. 5.00 µg/L; and
- Vinyl chloride in samples OW-304L (2 µg/L), OW-304R (2 µg/L), and OW-101 (5 µg/L) vs. 0.25 µg/L.

Although these reporting limits are elevated compared to the relevant water quality standards, the method detection limits (MDLs) were below the standards for all impacted analytes, except trichloroethene and vinyl chloride. The MDLs for trichloroethene were elevated for the samples listed above because the samples had high trichloroethene concentrations, making dilutions necessary to get results within the calibration range. Because the laboratory reports all detections above the MDL as qualified, any violations of the water quality standards would be noted for the other impacted analytes with the exception of vinyl chloride. Because of limitations of the laboratory equipment, a MDL of 0.25 µg/L for Vinyl Chloride cannot be obtained. The lowest practically obtainable laboratory detection limit (1 µg/L) was used instead.

ACCURACY

Data accuracy was assessed based on percent recoveries (%R) from spiked samples expressed as a percent of the true or known concentration of the assessed constituent, surrogate recoveries, blank results, CCV, ICAL, internal standards results mass spectra, and instrument performance checks.

<u>Blanks</u>

The QA/QC program included the analysis of one field blank and one trip blank associated with the March 11th, 2016 sampling, two trip blanks and one field blank associated with the March 15th, 2016 sampling, one trip blank and one field blank associated with the March 16th, 2016 sampling, and laboratory method blanks corresponding to each analytical batch of samples.

No analytes were detected above RLs in any field blanks, trip blanks, or associated laboratory method blank sample results. No qualifiers were added based on the blank sample results.

Spike Recoveries in LCS Samples

The spike recoveries in the LCS samples associated with this monitoring event were within the control limits established by the QAPP (70-130%), except for the following:

- The tetrachloroethene recovery exceeded the QAPP limits in the LCS associated with batch 167472 (139%) affecting samples GZ-504U, GZ-504L, GZ-601R, GZ-701L, GZ-701R, GZ-702U, and GZ-702R. Because tetrachloroethene recovered above the QAPP limits in the LCS, there is potential overestimation of the associated tetrachloroethene results. Tetrachloroethene was not detected in any of the associated samples; as a result, qualifiers were not added to the associated tetrachloroethene results based on the LCS exceedance. The tetrachloroethene results from the initial analysis of samples GZ-501L, GZ-503L, and GZ-504R are also impacted by this exceedance; however, the laboratory report and Table 2 of this report include tetrachloroethene results from the reanalysis only.
- The dichlorodifluoromethane recovery was below the QAPP limits (70-130%) in the LCS associated with batch 167632 (67%) affecting samples OW-304L and OW-304R. "UJ" qualifiers were added to the non-detected dichlorodifluoromethane results in OW-304L and OW-304R.

Spike Recoveries in MS/MSD Samples

MS/MSD samples were analyzed at an appropriate frequency (1/20 of project samples). MS/MSD analyses were performed for samples OW-402U and OW-101L. The spike recoveries were within the control limits established by the QAPP (70-130%), except for the following:

- The dichlorodifluoromethane recoveries in samples OW-402U MSD (132%) and OW-101L MSD (137%);
- The bromomethane recovery in OW-101L MSD (141%);
- The trichlorofluoromethane recovery in OW-101L MSD (135%); and,
- The vinyl chloride recoveries in OW-402U MSD (139%) and OW-101L MSD (136%).

All the above referenced recoveries were above the QAPP limits, indicating potential for overestimation of the associated analytes. None of the affected analytes were detected in the associated samples, so qualifiers were not added based on the MS/MSD results.

Surrogate Recoveries

The surrogate recoveries associated with all groundwater samples for this monitoring event were within the quality control limits established by the QAPP (80-120%).

Internal Standards

The internal standard area counts were within the QAPP limits of 50-200% of the initial calibration sequence areas and the retention times were within ±30 seconds from the retention time of the initial calibration.

Initial and Continuing Calibrations

The ICAL %RSD values were within the QAPP-established limit of 20%, and the RRFs were above the minimum RRF criterion established by the QAPP (0.050) for all reported analytes, except for bromomethane (0.0477) associated with batch 167531 (reanalysis of samples GZ-501L, GZ-503L, and GZ-504R). Because a quadratic regression was used to determine bromomethane concentrations for this batch, qualification of associated results is not necessary. Further, only results for tetrachloroethene were included in the laboratory report for the reanalysis of these samples.

The CCV %D was outside the QAPP-established limit of ±20% for bromomethane (-28.9% for opening; -31.1% for closing), chloroethane (-28.8% for closing); methylene chloride (-26.3% for closing), tetrachloroethene (39.5% for closing), and trichloroethene (42% for closing) associated with analytical batch 167632 (samples OW-304L and OW-304R); for 1,1-Dichloroethene (-20.2%), bromomethane (-35.6%), chloromethane (-28.7%), and dichlorodifluoromethane (-27.6%) associated with analytical batch 167472 (samples GZ-501L, GZ-503L, GZ-504U, GZ-504L, GZ-504R, GZ-601R, GZ-701L, GZ-701R, GZ-702U, and GZ-702R); tetrachloroethene (83.2% for closing) and trans-1,3-dichloropropane (-20.3% for closing) associated with analytical batch 167670 (samples GZ-506R, GZ-519U, OW-402U, OW-402U DUP, OW-101, OW-101L DUP, OW-307, GZ-703R, GZ-505R, WB-3L, WB-3L DUP); and bromomethane (-22.4% for closing) and tetrachloroethene (63.2% for closing) associated with analytical batch 167767 (samples WB-4L, WB-4L DUP, IW-1, IW-2, and IW-3). "UJ" qualifiers were added to the associated non-detects based on the CCV results. Tetrachloroethene was detected in OW-304R, GZ-703R, GZ-505R, WB-3L, WB-3L DUP, WB-4L, WB-4L DUP, and IW-3 and trichloroethene was detected in OW-304L and OW-304R. "J" qualifiers were added to the impacted detections.

The CCV RRFs were above the associated minimum RRF established by the QAPP (0.050), except for bromomethane (0.0484 in closing) associated with analytical batch 167632 (samples OW-304L and OW-304R); bromomethane (0.0497 in opening) associated with analytical batch 167670 (samples GZ-506R, GZ-519U, OW-402U, OW-402U DUP, OW-101, OW-101L DUP, OW-307, GZ-703R, GZ-505R, WB-3L, and WB-3L DUP); and Bromomethane (0.046 in closing) associated with analytical batch 167767 (samples WB-4L, WB-4L DUP, IW-1, IW-2, and IW-3). As a quadratic regression was used to determine concentrations in batches 167670 and 167767 for this analyte, qualifiers were not added. Batch 167632 used a linear fit to determine bromomethane concentrations; therefore, "UJ" qualifiers were added to the non-detect bromomethane results for samples OW-304L and OW-304R[3].

Closing CCVs were not run for analytical batches 167472, 167531, and 167707. The laboratory will run opening and closing CCVs for all future analyses.

Mass Spectra

The mass spectra for vinyl chloride in samples GZ-601R and GZ-702R and for trans-1,2-dichloroethene in samples OW-304L and OW-304R exhibited discrepancies from the respective reference spectra. The results for these compounds were reviewed by the laboratory to confirm all compounds were identified correctly. The following criteria were used to highlight any potential inconsistencies in the mass spectra.

[3] Qualifiers were added based on QAPP requirements. Per #HW-33 Revision 3, qualifiers are not required as long as the closing RRF is greater than or equal to 0.01.

- All ions present in the referencemass spectrum at a relative intensity greater than 10% must be present in the sample spectrum.
- The relative intensities of these ions must agree within ±20% between the reference and sample spectra.
- Ions present at greater than 10% in the sample mass spectrum, but not present in the reference spectrum, must be evaluated by a reviewer experienced in mass spectral interpretation.

Instrument Performance Check

All data generated were analyzed within the twelve-hour calibration interval after the associated instrument performance check bromofluorobenzene (BFB) injections.
No other data quality issues were identified.

PRECISION

Data precision was estimated by comparing analytical results between duplicate samples and calculating the relative percent difference (RPD) or absolute difference (AD) of the duplicate results (e.g., field duplicate samples and MS/MSD).

Field Duplicates

Four field duplicate pairs of samples (OW-402U/OW-402U DUP, OW-101L/OW-101L DUP, WB-3L/WB-3L DUP, and WB-4L/WB-4L DUP) were collected during the sampling event. The RPDs were calculated for the analytes that were detected in both samples of the duplicate pair using the following equation:

$$RPD = \left|2 * 100 * \frac{S_1 - S_2}{S_1 + S_2}\right|$$

Where:

S_1 = primary sample result, and
S_2 = duplicate sample result

Calculated RPDs (in percentage) are only applicable when the sample values are greater than or equal to two times the respective analytical RLs. For the sample duplicate pairs with values greater than or equal to two times the RL, the precision goal is a calculated RPD less than 20%. For the primary and duplicate sample results that are less than two times the respective analytical RL, the precision goal is met when the absolute difference (AD) between the results is less than two times the RL.

The results of OW-402U, OW-101L, WB-3L, and WB-4L and their respective field duplicates, met the QAPP limits.

Matrix Spike Duplicates

The RPDs for the MS/MSD pairs associated with groundwater samples for this monitoring event were within the analyte-specific control limits (<20%) established by the QAPP.

COMPLETENESS

Groundwater samples were successfully obtained from each monitoring well targeted for sampling during the sampling round. The laboratory reported the requested analyses, and the deliverable data reports were complete.
Completeness is the ratio of the number of valid sample results to the total number of samples analyzed within a specific matrix and/or analysis. The percent complete is calculated by the following equation:

$$\%Complete = \frac{(number\ of\ valid\ measurements)}{(number\ of\ measurements\ planned)} * 100$$

Because all of the analytical data are considered valid and usable, the percent complete for the results presented in this report is 100 percent for all analyses, which meets the QC goal of 90 percent. The sufficiency of valid results to meet project objectives for the analysis of analytes will continue to be evaluated during future sampling events

DATA QUALITY SUMMARY

The field and laboratory quality control results indicate that the sampling and analyses performed in generating the data for this groundwater sampling round were generally consistent with the analytical methods and the QAPP and provided data suitable for project objectives. Where appropriate, data were qualified based on GZA's review as recommended in the USEPA Region II SOP. The data are acceptable and can be used for decision-making purposes. The limitations identified by the applied qualifiers, however, should be considered when using the data.

REFERENCES

GZA, 2015, Quality Assurance Project Plan, Revision 4, Hewlett-Packard Voluntary Remedial Actions, San German, Puerto Rico (submitted as Appendix B of Intrinsic Biodegradation Study Work Plan), October.

USEPA Region II, 2013, SOP #HW-33 Revision 3, Low/Medium Volatile Data Validation, March.