



EarthCon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, Georgia 30062

P: 770-973-2100
F: 770-973-7395
www.earthcon.com

October 4, 2018

VIA OVERNIGHT MAIL

Mr. Jason Metzger
Unit Coordinator
Response and Remediation Program
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King, Jr. Drive, SE, Suite 1054 East
Atlanta, Georgia 30334

Subject: **Submittal of Second VIRP Progress Report
SECHEM, INC. – HSI Site No. 10515
4580 South Berkeley Lake Road
Norcross, Georgia**

Dear Mr. Metzger:

On behalf of our client SECHEM, INC. (SECHEM), EarthCon Consultants, Inc. (EarthCon), is pleased to submit the Second Voluntary Investigation and Remediation (VIRP) Progress Report for the SECHEM Site (HSI No. 10515) located in Norcross, Gwinnett County, Georgia. Response to the Georgia Environmental Protection Division (EPD)'s August 8, 2018 comments on the First VIRP Progress Report, dated April 5, 2018, and Response to (EPD) Comment Letter dated October 5, 2017 will be submitted under separate cover.

We appreciate the time EPD has taken to review our submittal. If you have any questions or comments regarding the Second VIRP Progress Report, please feel free to contact the undersigned at (770) 973-2100.

Sincerely,

Alison Levinson, P.G.
Senior Geologist

Carol D. Northern, P.G.
Principal Geologist

Attachment: Second VIRP Progress Report

cc: Ms. Susan Kibler, GA EPD
Ms. Rachel L. Odzer, SECHEM
Mr. Stephen P. Holt, P.E., SECHEM

SECOND VIRP PROGRESS REPORT

**SECHEM, INC.
4580 SOUTH BERKELEY LAKE ROAD
NORCROSS, GWINNETT, COUNTY, GEORGIA 30092
HSI SITE NUMBER 10515**

PREPARED FOR:

**SECHEM, INC.
CORPORATE ENVIRONMENTAL DEPARTMENT
654 JUDGE STREET
HARLEYVILLE, SOUTH CAROLINA 29448**

PREPARED BY:

**EARTHCON CONSULTANTS, INC.
1880 WEST OAK PARKWAY
BUILDING 100, SUITE 106
MARIETTA, GEORGIA 30062
770-973-2100**

EarthCon Project No. 02.20180044.01

October 2018

Contents

PG CERTIFICATION	iii
1.0 INTRODUCTION	1
2.0 SUMMARY OF SITE ACTIVITIES	1
2.1 Groundwater	2
2.2 Surface Water	2
3.0 ANALYTICAL RESULTS	2
3.1 Groundwater Analytical Results	2
3.2 Surface Water Analytical Results	3
4.0 CONCEPTUAL SITE MODEL	3
4.1 Source Areas	3
4.2 Groundwater Flow	3
4.3 Extent of Groundwater Impacts	3
4.4 Extent of Surface Water Impacts	4
4.5 Extent of Soil Impacts	4
5.0 RECOMMENDATIONS	5
6.0 MONTHLY INVOICE SUMMARY	5
7.0 SCHEDULE	5

TABLES

Table 1	Monitoring Well Construction Details
Table 2	Summary of Groundwater Elevation Data – March 19, 2018
Table 3	Summary of Field Parameters
Table 4	Summary of Groundwater Analytical Results
Table 5	Summary of Surface Water Analytical Results
Table 6	Soil Sample Designation
Table 7	Summary of Historical Soil Analytical Data
Table 8	Projected Milestone Schedule
Table 9	Summary of Monthly Invoices

FIGURES

Figure 1	Property Location
Figure 2	Property Layout
Figure 3	Potentiometric Surface Map - March 19, 2018
Figure 4	Groundwater Delineation Map
Figure 5	Soil Delineation Map
Figure 6	Soil Cross Section Location Map
Figure 7	Soil Delineation Cross Section A-A'
Figure 8	Soil Delineation Cross Section B-B'
Figure 9	Soil Delineation Cross Section C-C'

APPENDICES

Appendix A	Observations of Off-Site Activities (Hand Property)
Appendix B	Summary of Field Procedures
Appendix C	Field Sampling Forms
Appendix D	Laboratory Analytical Reports
Appendix E	Soil Delineation Criteria Calculations

PG CERTIFICATION

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Carol D. Northern, P.G.
Principal Geologist

Date: 10/4/18



Registration No. 793
State of Georgia

1.0 INTRODUCTION

The former SECHEM, INC. (SECHEM) facility (referred to herein as the Property) is located at 4580 South Berkeley Lake Road in Norcross, Gwinnett County, Georgia. The Property is listed on the Hazardous Site Inventory (HSI) as SECHEM, INC., HSI Site #10515. The adjacent Youngblood Farms Investments, L.P. (YFI) property is sublisted under HSI Site #10515 (the Site). The Property is owned by SECHEM, INC., a fourth tier subsidiary of Giant Cement Holding, Inc. (GCHI). The Property location and layout are shown on Figures 1 and 2, respectively. The Voluntary Investigation and Remediation Plan (VIRP) Application for the Site was submitted to the Georgia Environmental Protection Division (EPD) on January 5, 2017 and was approved by EPD in a letter dated October 5, 2017. This Second VIRP Progress Report provides a summary of activities conducted at the Site from March 2018 through August 2018.

2.0 SUMMARY OF SITE ACTIVITIES

During this reporting period, one semi-annual groundwater and surface water sampling event was conducted in March 2018. In a letter dated August 8, 2018, EPD provided comments on the First VIRP Progress Report dated April 5, 2018, and SECHEM's Response to EPD Comment Letter dated October 5, 2017. SECHEM's response to these comments is provided under separate cover.

During the March 2018 sampling event, while sampling at monitoring wells HMW-1 and HMW-2 located on the Hand Property (Figure 2), the field team observed personnel from the wheel repair shop (also located on the Hand property) cleaning and sand-blasting tire rims on the asphalt pavement outside their building. The sand-blasting material, cleaning solvent, and water were observed draining along an asphalt-lined ditch into a concrete sided, unlined stormwater basin. The field team also observed that the wash material that drained into the unlined stormwater basin, then flowed under the concrete wall of the basin to the ground surface below (the Youngblood Property). A more detailed description of the observed activities is provided in Appendix A.

The observed activities have the potential to impact soils and groundwater on the Youngblood Property which is currently being addressed as part of SECHEM's VIRP. Therefore, SECHEM contacted the Hand Property owner in August 2018, to further explore the observations and to request that these activities be discontinued immediately. SECHEM was informed by the owner that sandblasting activities have been discontinued and that their tenant, the wheel repair shop, claimed they did not use solvents in their cleaning process. Observations of further activities associated with the Hand Property will be made and recorded, as necessary.

2.1 Groundwater

One semi-annual sampling event was conducted in March 2018. Static water levels were measured, and four monitoring wells were redeveloped on March 19, 2018. Monitoring well YMW-15 was redeveloped due to suspected sedimentation of the well screen. Monitoring wells HMW-2 and WMW-2 were redeveloped since these wells had not been sampled recently and were added to the March 2018 sampling event to assist in the horizontal delineation of groundwater. WMW-1 was redeveloped because it is an historically turbid well. Each monitoring well was redeveloped by purging water until the discharge water was clear.

Twenty-six monitoring wells were sampled during the March 2018 sampling event. The locations of the monitoring wells are shown on Figure 2. The monitoring well construction details are presented in Table 1 and the water level measurements are presented in Table 2. A summary of the field parameter measurements for the March 2018 sampling event is provided in Table 3 and a description of the field procedures is presented in Appendix B. The groundwater sampling field forms for the March 2018 sampling event are provided in Appendix C.

2.2 Surface Water

Surface water samples were collected from four sample locations, SW-1, SW-2, SW-3, and SW-4 on March 22, 2018. The surface water sample locations are shown on Figure 2. A description of the field procedures is provided in Appendix B and the field sampling forms for the March 2018 sampling event are provided in Appendix C.

3.0 ANALYTICAL RESULTS

The groundwater and surface water analytical results are summarized in Tables 4 and 5, respectively, and are discussed below. The laboratory analytical reports are provided in Appendix D.

3.1 Groundwater Analytical Results

The groundwater sampling event was conducted on March 20 through 22, 2018. Groundwater samples were collected from 26 monitoring wells and were shipped to TestAmerica Savannah, a NELAC-certified laboratory located, in Savannah, Georgia, for analysis of volatile organic compounds (VOCs) by EPA Method 8260B and 1,4 dioxane by EPA Method 8260B SIM. A summary of groundwater analytical results is presented in Table 4.

The March 2018 groundwater sampling event resulted in detections of 22 regulated substances at concentrations above laboratory reporting limits (Table 4). Of those, 11 constituents were detected at concentrations above the delineation criteria [Type 1 Risk Reduction Standards (RRS) for groundwater] including: 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-

dichloroethane, 1,3-dichlorobenzene, cis-1,2-dichloroethene, naphthalene, tetrachloroethene, trichloroethene, vinyl chloride and 1,4-dioxane.

3.2 Surface Water Analytical Results

On March 22, 2018, surface water samples were collected at locations SW-1, SW-2, SW-3, and SW-4. The samples were analyzed for VOCs by EPA Method 8260B and 1,4 dioxane by EPA Method 8260B SIM. Results of the analyses are summarized in Table 5.

Three VOCs were detected at concentrations above the Georgia Instream Water Quality Standard (GA ISWQS) in the surface water samples collected from locations SW-1, SW-2 and SW-3. VOCs were not detected at concentrations above the GA ISWQSs in the sample collected from downstream sampling location SW-4, which is located off-Site.

4.0 CONCEPTUAL SITE MODEL

4.1 Source Areas

Regulated substances were identified in soil and groundwater on the Property and in soil, groundwater, and surface water on the adjacent Covey Rise Farm, LLC. property (formerly known as the Youngblood Farm Investments property). Soil contamination was primarily located to the west of the drum shed on the Property. The groundwater contaminant plume is located on the Property and extends onto the adjacent Covey Rise Farm property. The two probable sources of soil and groundwater contamination are the former AST farm and the drum shed (Figure 2).

4.2 Groundwater Flow

The water level measurements collected on March 19, 2018 (Table 2) were used to develop a potentiometric surface map for the Site. As shown on Figure 3, groundwater elevation data indicates groundwater flow on the Site is to the west and southwest toward the intermittent stream.

4.3 Extent of Groundwater Impacts

Based on analytical results from the most recent groundwater sampling event conducted in March 2018, 11 regulated substances were detected in groundwater above their respective delineation criteria. As shown on Figure 4, horizontal delineation in groundwater on accessible properties (SECHEM, Christa & Jeremy's World II, Hand Property and Covey Rise Farm) is complete.

Horizontal delineation has not been achieved at well YMW-6, located near the southwest property line of Covey Rise Farm, or at wells YMW-7, YMW-10 and YMW-16, located near the southeast property line of Covey Rise Farm. The groundwater data indicate that the plume at the upgradient-most well SMW-1, located on the northern most portion of the SECHEM property, can

be considered substantially delineated. Trichloroethene and 1,4-dioxane were detected in SMW-1 at concentrations of 0.0079 mg/L and 0.0022 mg/L, respectively which are only slightly above their respective delineation criteria. No other constituents were detected above the delineation criteria in SMW-1.

In accordance with the VIRP Projected Milestone Schedule, access to the previously inaccessible property will be attempted so that horizontal delineation of the downgradient portion of the groundwater plume can be completed.

4.4 Extent of Surface Water Impacts

Surface water samples were collected from locations SW-1, SW-2, SW-3, and SW-4 on March 22, 2018. As shown in Table 5, concentrations of tetrachloroethene, trichloroethene, and vinyl chloride exceeded the GA ISWQS at location SW-1 located in the segment of the intermittent stream near the intermittent spring located on the Covey Rise Farm property and at locations SW-2 and SW-3, located off-Site on Gwinnett County property. COCs were not detected at concentrations above the GA ISWQS in the sample collected from downstream location SW-4, which is also located off-Site.

4.5 Extent of Soil Impacts

As shown in the 2000 Compliance Status Report (CSR) and 2002 CSR Addendum, a considerable amount of soil analytical data was collected between 1995 and 2000. Sample depths and locations were generally chosen based on the results of field screening using a photoionization detector (PID), and the samples were analyzed for VOCs and semi-volatile organic compounds (SVOCs). The soil samples were collected from varying depths, including near the ground surface, at or above the water table, and above bedrock. As described in the June 2013 Phase II CAP Addendum Report, additional surface and subsurface soil samples were collected in April 2013 to assess the extent of contamination in the vicinity of the AS/SVE system. These samples were collected after the AS/SVE system had been in operation for approximately 5 years. The assessment showed significant reductions in surface and subsurface soil concentrations on the Property; however, residual source material was identified.

A review of the historical soil data was performed to determine if additional sampling was needed to complete the horizontal and vertical delineation of soils on accessible properties. Available data was first reviewed to eliminate those samples collected at or below the water table and therefore not considered representative of soil conditions. A summary of that evaluation is presented in Table 6. Samples considered representative of soil conditions were then compared to delineation criteria (Type 1 RRS for soil), as summarized in Table 7. Soil delineation criteria calculations are provided in Appendix E.

The horizontal extent of regulated substances in soil above the delineation criteria is presented

on Figure 5. As shown on Figure 5, the concentrations of regulated substances in soil present above the delineation criteria is limited to soil borings SB-2, SB-3 SB-10 and SB-11, located on the SECHEM property. The soil contamination is delineated horizontally by soil samples collected from borings SB-1, SB-4, SB-5, SB-6, SB-7, SB-8, SB-9, SG-3, SG-5, SG-6, and SG-11.

Figure 6 shows the locations of three cross sections that were prepared to further illustrate the horizontal delineation of soil contamination; the cross sections are depicted on Figures 7, 8 and 9. As shown on the cross sections, vertical delineation in soil is defined either by the presence of groundwater or the presence of concentrations less than the delineation criteria in an adjacent boring.

5.0 RECOMMENDATIONS

Based on the evaluation conducted during this reporting period, additional groundwater data is required to define the horizontal extent of a portion of the downgradient plume on previously inaccessible property. SECHEM is proceeding with obtaining access to the previously inaccessible property to complete the horizontal delineation for groundwater by October 2019¹, in accordance with the schedule set forth in the Projected Milestone Schedule presented in Table 8. If access cannot be obtained, this schedule will need to be revised accordingly.

A review of the soil data shows that both the horizontal and vertical delineation of regulated substances in soils is complete. No further soil sampling is recommended.

Semi-annual groundwater monitoring will continue as set forth in Table 8.

6.0 MONTHLY INVOICE SUMMARY

EPD requires that a professional engineer or geologist oversee the implementation of the VIRP in accordance with the provisions, purposes, standards and policies of the Georgia Voluntary Remediation Program Act. From March 2018 through August 2018, Ms. Carol D. Northern, P.G., invoiced 11.5 hours to this project. A monthly summary of hours invoiced, and a description of services provided is shown in Table 9.

7.0 SCHEDULE

A project schedule for activities described in this VIRP is provided in Table 8. SECHEM expects to conduct the following activities during the third 6-month reporting period following the Property's enrollment into the VRP:

¹ This schedule is contingent on the negotiation of site access agreements between SEHCEM and downgradient property owner(s).

- Prepare the Third VIRP Progress Report to include the results of the September 2018 semi-annual sampling event;
- Conduct the semi-annual groundwater and surface water sampling event scheduled for March 2019;
- Attempt to obtain access to downgradient property to complete horizontal delineation of the groundwater plume;
- Evaluate vertical delineation of the groundwater plume; and
- Continue to evaluate options for groundwater remediation.

The Third VIRP Progress Report will be submitted by April 5, 2019.

TABLES

**TABLE 1
 MONITORING WELL CONSTRUCTION DETAILS**

Monitoring Well	Installation Date	Total Depth feet, BGS	Screened Interval, feet BGS		Screen Length feet	Screened Zone	Top of Casing Elevation feet
			Top	Bottom			
SECHEM Property							
SMW-1	2/25/1997	45	35	45	10	OVB	1089.61
SMW-2	2/25/1997	39	29	39	10	OVB	1074.74
SMW-3	2/26/1997	40	30	40	10	OVB	1086.73
SMW-4	2/26/1997	40	30	40	10	OVB	1085.53
SG-5	7/20/2000	37.5	27.5	37.5	10	OVB	1087.55
SRW-1	NA	66	56	66	10	NA	1073.62
Weeks Landscaping Property							
WMW-1	2/28/2002	59	49	59	10	OVB	1083.98
WMW-2	2/27/2002	50	40	50	10	OVB	1084.70
Hand Property							
HMW-1	2/25/2002	63.5	53.5	63.5	10	OVB	1070.72
HMW-2	2/26/2002	67	57	67	10	OVB	1075.66
YFI Property							
YMW-1	8/17/1995	39	24	39	15	OVB	1071.49
YMW-2	8/17/1995	19	9	19	10	OVB	1056.35
YMW-4	8/7/1996	35	25	35	10	OVB	1072.07
YMW-5	8/8/1996	34	24	34	10	OVB	1050.62
YMW-6	8/1996	25	15	25	10	OVB	1050.43
YMW-7	8/9/1996	21	11	21	10	OVB	1037.15
YMW-8	8/9/1996	30	20	30	10	OVB	1060.00
YMW-9	8/9/2016	23.5	14	24	10	OVB	1044.92
YMW-10	8/10/1996	24	14	24	10	OVB	1039.80
YMW-11	8/10/1996	24	14	24	10	OVB	1036.11
YMW-13	8/11/1996	29	19	29	10	OVB	1057.08
YMW-14	8/11/1996	19	9	19	10	OVB	1045.24
YMW-15*	7/26/2000	50	45	50	5	BDRK	1051.88
YMW-16	7/25/2000	34	29	34	5	BDRK	1038.94
YMW-17	2/28/2002	53	43	53	10	OVB	1057.97
YMW-18	2/27/2002	53	43	53	10	OVB	1051.25
YMW-19	3/11/2002	100	95	100	5	BDRK	1072.33
YG-1	7/21/2000	16	6	16	10	OVB	1040.89
YG-6	9/12/2000	12	7	12	5	OVB	1036.99

Notes

BGS - below ground surface
 OVB - overburden
 PWR - partially weathered rock
 NA- not available.

These well construction details are based on information provided in the *Corrective Action Program 2015 Annual Report*, prepared by Golder Associates, Inc. and dated April 2016.

* The total depth of YMW-15 that was measured in the field in 2017 and 2018 is approximately 10 feet less than the total depth indicated by the boring log/well construction information.

Prepared by: RLA 10/31/2017
 Checked by: KAH 2/22/2018

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA - MARCH 19, 2018

Location	Top of Casing Elevation (feet MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
SECHEM Property			
SMW-1	1089.61	30.65	1058.96
SMW-2	1074.74	27.79	1046.95
SMW-3	1086.73	33.28	1053.45
SMW-4	1085.53	27.74	1057.79
SG-5	1087.55	33.15	1054.40
SRW-1	1073.62	27.49	1046.13
Weeks Landscaping Property			
WMW-1	1083.98	32.55	1051.43
WMW-2	1084.70	27.50	1057.20
Hand Property			
HMW-1	1070.72	19.12	1051.60
HMW-2	1075.66	20.65	1055.01
YFI Property			
YMW-1	1071.49	27.68	1043.81
YMW-2	1056.35	14.30	1042.05
YMW-4	1072.07	32.39	1039.68
YMW-5	1050.62	14.62	1036.00
YMW-6	1050.43	17.14	1033.29
YMW-7	1037.15	5.33	1031.82
YMW-8	1060.00	18.40	1041.60
YMW-9	1044.92	4.93	1039.99
YMW-10	1039.80	6.04	1033.76
YMW-11	1036.11	3.84	1032.27
YMW-13	1057.08	21.58	1035.50
YMW-14	1045.24	9.37	1035.87
YMW-15	1051.88	15.91	1035.97
YMW-16	1038.94	5.07	1033.87
YMW-17	1057.97	9.71	1048.26
YMW-18	1051.25	10.90	1040.35
YMW-19	1072.33	26.97	1045.36
YG-1	1040.89	7.00	1033.89
YG-6	1036.99	7.38	1029.61

Notes

MSL - Mean sea level

TOC - Measured from top of casing

Prepared By: JRM 4/18/18

Checked By: AGL 4/19/18

TABLE 3
SUMMARY OF FIELD PARAMETERS

Sample Location	Date	Temperature °C	pH S.U.	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm	Turbidity NTU
SECHEM Property							
SMW-1	3/20/18	20.17	4.91	3.52	203.9	101	6.04
SMW-2	3/21/18	14.12	6.38	0.68	14.1	112	8.73
SMW-3	3/20/18	16.63	6.67	0.78	718.6	180	2.22
SMW-4	3/21/18	14.15	4.40	9.39	245.0	47	9.72
SRW-1	3/20/18	16.99	5.72	0.52	153.3	60	9.12
Weeks Landscaping Property							
WMW-1	3/20/18	18.39	6.51	0.99	15.6	84	96.7
WMW-2	3/20/18	23.16	5.73	4.07	158.4	66	21.74
Hand Property							
HMW-1	3/22/18	11.20	5.66	10.21	200.8	74	1.62
HMW-2	3/22/18	15.79	6.31	5.48	201.6	89	38.44
YFI Property							
YMW-1	3/20/18	18.87	5.49	0.26	156.8	70	0.24
YMW-2	3/20/18	16.52	5.14	0.42	124.6	78	11.37
YMW-4	3/20/18	20.63	5.32	11.26	136.1	68	5.76
YMW-5	3/21/18	15.24	6.25	0.89	108.9	141	0.33
YMW-6	3/22/18	14.41	6.31	3.40	178.7	62	0.83
YMW-7	3/21/18	13.73	6.75	4.50	175.9	92	6.76
YMW-8	3/21/18	14.45	5.49	8.41	210.9	41	9.46
YMW-9	3/21/18	13.39	5.40	7.77	203.2	110	9.31
YMW-10	3/21/18	13.55	5.98	5.84	119.2	149	9.46
YMW-11	3/21/18	13.25	6.48	4.12	178.2	87	9.86
YMW-13	3/21/18	15.20	5.12	0.60	196.3	64	3.53
YMW-14	3/20/18	14.94	4.70	0.52	190.0	100	5.78
YMW-15	3/21/18	14.88	6.49	0.51	89.1	201	0.01
YMW-16	3/21/18	13.90	6.30	6.01	194.1	142	0.5
YMW-17	3/21/18	12.70	5.91	9.62	211.4	41	5.44
YMW-18	3/21/18	13.47	6.47	7.65	189.8	94	8.79
YMW-19	3/20/18	17.94	6.16	4.96	169.7	91	2.02

Notes

mg/L - milligrams per liter
 mV - millivolts
 S.U. Standard Units
 µs/cm - microsiemens per centimeter
 NTU - nephelometric turbidity units
 -- Not sampled.

Prepared by: JRM 4/18/18

Checked by: TJM 8/5/18

**TABLE 5
 SUMMARY OF SURFACE WATER ANALYTICAL RESULTS**

Sample Location	Date	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes, total	1,4-Dioxane
GA IWQS (mg/L)		--	0.016	--	7.1	1.3	0.037	0.96	0.19	--	2.1	--	0.0033	5.98	10	0.03	0.0024	--	--
SW-1	3/22/2018	0.055	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.58	< 0.01	< 0.01	0.58	0.094	< 0.01	0.5	0.028	< 0.01	<0.002
SW-2	3/22/2018	0.0035	< 0.001	0.0044	0.018	0.0045	0.012	0.0015	0.0014	0.1	< 0.001	<0.001	0.056	0.0019	< 0.001	0.066	0.005	< 0.001	0.043
SW-3	3/22/2018	< 0.001	< 0.001	< 0.001	0.0012	< 0.001	0.0019	< 0.001	< 0.001	0.01	< 0.001	<0.001	0.005	< 0.001	< 0.001	0.0061	< 0.001	< 0.001	0.018
SW-4	3/22/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0019	< 0.001	<0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.012

Prepared by: JRM 4/24/2018

Checked by: AGL 6/19/2018

Notes:

mg/L - micrograms per liter

GA IWQS - Georgia Instream Water Quality Standard

-- No standard

Bold - Concentration exceeds laboratory reporting limit

Bold and Shaded - Concentration exceeds WQS

**TABLE 6
 SOIL SAMPLE DESIGNATION**

Sample Location	Sample Depth (ft. BGS)	Approximate Depth to GW (ft. BGS)*	Soil Sample (yes/no)**
YG-1	4 - 5 ft	4 ft.	no
YG-2	11 - 12 ft	11 - 12 ft.	no
YG-3	1 - 2 ft	11 - 16 ft.	yes
YG-4	19 - 20 ft	21 ft.	yes
YG-5	23 - 24 ft	24 ft.	no
YG-6	0 - 1 ft	4 - 8 ft.	yes
YG-7	0 - 1 ft	8 ft.	yes
YG-8	0 - 1 ft	8 ft.	yes
YG-9	1 - 2 ft	8 - 12 ft.	yes
YG-10	4 - 5 ft	9 - 16 ft.	yes
YG-11	0 - 1 ft	11 - 16 ft.	yes
YG-12	0 - 1 ft	7 ft.	yes
YG-13	7 - 8 ft	5 ft.	no
YG-14	0 - 1 ft	21 ft.	yes
YG-15	7 - 8 ft	4 ft.	no
YG-16	10 - 12 ft	>16 ft.	yes
YG-17	10 - 12 ft	>16 ft.	yes
YG-18	1 - 2 ft	26 ft.	yes
YG-18	31 - 32 ft	28 ft.	no
YG-19	10 - 10.5 ft	6 ft.	no
YG-20	7 - 8 ft	4 ft.	no
YG-21	7 - 8 ft	5 ft.	no
MW-4 (YMW-4)	15 - 17 ft	20 ft.	yes
MW-4 (YMW-4)	30 - 32 ft	28 ft.	no
YMW-15	--	14 ft.	no
YMW-16	--	1 ft.	no

Sample Location	Sample Depth (ft. BGS)	Approximate Depth to GW (ft. BGS)	Soil Sample (yes/no)*
SG-7	19 - 20 ft	17 ft.	no
SG-8	19 - 20 ft	21 ft.	no
SG-9	13 - 14 ft	21 ft.	yes
SG-10	4 - 5 ft	22 ft.	yes
SG-11	8 - 9 ft	25 ft.	yes
SG-12	0 - 1 ft	16 ft.	yes
SG-13	4 - 5 ft	25 ft.	yes
SG-13	27 - 28 ft	18 ft.	no
SG-14	8 - 9 ft	21 ft.	yes
SG-14	27 - 27.5 ft	21 ft.	no
SG-15	5 - 6 ft	24 ft.	yes
SG-15	23 - 24 ft	24 ft.	no
SG-16	7 - 8 ft	24 ft.	yes
SG-16	31 - 32 ft	24 ft.	no
SG-17	10 - 12 ft	27 ft.	yes
SG-17	30 - 32 ft	27 ft.	no
SG-18	16 - 17 ft	27 ft.	yes
SG-18	30 - 32 ft	27 ft.	no
SG-19	7 - 8 ft	24 ft.	yes
SG-19	31 - 35 ft	24 ft.	no
SB-1□	19 - 20 ft	27 ft.	yes
SB-2□	8 - 9 ft	27 ft.	yes
SB-3□	19 - 20 ft	27 ft.	yes
SB-4□	19 - 20 ft	25 ft.	yes
SB-5□	5 - 6 ft	26 ft.	yes
SB-6□	19 - 20 ft	25 ft.	yes

* Approximate depth to water taken from boring logs, where available.

Prepared By: AGL 06/08/2018

** Sample considered in evaluation of soil delineation if it was collected above the water table.

Checked By: JRM 8/2/2018

-- Sample depth unknown.

ft. BGS-feet below ground surface

Soil sample considered to be at or below the approximate water table.

TABLE 7
SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA

Covey Farm Rise, LLC (Formerly Youngblood Farm Investments, L.P.)															
Constituent (mg/kg)	Delineation Criteria (Type 1 RRS) mg/kg	YG-3	YG-4	YG-6	YG-7	YG-8	YG-9	YG-10	YG-11	YG-12	YG-14	YG-16	YG-17	YG-18	MW-4 (YMW-4)
Sample Depth (ft. BGS)		1 - 2 ft	19 - 20 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	1 - 2 ft	4 - 5 ft	0 - 1 ft	0 - 1 ft	0 - 1 ft	10 - 12 ft	10 - 12 ft	1 - 2 ft	15 - 17 ft
1,1,1-Trichloroethane	5.44	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	0.0077	< 0.0043	< 0.005
1,1,2-Trichloroethane	0.5	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
1,1-Dichloroethane	0.16	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
1,1-Dichloroethene	0.36	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	0.0074	< 0.0043	< 0.005
1,2,4-Trichlorobenzene	10.83	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.020
1,2-Dichlorobenzene	25	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
1,2-Dichloroethane	0.03	< 0.0049	0.010	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
1,2-Dichloroethene (total)*	0.53	< 0.0049	0.052	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	0.0061	< 0.0043	< 0.010
1,3-Dichlorobenzene	2.22	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
1,4-Dichlorobenzene	6.84	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0043	< 0.005
1,4-Dioxane	DL/0.13	--	--	--	--	--	--	--	--	--	--	< 0.170	< 0.170	< 0.130	--
2-Butanone	23.43	< 0.0098	< 0.0098	< 0.0097	< 0.0100	< 0.0095	< 0.0098	< 0.0099	< 0.0100	< 0.0100	< 0.0098	< 0.011	< 0.011	< 0.0086	--
4-Methyl-2-pentanone	28.54	< 0.0098	< 0.0098	< 0.0097	< 0.0100	< 0.0095	< 0.0098	< 0.0099	< 0.0100	< 0.0100	< 0.0098	< 0.011	< 0.011	< 0.0086	--
Acetone	57.38	< 0.098	< 0.098	< 0.097	< 0.100	< 0.095	< 0.098	< 0.099	< 0.100	< 0.100	< 0.098	< 0.11	< 0.11	0.14	--
Benzene	0.05	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
Carbon disulfide	4.78	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	--
Chlorobenzene	4.18	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
Chloroform	0.68	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
cis-1,2-Dichloroethene	0.53	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.005
Ethylbenzene	20	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
Isopropylbenzene	21.88	--	--	--	--	--	--	--	--	--	--	< 0.0056	< 0.0057	< 0.0043	< 0.010
Methanol	80.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	0.08	< 0.049	< 0.049	< 0.049	< 0.050	< 0.048	< 0.049	< 0.050	< 0.050	< 0.050	< 0.049	< 0.056	< 0.057	< 0.043	< 0.005
Naphthalene	38.2	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.010
n-Butyl Acetate	1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	0.18	< 0.0049	0.006	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
Toluene	14.4	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005
trans-1,2-Dichloroethene	0.63	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.005
Trichloroethene	0.13	< 0.0049	0.013	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	0.018	0.0061	< 0.005
Vinyl chloride	0.04	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.010
Xylenes (total)	196.7	< 0.0049	< 0.0049	< 0.0049	< 0.005	< 0.0048	< 0.0049	< 0.005	< 0.005	< 0.005	< 0.0049	< 0.0056	< 0.0057	< 0.0043	< 0.005

Notes

-- Constituent not analyzed

DL - detection limit

mg/kg - milligrams per kilogram

Bold - Concentration above laboratory reporting limit

Shade - indicates constituent detected above delineation criteria.

ft. BGS-feet below ground surface.

* assumes predominantly cis 1,2-dichloroethene.

** Sample depth unknown

TABLE 7
SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA

SECHEM, Inc., Hand and Christa & Jeremy's World II, LLC.															
Constituent (mg/kg)	Delineation Criteria (Type 1 RRS) mg/kg	MW-3 (SMW-3)	SG-1	SG-2	SG-3	SG-5	SG-6	SG-9	SG-10	SG-11	SG-12	SG-13	SG-14	SG-15	SG-16
Sample Depth (ft. BGS)		20 - 22 ft	7 - 8 ft	21 - 22 ft	3 - 4 ft	11 - 12 ft	16 - 17 ft	13 - 14 ft	4 - 5 ft	8 - 9 ft	0 - 1 ft	4 - 5 ft	8 - 9 ft	5 - 6 ft	7 - 8 ft
1,1,1-Trichloroethane	5.44	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	0.0053
1,1,2-Trichloroethane	0.5	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,1-Dichloroethane	0.16	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,1-Dichloroethene	0.36	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,2,4-Trichlorobenzene	10.83	< 0.020	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,2-Dichlorobenzene	25	< 0.005	< 0.0048	< 0.0048	< 0.042	0.0054	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,2-Dichloroethane	0.03	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,2-Dichloroethene (total)*	0.53	< 0.010	< 0.0048	0.0014	< 0.042	< 0.0048	0.012	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,3-Dichlorobenzene	2.22	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
1,4-Dichlorobenzene	6.84	< 0.005	--	--	--	--	--	--	--	--	--	< 0.0042	< 0.006	< 0.005	< 0.0048
1,4-Dioxane	DL/0.13	--	--	--	--	--	--	--	--	--	--	< 0.130	< 0.180	< 0.150	< 0.140
2-Butanone	23.43	--	< 0.0097	< 0.0097	< 0.083	< 0.0097	< 0.0096	< 0.0097	< 0.0097	< 0.0095	< 0.0095	< 0.0084	< 0.012	< 0.010	< 0.0096
4-Methyl-2-pentanone	28.54	--	< 0.0097	< 0.0097	< 0.083	0.079	< 0.0096	< 0.0097	< 0.0097	< 0.0095	< 0.0095	< 0.0084	< 0.012	< 0.010	< 0.0096
Acetone	57.38	--	< 0.0048	0.010	< 0.042	0.012	< 0.0048	< 0.097	< 0.097	< 0.095	< 0.095	< 0.084	< 0.120	< 0.1	< 0.096
Benzene	0.05	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Carbon disulfide	4.78	--	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Chlorobenzene	4.18	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Chloroform	0.68	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
cis-1,2-Dichloroethene	0.53	< 0.005	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	20	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Isopropylbenzene	21.88	< 0.010	--	--	--	--	--	--	--	--	--	< 0.0042	< 0.006	< 0.005	< 0.0048
Methanol	80.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	0.08	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.048	< 0.049	< 0.048	< 0.048	< 0.042	< 0.060	< 0.050	< 0.048
Naphthalene	38.2	< 0.010	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
n-Butyl Acetate	1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	0.18	< 0.005	< 0.0048	0.005	0.082	< 0.0048	0.12	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Toluene	14.4	0.024	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
trans-1,2-Dichloroethene	0.63	< 0.005	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	0.13	< 0.005	< 0.0048	< 0.0048	< 0.042	< 0.0048	0.11	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Vinyl chloride	0.04	< 0.010	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048
Xylenes (total)	196.7	0.011	< 0.0048	< 0.0048	< 0.042	< 0.0048	< 0.0048	< 0.0048	< 0.0049	< 0.0048	< 0.0048	< 0.0042	< 0.006	< 0.005	< 0.0048

Notes

-- Constituent not analyzed

DL - detection limit

mg/kg - milligrams per kilogram

Bold - Concentration above laboratory reporting limit

Shade - indicates constituent detected above delineation criteria.

ft. BGS-feet below ground surface.

* assumes predominantly cis 1,2-dichloroethene.

** Sample depth unknown

TABLE 7
SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA

SECHEM, Inc., Hand and Christa & Jeremy's World II, LLC.															
Constituent (mg/kg)	Delineation Criteria (Type 1 RRS) mg/kg	SG-17	SG-18	SG-19	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11
Sample Depth (ft. BGS)		10 - 12 ft	16 - 17 ft	7 - 8 ft	19 - 20 ft	8 - 9 ft.	19 - 20 ft.	19 - 20 ft.	5 - 6 ft.	19 - 20 ft.	19 - 20 ft.	19 - 20 ft.	12 - 13 ft.	18 - 19 ft.	12 - 13 ft.
1,1,1-Trichloroethane	5.44	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<2.6
1,1,2-Trichloroethane	0.5	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<2.6
1,1-Dichloroethane	0.16	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<2.6
1,1-Dichloroethene	0.36	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<2.6
1,2,4-Trichlorobenzene	10.83	< 0.0068	< 0.0044	< 0.0042	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	25	< 0.0068	< 0.0044	< 0.0042	<0.0057	270	<0.037	<0.0062	2.0	<0.54	0.76	0.043	0.030	0.023	55
1,2-Dichloroethane	0.03	< 0.0068	< 0.0044	< 0.0042	0.097	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	0.0082	<0.0061	<0.0061	<2.6
1,2-Dichloroethene (total)*	0.53	<0.0068	<0.0044	<0.0042	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	2.22	< 0.0068	< 0.0044	< 0.0042	<0.0057	180	<0.037	<0.0062	<0.9	<0.54	<0.47	0.009	<0.0061	<0.0061	34
1,4-Dichlorobenzene	6.84	< 0.0068	< 0.0044	< 0.0042	<0.0057	110	<0.037	<0.0062	<0.9	<0.54	<0.47	0.0082	<0.0061	<0.0061	22
1,4-Dioxane	DL/0.13	< 0.200	< 0.130	--	0.086	<490	4.4	<0.062	<9	<5.4	<4.7	<0.065	<0.061	0.88	<26
2-Butanone	23.43	< 0.014	< 0.0088	< 0.0084	0.320	<240	<1.9	<0.031	<4.5	19	<2.3	<0.033	<0.031	<0.030	<13
4-Methyl-2-pentanone	28.54	< 0.014	< 0.0088	< 0.0084	<0.029	<240	<1.9	<0.031	<4.5	<2.7	<2.3	<0.033	<0.031	<0.030	<13
Acetone	57.38	< 0.14	< 0.088	< 0.084	0.730	<49	<3.7	<0.062	<9	<5.4	<4.7	<0.065	<0.061	<0.061	<26
Benzene	0.05	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<26
Carbon disulfide	4.78	< 0.0068	< 0.0044	< 0.0042	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	4.18	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<26
Chloroform	0.68	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<26
cis-1,2-Dichloroethene	0.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	20	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	19
Isopropylbenzene	21.88	< 0.0068	< 0.0044	< 0.0042	--	--	--	--	--	--	--	--	--	--	--
Methanol	80.81	--	--	--	<6900	<5.8	11	<7.4	<6	<7.1	<7.1	<7.2	<7	<6.6	<7.2
Methylene Chloride	0.08	< 0.068	< 0.044	< 0.042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	0.052	<0.0061	<0.0061	<2.6
Naphthalene	38.2	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	0.007	0.01	<0.0061	13
n-Butyl Acetate	1000	--	--	--	<6900	<5.8	<6.1	<7.4	<6	<7.1	<7.1	<7.2	<7	<6.6	<7.2
Tetrachloroethene	0.18	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	0.019	<0.0061	<0.0061	56
Toluene	14.4	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	37
trans-1,2-Dichloroethene	0.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	0.13	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	0.025	<0.0061	<0.0061	<2.6
Vinyl chloride	0.04	< 0.0068	< 0.0044	< 0.0042	<0.0057	<49	<0.037	<0.0062	<0.9	<0.54	<0.47	<0.0065	<0.0061	<0.0061	<2.6
Xylenes (total)	196.7	< 0.0068	< 0.0044	< 0.0042	<0.011	<98	<0.074	<0.012	<1.8	<1.1	<0.94	<0.013	0.019	<0.012	110

Notes

-- Constituent not analyzed
DL - detection limit
mg/kg - milligrams per kilogram

Bold - Concentration above laboratory reporting limit

Shade - indicates constituent detected above delineation criteria.

ft. BGS-feet below ground surface.

* assumes predominantly cis 1,2-dichloroethene.

** Sample depth unknown

Prepared By: JRM 4/27/2018

Checked By: AGL 6/18/2018

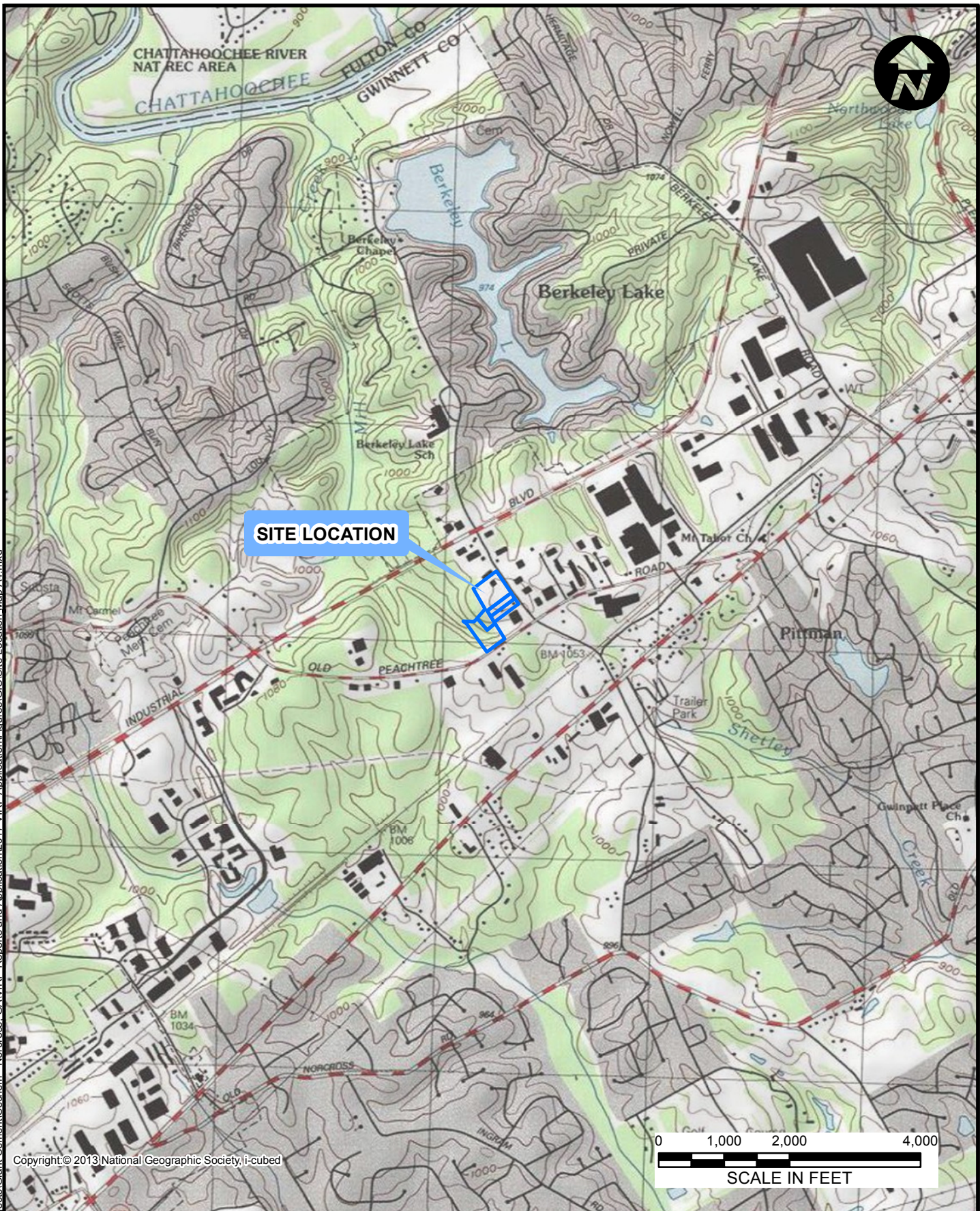
TABLE 8
PROJECTED MILESTONE SCHEDULE

Date	Activity
October 5, 2017	VIRP Application approved
March 19-23, 2018	Semi-annual groundwater and surface water sampling event
April 5, 2018	First VIRP Progress Report
September 19-22, 2018	Semi-annual groundwater and surface water sampling event
October 5, 2018	Horizontal delineation on accessible properties complete
	Second VIRP Progress Report
March 2019	Semi-annual groundwater and surface water sampling event
April 5, 2019	Third VIRP Progress Report
September 2019	Semi-annual groundwater and surface water sampling event
October 5, 2019	Horizontal delineation of initially inaccessible areas complete
October 5, 2019	Fourth VIRP Progress Report
March 2020	Semi-annual groundwater and surface water sampling event
April 5, 2020	Vertical delineation complete, remediation plan finalized, preliminary cost estimate prepared.
	Fifth VIRP Progress Report
September 2020	Semi-annual groundwater and surface water sampling event
October 5, 2020	Sixth VIRP Progress Report
March 2021	Semi-annual groundwater and surface water sampling event
April 5, 2021	Seventh VIRP Progress Report
September 2021	Semi-annual groundwater and surface water sampling event
October 5, 2021	Eighth VIRP Progress Report
March 2022	Semi-annual groundwater and surface water sampling event
April 5, 2022	Ninth VIRP Progress Report
September 2022	Semi-annual groundwater and surface water sampling event
October 5, 2022	Compliance Status Report

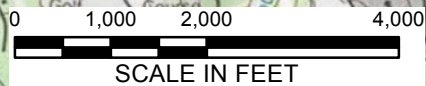
TABLE 9
SUMMARY OF MONTHLY INVOICES

Month	Hours Billed by Carol Northern, P.G.	Description of Activities
April 2018	3.25	<ul style="list-style-type: none">– Submittal of 1st VIRP Progress Report– Evaluation of horizontal and vertical delineation of soil constituents
May 2018	1.25	<ul style="list-style-type: none">– Evaluation of horizontal and vertical delineation of soil constituents
June 2018	1	<ul style="list-style-type: none">– Evaluation of horizontal and vertical delineation of groundwater constituents
August 2018	6	<ul style="list-style-type: none">– Evaluation of horizontal and vertical delineation of soil and groundwater constituents– Preparation of 2nd VIRP Progress Report

FIGURES



SITE LOCATION



Document Path: S:\Premier\Projects\Giant Cement\Scheme - Norcross_GAWIRP_Reports and Application\2017_VIRP_Application\Figures\GIS\Site_Location_Map_A4.mxd

Copyright: © 2013 National Geographic Society, i-cubed

SECHEM, INC

4850 SOUTH BERKELEY LAKE ROAD
NORCROSS, GEORGIA
HI SITE NUMBER 10515

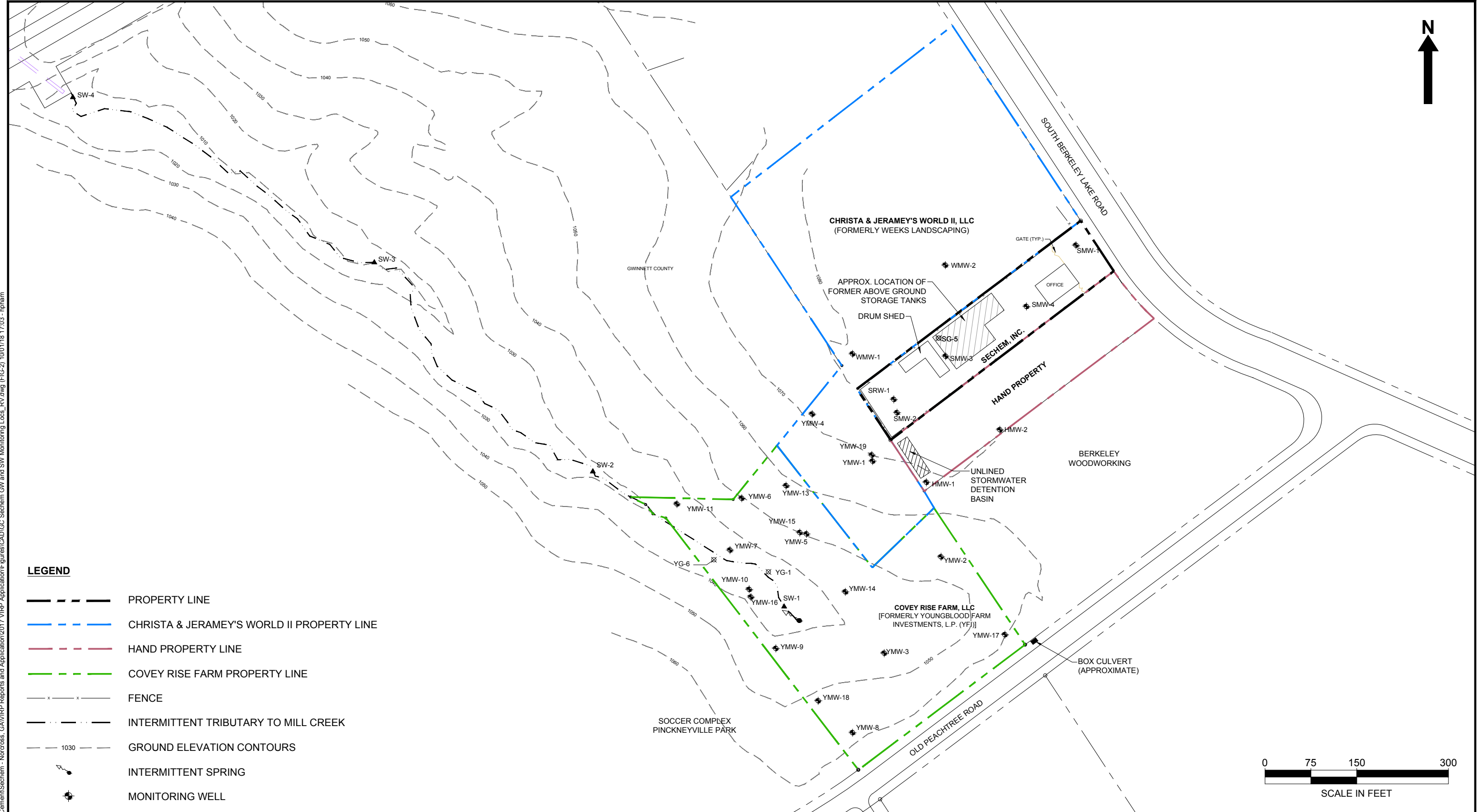
PROJECT NO. 02.21080044.00







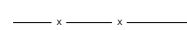
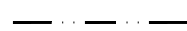





EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

PROPERTY LOCATION

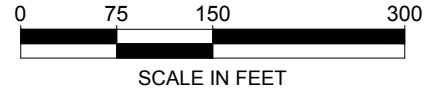
DRAWN	CHECKED	DATE	FIGURE
HVP	AGL	APR 2018	1



LEGEND

-  PROPERTY LINE
-  CHRISTA & JERAMEY'S WORLD II PROPERTY LINE
-  HAND PROPERTY LINE
-  COVEY RISE FARM PROPERTY LINE
-  FENCE
-  INTERMITTENT TRIBUTARY TO MILL CREEK
-  1030 GROUND ELEVATION CONTOURS
-  INTERMITTENT SPRING
-  MONITORING WELL
-  SURFACE WATER MONITORING POINT
-  PIEZOMETER

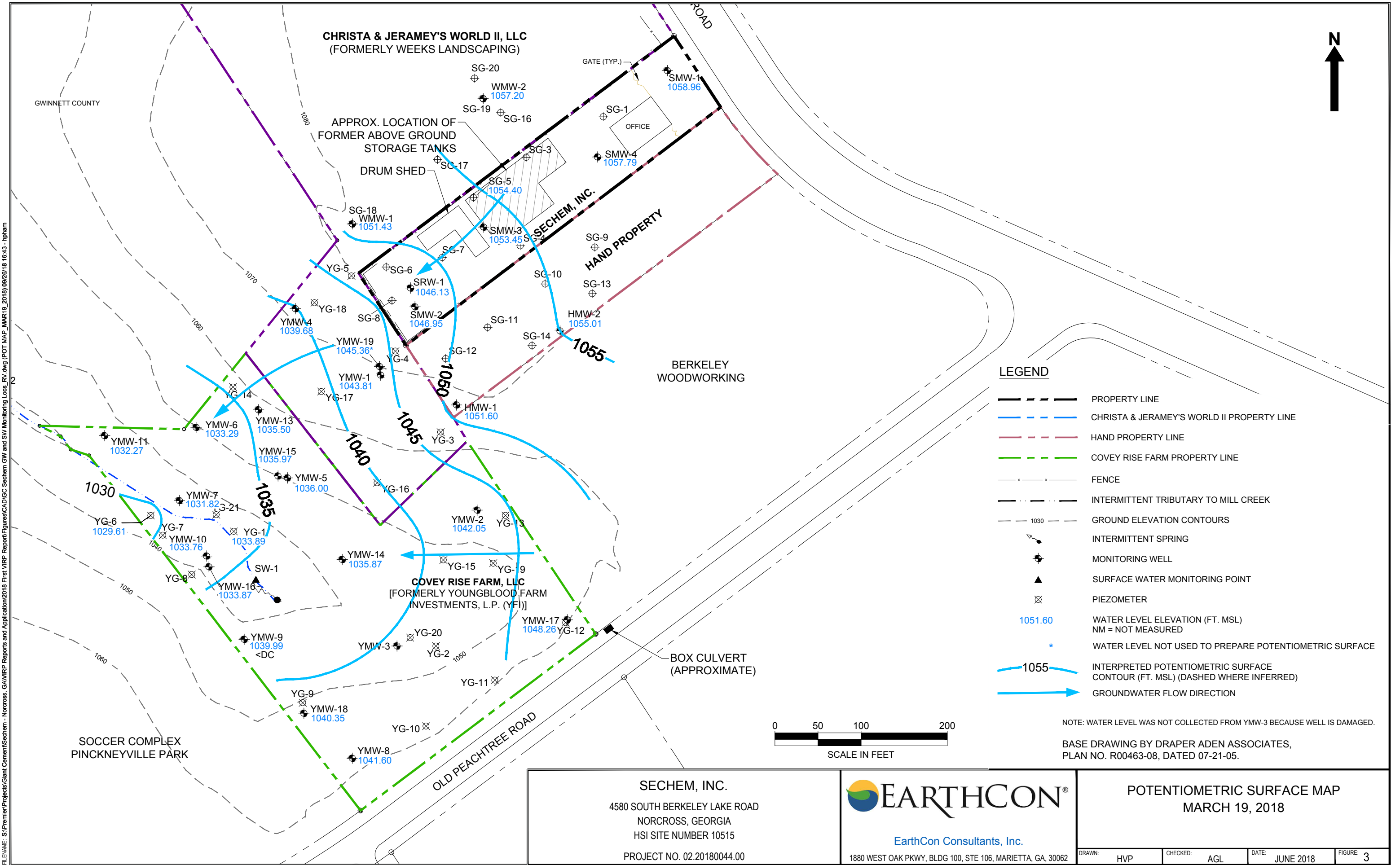
BASE DRAWING BY DRAPER ADEN ASSOCIATES,
PLAN NO. R00463-08, DATED 07-21-05.



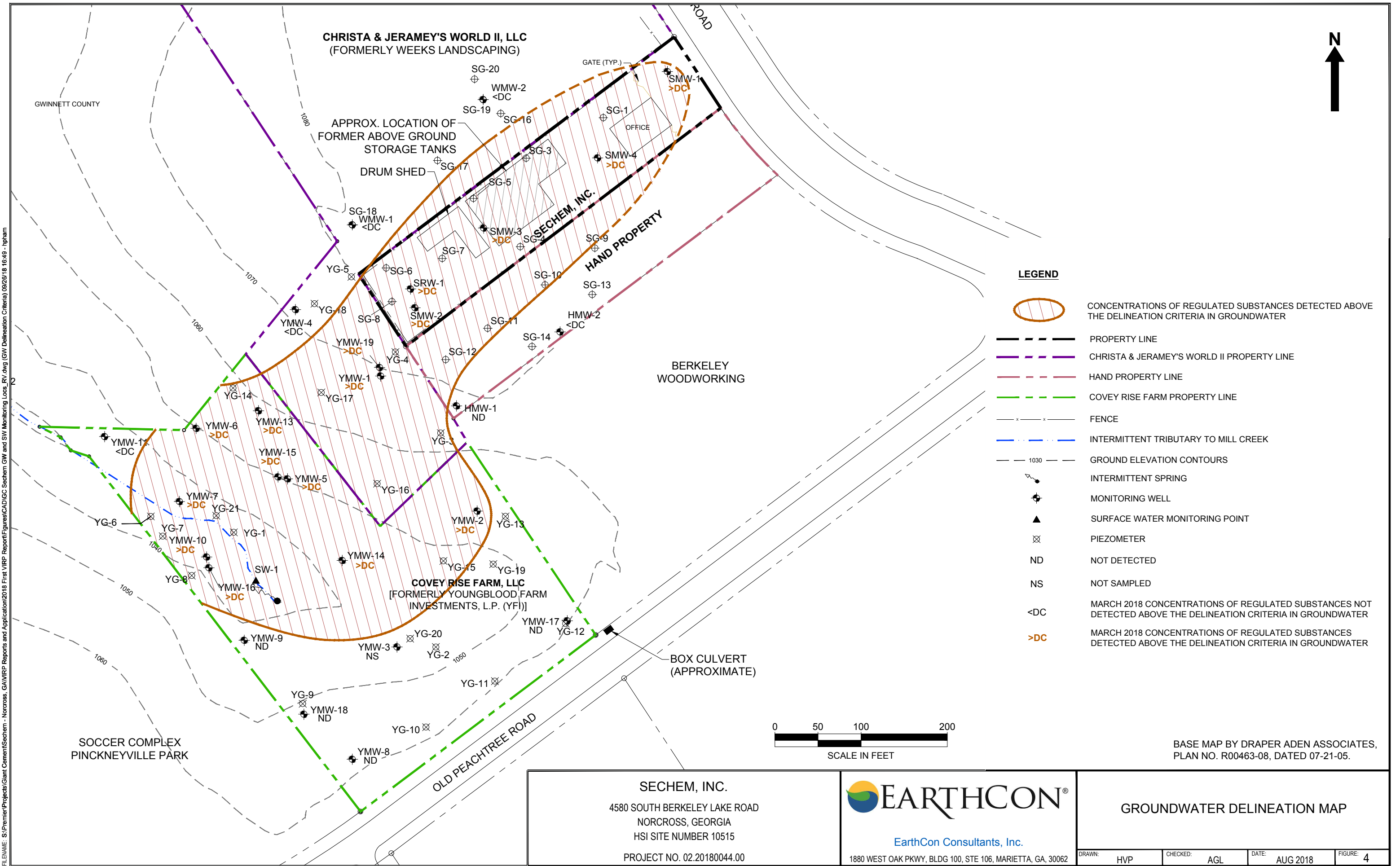
<p>SECHEM, INC. 4580 SOUTH BERKELEY LAKE ROAD NORCROSS, GEORGIA HSI SITE NUMBER 10515 PROJECT NO. 02.20180044.00</p>	 EARTHCON EarthCon Consultants, Inc. 1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062	<p>PROPERTY LAYOUT</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DRAWN: HVP</td> <td style="width: 25%;">CHECKED: AGL</td> <td style="width: 25%;">DATE: OCT 2018</td> <td style="width: 25%;">FIGURE: 2</td> </tr> </table>	DRAWN: HVP	CHECKED: AGL	DATE: OCT 2018	FIGURE: 2
DRAWN: HVP	CHECKED: AGL	DATE: OCT 2018	FIGURE: 2			

FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross_GAV\IRP Reports and Application\2017_VIRP Application\Figures\CAD\IGC Sechem GW and SW Monitoring Locs_RV.dwg (FIG-2), 10/01/18 17:03 - hpbam

FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross, GA\VRP Reports and Application\2018 First VRP Report\Figures\CAD\GC Sechem GW and SW Monitoring Locs_RV.dwg (POT MAP_MAR19_2018) 09/26/18 16:43 - hpham

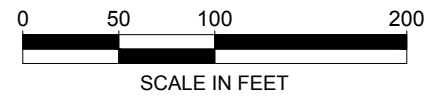


FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross, GA\VRP Reports and Application\2018 First VRP Report\Figures\CAD\GC Sechem GW and SW Monitoring Locs_RV.dwg (GW Delineation Criteria) 08/26/18 16:49 - hpham



LEGEND

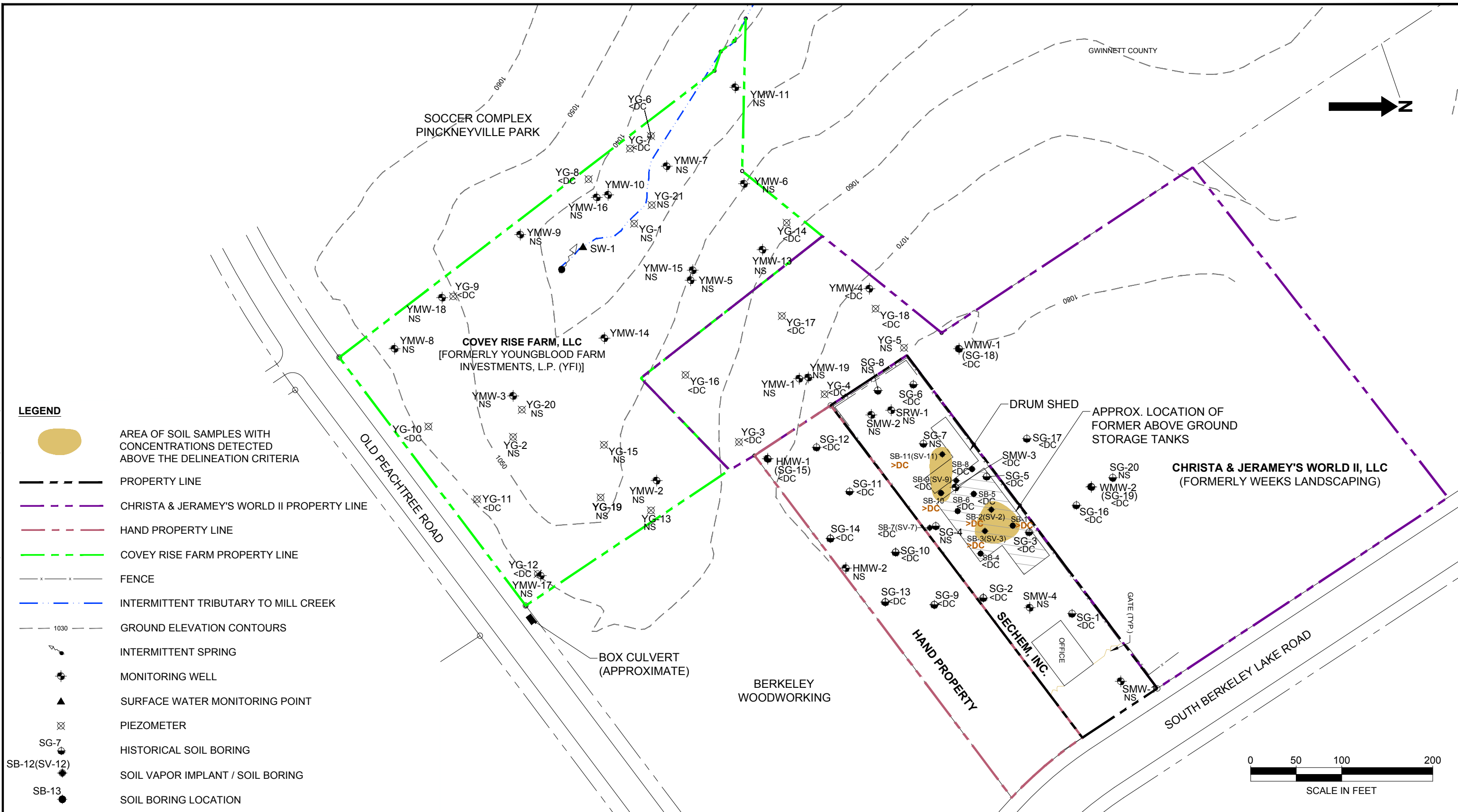
- CONCENTRATIONS OF REGULATED SUBSTANCES DETECTED ABOVE THE DELINEATION CRITERIA IN GROUNDWATER
- PROPERTY LINE
- CHRISTA & JERAMEY'S WORLD II PROPERTY LINE
- HAND PROPERTY LINE
- COVEY RISE FARM PROPERTY LINE
- FENCE
- INTERMITTENT TRIBUTARY TO MILL CREEK
- 1030 GROUND ELEVATION CONTOURS
- INTERMITTENT SPRING
- MONITORING WELL
- SURFACE WATER MONITORING POINT
- PIEZOMETER
- ND** NOT DETECTED
- NS** NOT SAMPLED
- <DC** MARCH 2018 CONCENTRATIONS OF REGULATED SUBSTANCES NOT DETECTED ABOVE THE DELINEATION CRITERIA IN GROUNDWATER
- >DC** MARCH 2018 CONCENTRATIONS OF REGULATED SUBSTANCES DETECTED ABOVE THE DELINEATION CRITERIA IN GROUNDWATER





















BASE MAP BY DRAPER ADEN ASSOCIATES, PLAN NO. R00463-08, DATED 07-21-05.

<p>SECHEM, INC. 4580 SOUTH BERKELEY LAKE ROAD NORCROSS, GEORGIA HSI SITE NUMBER 10515 PROJECT NO. 02.20180044.00</p>	<p>EARTHCON[®] EarthCon Consultants, Inc. 1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062</p>	<p>GROUNDWATER DELINEATION MAP</p>
DRAWN: HVP	CHECKED: AGL	DATE: AUG 2018
		FIGURE: 4

FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross, GA\VRP Reports and Application\2018 First VRP Report\Figures\CAD\DC Sechem Soil Sampling Locations.dwg (FIG-X) 09/26/18 17:00 - hpbism



LEGEND

-  AREA OF SOIL SAMPLES WITH CONCENTRATIONS DETECTED ABOVE THE DELINEATION CRITERIA
-  PROPERTY LINE
-  CHRISTA & JERAMEY'S WORLD II PROPERTY LINE
-  HAND PROPERTY LINE
-  COVEY RISE FARM PROPERTY LINE
-  FENCE
-  INTERMITTENT TRIBUTARY TO MILL CREEK
-  GROUND ELEVATION CONTOURS
-  INTERMITTENT SPRING
-  MONITORING WELL
-  SURFACE WATER MONITORING POINT
-  PIEZOMETER
-  HISTORICAL SOIL BORING
-  SOIL VAPOR IMPLANT / SOIL BORING
-  SOIL BORING LOCATION
-  SOIL ANALYTICAL DATA GREATER THAN DELINEATION CRITERIA
-  SOIL ANALYTICAL DATA GREATER THAN DELINEATION CRITERIA
-  NO SOIL SAMPLE COLLECTED

BASE DRAWING BY DRAPER ADEN ASSOCIATES,
PLAN NO. R00463-08, DATED 07-21-05.

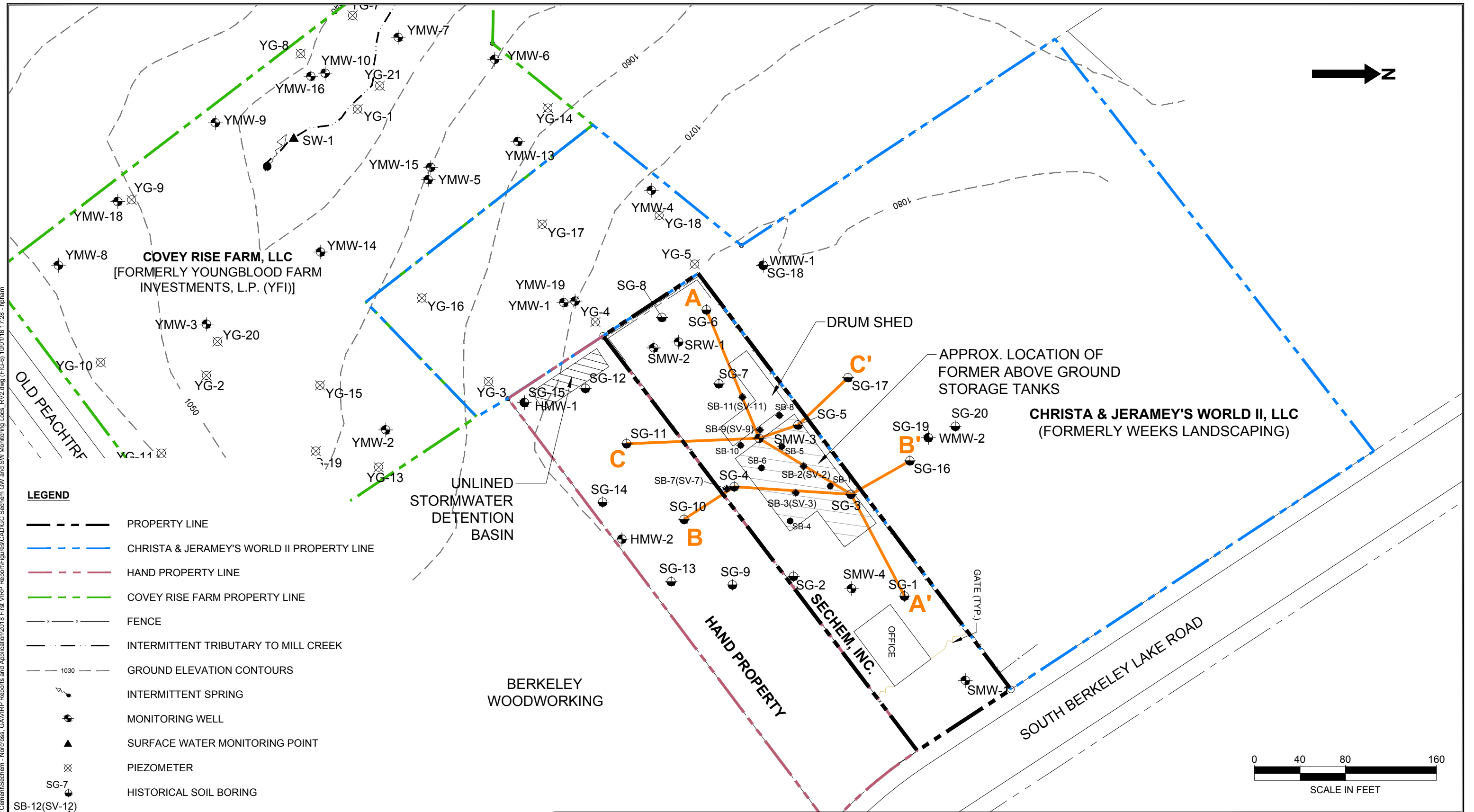
SECHEM, INC.
4580 SOUTH BERKELEY LAKE ROAD
NORCROSS, GEORGIA
HSI SITE NUMBER 10515
PROJECT NO. 02.20180044.00

 **EARTHCON**[®]
EarthCon Consultants, Inc.
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

SOIL DELINEATION MAP

DRAWN: HVP	CHECKED: AGL	DATE: AUG 2018	FIGURE: 5
------------	--------------	----------------	-----------

FILENAME: S:\Premier\Projects\Giant Cement\Secchem - Norcross, GA\VIPR Reports and Application\2018 First VIPR Report\Figures\CAD\GC Secchem GW and SW Monitoring Locs_RV2.dwg (FIG-6) 10/01/18 17:28 - hpham



BASE DRAWING BY DRAPER ADEN ASSOCIATES,
 PLAN NO. R00463-08, DATED 07-21-05.

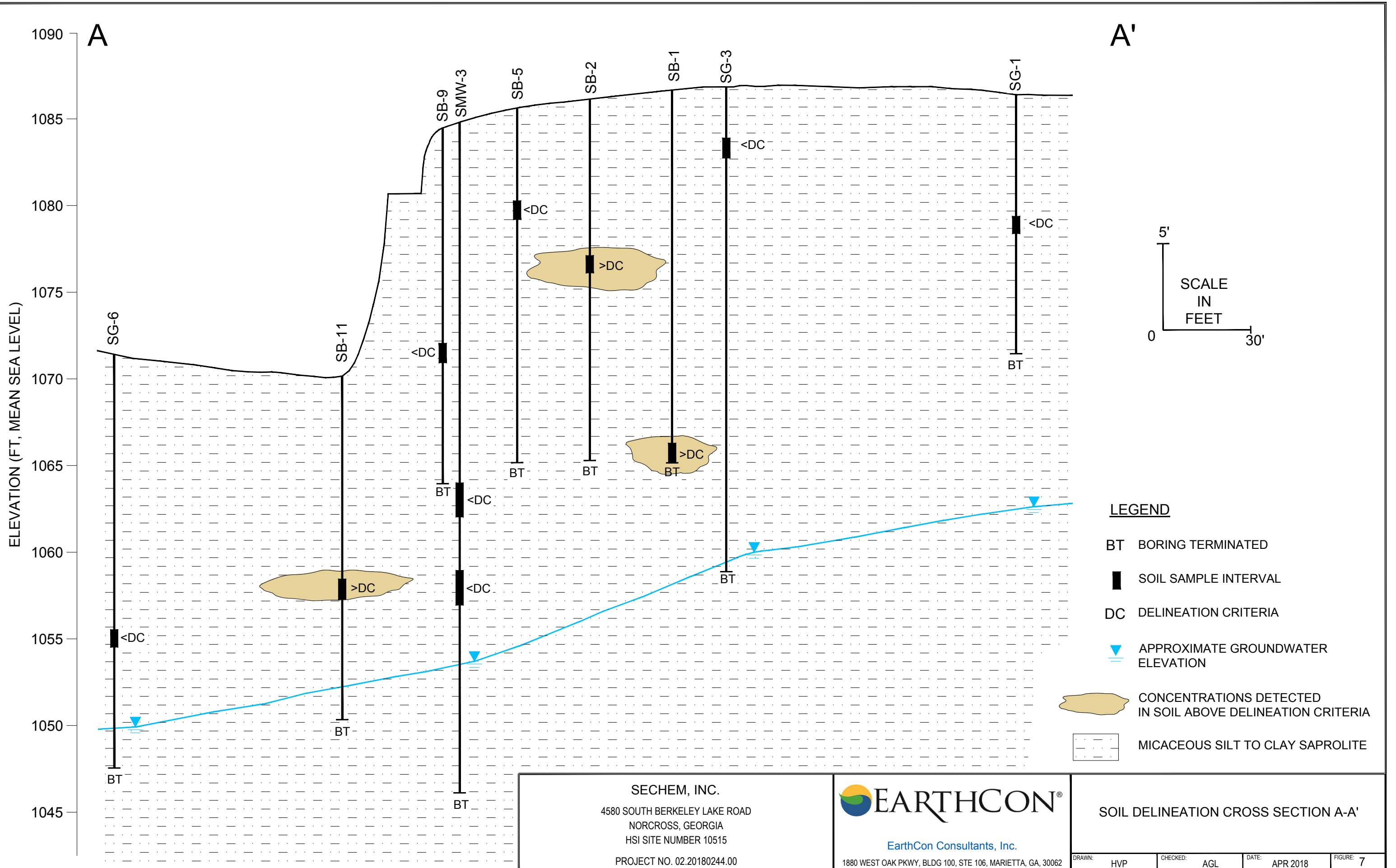
SECHEM, INC.
 4580 SOUTH BERKELEY LAKE ROAD
 NORCROSS, GEORGIA
 HSI SITE NUMBER 10515
 PROJECT NO. 02.20180044.00

EARTHCON®
 EarthCon Consultants, Inc.
 1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

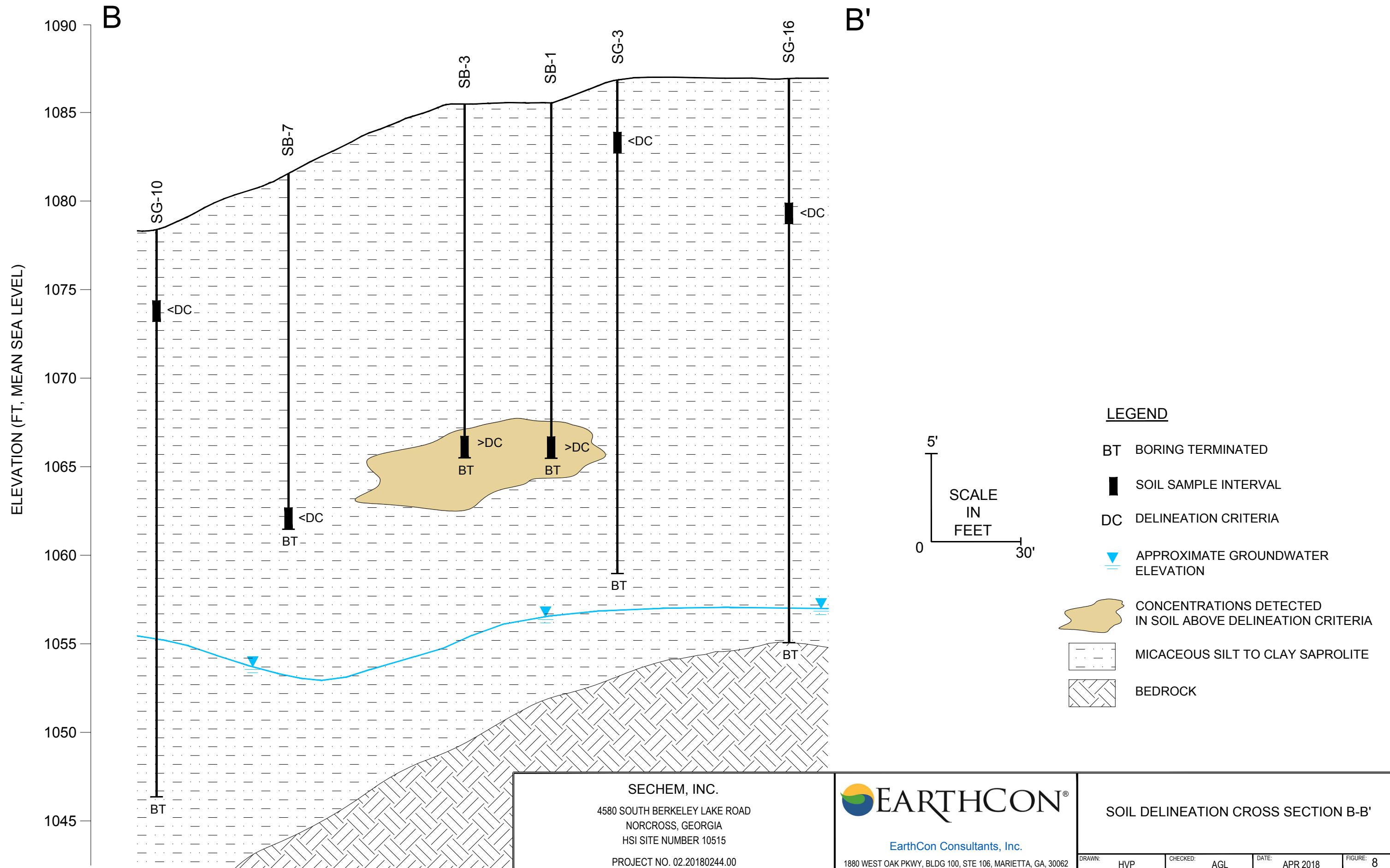
SOIL CROSS SECTION LOCATION MAP

DRAWN: HVP	CHECKED: AGL	DATE: OCT 2018	FIGURE: 6
------------	--------------	----------------	-----------

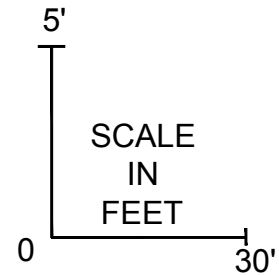
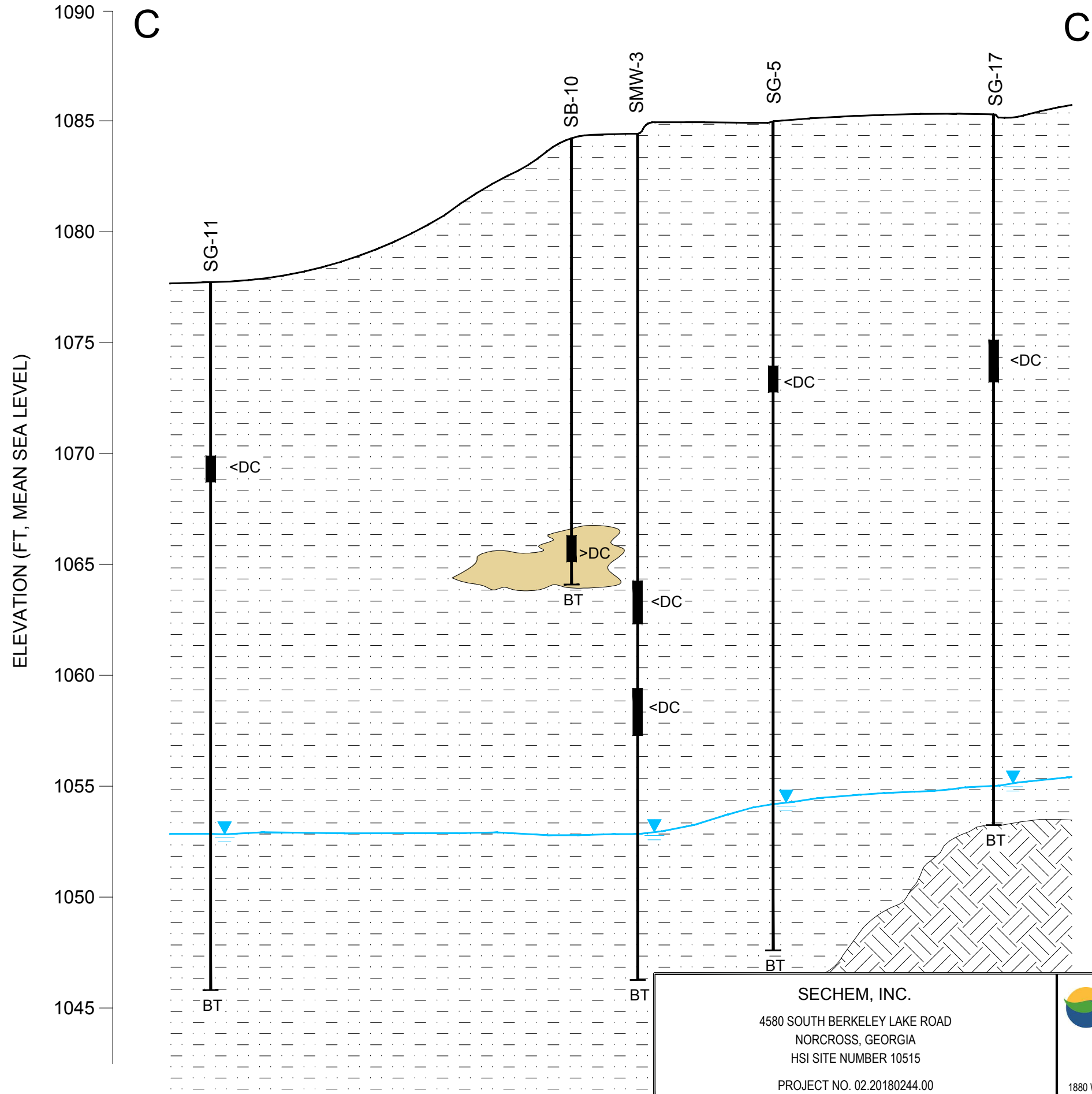
FILENAME: S:\Premier\Projects\Giant Cement\Scheme - Norcross, GA\VRP Reports and Application\2018 Second VRP Report\USE THESE FILES\Figures\CAD\DC Section VRP and APP Figures_2018_RV.dwg (FIG-7 A-A) 09/27/18 11:32 - hpham



FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross, GA\VRP Reports and Application\2018 Second VRP Report\USE THESE FILES\Figures\CAD\GCS Sechem VRP and APP Figures_2018_RV.dwg (FIG-8 B-B' 2018) 09/27/18 11:26 - hpham



FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross, GA\VRP Reports and Application\2018 Second VRP Report\USE THESE FILES\Figures\CAD\CSC Sechem VRP and APP Figures_2018_RV.dwg (FIG-9 C-C 2018) 09/27/18 11:28 - hpham



- LEGEND**
- BT BORING TERMINATED
 - SOIL SAMPLE INTERVAL
 - DC DELINEATION CRITERIA
 - ▼ APPROXIMATE GROUNDWATER ELEVATION
 - CONCENTRATIONS DETECTED IN SOIL ABOVE DELINEATION CRITERIA
 - MICACEOUS SILT TO CLAY SAPROLITE
 - BEDROCK

<p>SECHEM, INC. 4580 SOUTH BERKELEY LAKE ROAD NORCROSS, GEORGIA HSI SITE NUMBER 10515 PROJECT NO. 02.20180244.00</p>	<p>EARTHCON[®] EarthCon Consultants, Inc. 1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062</p>	<p>SOIL DELINEATION CROSS SECTION C-C'</p>
DRAWN: HVP	CHECKED: AGL	DATE: APR 2018
FIGURE: 9		

APPENDICES

APPENDIX A

**Observation of Off-site Activities Letter
August 21, 2018**



EarthCon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, Georgia 30062

P: 770-973-2100
F: 770-973-7395
www.earthcon.com

August 21, 2018

Ms. Rachel L. Odzer
Manager, Environmental Projects
Giant Cement Holding, Inc. | Corporate Environmental
654 Judge Street
Harleyville, SC 29448

Re: Observation of Off-Site Activities
SECHEM, INC., HSI No. 10515
Norcross, Gwinnett County, Georgia

Dear Ms. Odzer:

During the March 2018 groundwater sampling event at the SECHEM, INC. facility in Norcross, Georgia (Site), the EarthCon field team observed activities on the Hand Property (Figure 1) that we wanted to bring to your attention. On March 22, 2018, while sampling at monitoring wells HMW-1 and HMW-2 located on the Hand Property, our field team observed personnel from the wheel repair shop (also located on the Hand property) cleaning tire rims on the asphalt pavement outside their building. The observed activities included sand-blasting the tire rims, rinsing the rims with solvent, and rinsing with water from a running hose. The sand-blasting material, solvent, and water were observed draining along an asphalt-lined ditch into a concrete sided, unlined storm water basin. The field team also observed that the wash material that drained into the unlined stormwater basin, then flowed under the concrete wall of the basin to the ground surface below. An approximate representation of the observations that were made is illustrated on Figure 2.

Based on our field observations, we are concerned that these activities have the potential to impact soils and groundwater on the Youngblood Property which is currently being addressed as part of SECHEM's Voluntary Investigation and Remediation Plan (VIRP) under the Georgia Voluntary Remediation Program (VRP). Accordingly, we believe additional investigation into the activities observed in March 2018 is warranted since they have the potential to impede the clean-up efforts and completion of the SECHEM VIRP.

We recommend that the discharge to the ground surface observed in March 2018 on the Hand Property be discontinued immediately. Further, we also recommend that the observations be

included in our next report to the Georgia Environmental Protection Division (EPD) scheduled to be submitted on October 5, 2018.

If you have any questions or would like to discuss these observations or the project in general, please contact us at (770) 973-2100.

Sincerely,



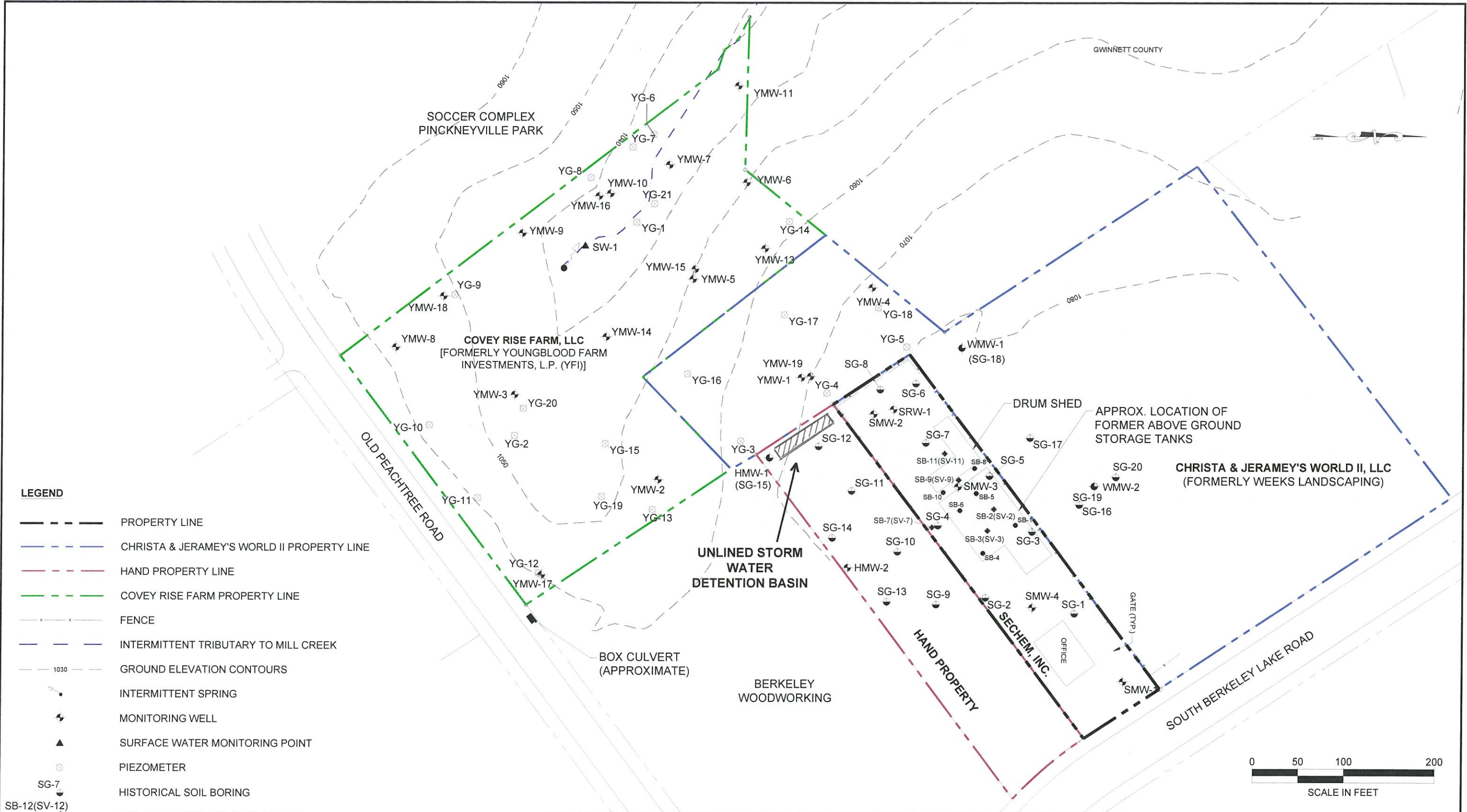
Alison Levinson, P.G.
Senior Geologist



Carol D. Northern, P.G.
Principal Geologist

Attached: Figures 1 and 2
cc: Stephen P. Holt, P.E. -SECHEM

FILENAME: S:\Premier\Projects\Giant Cement\Sechem - Norcross, GAVIRP Reports and Application\2018 First VPR Report\Figures\CAD\CC Sechem GW and SW Monitoring Locs_RV2.dwg (FIG-2) 07/12/18 15:12 - hpham



- LEGEND**
- PROPERTY LINE
 - CHRISTA & JERAMEY'S WORLD II PROPERTY LINE
 - HAND PROPERTY LINE
 - COVEY RISE FARM PROPERTY LINE
 - FENCE
 - INTERMITTENT TRIBUTARY TO MILL CREEK
 - 1030 GROUND ELEVATION CONTOURS
 - INTERMITTENT SPRING
 - MONITORING WELL
 - SURFACE WATER MONITORING POINT
 - PIEZOMETER
 - SG-7 HISTORICAL SOIL BORING
 - SB-12(SV-12) SOIL VAPOR IMPLANT / SOIL BORING
 - SB-13 SOIL BORING LOCATION

BASE DRAWING BY DRAPER ADEN ASSOCIATES,
PLAN NO. R00463-08, DATED 07-21-05.

SECHEM, INC.
4580 SOUTH BERKELEY LAKE ROAD
NORCROSS, GEORGIA
HSI SITE NUMBER 10515
PROJECT NO. 02.20180044.00

EARTHCON[®]
EarthCon Consultants, Inc.
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

PROPERTY LAYOUT			
DRAWN: HVP	CHECKED: AGL	DATE: JUNE 2018	FIGURE: 1



SECHEM PROPERTY

HAND PROPERTY

UNLINED STORM WATER
DETENTION BASIN

SAND BLASTING AND
CLEANING AREA

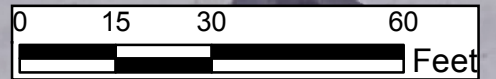
ASPHALT DITCH

HMW-1

DISCHARGE FROM
DETENTION POND

YOUNGBLOOD PROPERTY

© 2018 Google



Document Path: S:\Premier\Projects\Giant Cement\Sechem - Norcross_GAWIRP_Reports and Application\2018 First VPRP Report\Figures\GIS\Hand Property Aerial.mxd

SECHEM, INC

4850 SOUTH BERKELEY LAKE ROAD
NORCROSS, GEORGIA
HI SITE NUMBER 10515

PROJECT NO. 02.21080044.00



EarthCon Consultants, Inc.

1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

HAND PROPERTY
AERIAL PHOTO

DRAWN	CHECKED	DATE	FIGURE
HVP	AGL	AUG 2018	2

APPENDIX B

Summary of Field Procedures

APPENDIX B: SUMMARY OF FIELD PROCEDURES

A summary of the field activities performed from March 19 to 22, 2018 is provided in the following sections. Groundwater and surface water sampling field forms are provided in Appendix B. Laboratory analytical reports are provided in Appendix C.

GROUNDWATER SAMPLING

The groundwater sampling was conducted in general accordance with the United States Environmental Protection Agency (USEPA) Region 4 Science and Ecosystem Support Division (SESD) Operating Procedure (OP) for *Groundwater Sampling* (SESDPROC-301-R4, dated April 26, 2017).

Sample Containers

The laboratory provided sample containers with appropriate preservation, as needed, that met the sampling requirements of the event. The cleanliness of each batch of sample containers was verified by the laboratory.

The field technician was responsible for identifying the location of each sample collected, recording the date upon which the sample was obtained, the type of sample, the preservative used, and the applicable project number. This information was documented in the field book/field form. This same information was then placed on the sample identification label and the chain-of-custody record. Sample labels were filled out with indelible ink. If the field technician determined that additional information was pertinent to a sample, such data was recorded in the field log/field form.

Groundwater Level Measurements

Prior to sampling, the depth to groundwater and total well depth was measured using an electronic tape or water level indicator. A fixed point was marked with an indelible marker on each well to serve as a reference point for measurement. Depths were measured to the nearest 0.01 foot and recorded on the field sheet. The tape was cleaned with phosphate-free detergent and water, and rinsed with distilled water prior to each use. Water level measurements are presented in Table 2.

Well Purging

The monitoring wells were purged using a modified low flow/low volume method with a peristaltic or bladder pump and dedicated, disposable, Teflon-lined tubing. The non-dedicated equipment was decontaminated before use and between each well. The groundwater parameters of temperature, pH, specific conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity, were measured during purging, and are summarized on Table 3.

Purging continued until a minimum of three consecutive stable readings were measured with five-minute intervals between readings. The turbidity criterion of 10 NTUs was met for most wells with

the exception of WMW-1, WMW-2, YMW-2, and HMW-2 during the March 2018 event. Pumping rates were reduced as much as possible to reduce the amount of drawdown in the wells. After purging began, drawdown stabilized and was generally less than 0.33 feet for the majority of the wells. Purging was considered complete when the depth to water and water quality parameters stabilized.

Purge water from the wells was temporarily placed in 5-gallon buckets and emptied into 55-gallon drums located on the SECHEM property. Additional information regarding the purging and sampling activities, including the volume of water purged from each well, the purge rate, and depth to water during the purge process, are provided in the field sampling forms included in Appendix B.

Groundwater Sampling and Analysis

Groundwater samples were collected once purging was considered complete. The groundwater samples were placed in laboratory supplied, pre-preserved containers. The containers were labeled, placed in a cooler on ice, and transported to TestAmerica Atlanta, located in Norcross, Georgia. The groundwater samples were then shipped to TestAmerica Savannah, a NELAC-certified laboratory located, in Savannah GA, and analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and 1,4 dioxane by EPA Method 8260B SIM. A summary of groundwater analytical results is presented in Table 4.

Decontamination Procedures

Prior to sampling and between each location, non-dedicated equipment such as the water level indicator, field measurement instrumentation, and non-dedicated sampling pumps, were cleaned with phosphate-free detergent and rinsed with distilled water in general accordance with the EPA SESD OP for *Field Equipment Cleaning and Decontamination* (SESDPROC-205-R3, December 18, 2015). The equipment was allowed to air dry. Nitrile gloves were worn and changed between each sampling location.

Equipment Calibration

Equipment used to perform field testing on groundwater samples included an YSI 556 MP and SmartTroll MP multi-parameter and a Scientific Micro TPW, HF Scientific, or Hach turbidity meter to measure pH, specific conductivity, temperature, and turbidity. Equipment calibration was verified daily. Daily calibration readings/results were documented in field books.

Field Sampling Forms

Field personnel maintained a bound, water-resistant field notebook and field activities were recorded with indelible ink. Additionally, sampling field forms were completed for each sample. The field notebook, sampling forms, and chain-of-custody records contain sufficient information to allow reconstruction of the sample collection and handling procedures at a later time.

Chain-of-Custody

The chain-of-custody record is used to track the custody of samples during transport and shipping. Samples were documented on the chain of custody form at the time of sample collection. The chain-of-custody record was filled out and initialed by the sampling field technician. Upon completion of appropriate line items, or upon sample pick-up, the field representative signed, dated, listed the time, and confirmed the completeness of descriptive information contained on the form. The chain-of-custody form accompanied the samples and terminated upon laboratory receipt of samples. The entries were recorded in ink. Each sample had a corresponding entry on a chain-of-custody record.

Analytical Procedures and QA/QC

The groundwater samples were transported to TestAmerica in Savannah via TestAmerica Atlanta, under chain-of-custody protocol. The samples were analyzed for VOCs by EPA Method 8260B and 1,4 dioxane by EPA Method 8260B SIM. Quality control samples, consisting of blind duplicates, trip blanks, and laboratory method blanks were also analyzed.

SURFACE WATER SAMPLING

On March 22, 2018, surface water samples were collected at locations SW-1, SW-2, SW-3, and SW-4. Surface water sampling was conducted in general accordance with the EPA SESD OP for *Surface Water Sampling* (SESDPROC-201-R4, dated December 16, 2016). Each sample was collected by dipping a clean, dedicated Teflon® bottle into the creek while facing upstream and without disturbing the stream bed. With as little agitation as possible, the surface water samples were decanted from the Teflon bottle into pre-preserved 40 ml glass vials with Teflon septa. The vials were labeled, placed in a cooler on ice and transported to TestAmerica Savannah via TestAmerica Atlanta under chain of custody protocol and analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and 1,4 dioxane by EPA Method 8260B SIM.

APPENDIX C

Field Sampling Forms



Sechem Water Levels

Project #: 02.20180044.00

Date: 3/19/18

Equipment:

Name: Mr. Davis, F. Colch

Monitoring Well	Screened Interval feet bgs		Screen Length Feet	Top of Casing Elevation Feet	Time	Depth To Water Feet	Total Depth Feet	Notes
	Top	Bottom						
SMW-1	35	45	10	1089.61	1036	30.65	44.32	
SMW-2	29	39	10	1074.74	1028	27.79	42.10	
SMW-3	30	40	10	1086.73	1022	33.28	44.06	
SMW-4	30	40	10	1085.53	1032	27.74	40.49	
SRW-1		68			1025	27.49	67.94	
WMW-1	49	59	10	1083.98	1000	37.55	62.18	
WMW-2	40	50	10	1084.70	1521	27.50	47.71	same after development
YMW-1	24	39	15	1071.49	0957	27.68	40.83	
YMW-2	9	19	10	1056.35	1156	14.30	22.33	
YMW-4	25	35	10	1072.07	1004	32.39	38.10	
YMW-5	24	34	10	1050.62	1006	14.62	36.40	
YMW-6	15	25	10	1050.43	1011	17.14	27.94	
YMW-7	11	21	10	1037.15	1051	5.33	22.86	
YMW-8	20	30	10	1060.00	1140	18.40	31.79	
YMW-9	13.5	23.5	10	1044.92	1148	4.93	24.78	
YMW-10	14	24	10	1039.80	1101	6.04	26.47	
YMW-11	14	24	10	1036.11	1046	3.84	26.20	
YMW-13	19	29	10	1057.08	1008	21.58	31.73	
YMW-14	9	19	10	1045.24	1153	9.37	22.40	
YMW-15	45	50	5	1051.88	1014	15.91	40.20	same after development
YMW-16	29	34	5	1038.94	1102	5.07	37.86	
YMW-17	43	53	10	1057.97	1132	9.71	58.21	
YMW-18	43	53	10	1051.25	1144	10.90	51.90	
YMW-19	85	100	5	1072.33	0953	26.97	2106.5	2101.85
HMW-1	54	64	10	1070.72	1225	19.12	62.36	
HMW-2	57	67	10	1075.66	1232	20.65	66.55	
YG-1	6	10	10	1037.40	1057	7.00	14.33	
YG-6	7	12	5	1033.40	1054	7.38	12.05	
SG-5	27.5	37.5	10.0	1085.00	1632	33.15	38.72	SOFT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Notes:

Highlighted wells are to be developed



Groundwater Sampling Record

WELL No. **SMW-1** PROJECT # **02.20180044.00** LOCATION **4580 South Berkeley Lake Road** **3/20/18**
 SAMPLE No. **SMW-1** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **E. Davis**
 SAMPLE TIME: **1020** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **Sunny 70°** /EarthCon

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs:
35-45

Casing Diameter: 2" 4" 6" Other: _____
Casing Volume Calculation: ($\pi r^2 h$)
 Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **20.68** Measuring Point Elevation (feet): _____
Depth of Well (feet): **44.28** Groundwater Surface Elevation: _____
Water Column (feet): **13.60** LNAPL present: _____ thickness: _____
Casing Volume (gallons/liters): **2.21 / 6.65** DNAPL present: _____ thickness: _____
Calculated 3 Purge Volume (gallons/liters): **6.65** Remarks: _____
Actual Purge Volume (gallons/liters): **1.40**
Pump Intake Depth (feet): **241'** Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1525	0								PURGE START
1533	-	20.23	5.49	5.48	160.3	121	34.95	31.12	
1540	0.25	19.80	5.49	3.86	160.3	119	36.06	31.08	
1548	0.45	19.73	5.26	3.75	162.9	110	22.50	31.21	
1550	0.65	19.94	5.12	3.65	179.2	106	19.52	31.22	
1555	0.75	19.93	5.07	3.56	185.1	104	14.51	31.25	
1600	0.90	20.03	5.00	3.53	191.4	103	11.50	31.24	
1605	1.10	20.04	4.95	3.51	198.2	102	10.10	31.12	
1610	1.25	20.17	4.91	3.52	203.9	101	6.04	31.28	

Measurement and Sampling Equipment **Spect 1525** **End Well** **Sample 1020**

Type	Manufacturer	Model #	Calibration Date
<u>Water Quality</u>	<u>VSI</u>	<u>SS6</u>	<u>3/20/18</u>
<u>Turbidity</u>	<u>HS Scientific</u>	<u>Micro TAW</u>	<u>3/20/18</u>
<u>Shallow Pump</u>	<u>OES</u>	<u>Micro Pump</u>	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. SMW-2 PROJECT # 02.20180044.00 LOCATION 4580 South Berkeley Lake Road DATE 3/21/18
 SAMPLE No. SMW-2 PROJECT NAME Sechem Inc. FIELD PERSONNEL/COMPAN E. Cook, J. Madden /EarthCon
 SAMPLE TIME: 08:45 SITE Norcross, GA FIELD CONDITIONS/WEATHER cloudy, 45°F

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes (no)

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 29-39

Casing Diameter: 2" 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet) 27.24 Measuring Point Elevation (feet): _____
 Depth of Well (feet) 42.22 Groundwater Surface Elevation: _____
 Water Column (feet): 14.38 LNAPL present: _____ thickness: _____
 Casing Volume (gallons/liters): 2.24 DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/liters): 7.02 Remarks: _____
 Actual Purge Volume (gallons/liters): _____
 Pump Intake Depth (feet): _____ Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY ($\mu\text{S/cm}$)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
08:00	0								PURGE START
08:05	0.25	14.76	6.25	1.10	154.8	93	89.94	28.75	cloudy
08:10	0.50	14.53	6.40	0.70	114.0	96	57.17	28.59	cloudy
08:15	0.70	14.43	6.28	0.63	79.6	100	24.24	28.55	cloudy
08:20	1.00	14.32	6.24	0.56	56.4	102	19.44	28.54	cloudy
08:25	1.10	14.41	6.29	0.51	38.9	104	18.47	28.59	clear
08:30	1.25	14.10	6.30	0.58	28.2	106	6.75	28.56	"
08:35	1.45	14.16	6.35	0.60	20.5	109	7.78	28.55	"
08:40	1.55	14.12	6.38	0.68	14.1	112	8.73	28.54	"
08:45	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type <u>YST</u>	Manufacturer <u>YSE Incorporated</u>	Model # <u>556 MFS</u>	Calibration Date <u>3/21/18</u>
<u>Turbidity meter</u>	<u>Sci. Inc.</u>	<u>Micro TPW</u>	<u>3/21/18</u>
<u>Peri Pump</u>	<u>Geotech</u>	<u>54</u>	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	

WELL No. SMW-3	PROJECT # 02.20180044.00	LOCATION 4580 South Berkely Lake Road	DATE 3/20/18
SAMPLE No. SMW-3	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY K. Davis	/EarthCon
SAMPLE TIME 1820	SITE Norcross, GA	FIELD CONDITIONS/WEATHER OVERCAST 60°	
Well Condition Inspection (circle one) cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked number: <input checked="" type="radio"/> legible <input type="radio"/> not legible outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no		Equipment Cleaning Procedures - potable water and phosphates-free soap - potable water rinse - water rinse: distilled deionized - solvent rinse: acetone hexane - air dry	

Casing Diameter: (circle one)
 2" 4" 6" Other ____

Casing Volume Calculation: (πr²)(7.48 gal/ft³)
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.616; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 33.23 Measuring Point Elevation (feet): _____

Depth of Well (feet): 43.96 Groundwater Surface Elevation: _____

Water Column (feet): 10.73 LNAPL present: _____ thickness: _____

Casing Volume (gallons/feet): 1.15 DNAPL present: _____ thickness: _____

Calculated 3 Purge Volume (gallons/feet): 5.30 Remarks: _____

Actual Purge Volume (gallons/feet): 0.85

Pump Intake Depth (feet): 240' Ferrous Iron (mg/L): _____

Well Evacuation
Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1741	0								PURGE START
1748		16.59	6.84	3.55	776.0	179	5.81	33.51	
1755	0.25	16.74	6.78	1.38	736.6	181	2.35	33.71	
1800	0.45	16.74	6.68	1.05	723.7	181	1.43	33.74	
1805	0.55	16.67	6.67	0.91	724.0	181	1.67	33.79	
1810	0.75	16.63	6.67	0.78	718.6	180	2.22	33.82	

Measurement and Sampling Equipment

Type <u>water quality</u>	Manufacturer <u>YSI</u>	Model # <u>556</u>	Calibration Date <u>3/20/18</u>
<u>Turbidity</u>	<u>HANNA</u>	<u>HI9142PW</u>	<u>3/20/18</u>
<u>Stadium</u>	<u>QED</u>	<u>MICRO AMPLIFY</u>	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	

Start 1741
End 1811
Sample 1820



Groundwater Sampling Record

WELL No. SMW-4	PROJECT # 02.20180044.00	LOCATION 4580 South Berkeley Lake Road	DATE 3/21/2018						
SAMPLE No. SMW-4	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY R. DAUS	/EarthCon						
SAMPLE TIME: 0850	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Clouds 42°							
Well Condition Inspection (circle one)		Equipment Cleaning Procedures	Well Screen Interval ft bgs: 30-40						
cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked	outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	- potable water and phosphate-free soap							
number: <input checked="" type="radio"/> legible <input type="radio"/> not legible		- potable water rinse							
well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no	- water rinse: <input checked="" type="radio"/> distilled <input type="radio"/> deionized	- solvent rinse: acetone hexane							
	- air dry								
Casing Diameter: 4"	Casing Volume Calculation: (π r ² h) = 48 gal/ft Casing Volume (gallons/ft) for 2" = 0.163, 4" = 0.653, 6" = 1.47 Casing Volume (liters/ft) for 2" = 0.618, 4" = 2.47, 6" = 5.56								
Depth to Water (feet): 27.4	Measuring Point Elevation (feet):	Groundwater Surface Elevation:							
Depth of Well (feet): 40.52	LNAPL present: _____ thickness: _____								
Water Column (feet): 12.78	DNAPL present: _____ thickness: _____								
Casing Volume (gallons/liters): 2.1	Remarks:								
Calculated 3 Purge Volume (gallons/liters): 6.3	Ferrous Iron (mg/L): _____								
Actual Purge Volume (gallons/liters): 6.90									
Pump Intake Depth (feet): ~35'									
Well Evacuation									
Water level recovery is: very slow slow moderate fast		Bailed dry: yes no							
TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
0809	0								PURGE START
0815	0.25	13.96	3.72	16.67	241.1	54	182.1	28.25	
0820	0.40	14.34	4.36	12.71	221.4	49	62.10	28.35	
0825	0.50	14.31	4.44	10.92	220.6	48	44.73	28.27	
0830	0.55	14.01	4.42	10.36	226.4	48	24.04	28.25	
0835	0.70	14.09	4.39	9.97	233.6	48	17.35	28.26	
0840	0.75	13.98	4.46	9.76	237.1	47	12.54	28.26	
0845		14.15	4.40	9.39	245.0	47	9.72	28.28	
Measurement and Sampling Equipment									
Type	Manufacturer	Model #	Calibration Date						
Clayton Quikdry	VSI	556	3/1/18						
Turkington	HTS/Scientific	MICROTRU	2/1/18						
Well Pump	Groundway	Geotech							
SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS					
3	VOCs	40 mL VOA	HCl						
3	1,4 Dioxane	40 mL VOA	HCl						

START 0809
END 0846

Sample 0850



Groundwater Sampling Record

WELL No. SRW-1 PROJECT # 02.20180044.00 LOCATION 4580 South Berkeley Lake Road 03/20/18
 SAMPLE No. SRW-1 PROJECT NAME Sechem Inc. FIELD PERSONNEL J. Madden, E. Cook /EarthCon
 SAMPLE TIME: 17:40 SITE Norcross, GA FIELD CONDITIONS/WEATHER cloudy, 50% humidity

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 7-68

Casing Diameter: (circle one)
 2" 4" 6" Other: _____

Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 27.42 Measuring Point Elevation (feet): _____
 Depth of Well (feet): 69.90 Groundwater Surface Elevation: _____
 Water Column (feet): 42.48 LNAPL present: _____ thickness: _____
 Casing Volume (gallons/feet): 62.45 DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/feet): 187.35 Remarks: _____
 Actual Purge Volume (gallons/feet): _____
 Pump Intake Depth (feet): 66.5 ft bgs Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
17:10	0								PURGE START
17:15	0.20	17.21	5.74	1.36	145.6	62	25.72	27.64	Clear, no odor
17:20	0.45	17.14	5.75	0.61	146.0	61	17.95	27.83	"
17:25	0.70	17.07	5.74	0.50	150.2	61	9.97	28.03	"
17:30	1.0	17.02	5.70	0.51	153.8	60	9.98	28.10	"
17:35	1.25	16.99	5.72	0.52	153.3	60	9.12	28.16	"
17:40	5	4	2	1	6	15			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
WST	VSI Inc.	556 MPS	03/20/2018
Turbidity meter	Sci. inc.	Micro TPW	03/20/2018
Peri pump	Leotech		

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. **WMW-1** PROJECT # **02.20180044.00** LOCATION **4580 South Berkely Lake Road** DATE **3/20/18**
 SAMPLE No. **WMW-1** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **R. Davis** /EarthCon
 SAMPLE TIME: **1050** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **Sunny 62°**

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: **43-45**

Casing Diameter: (circle one) **2"** 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2) \times 48 \text{ gal/ft}^3$
 Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **32.62** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **62.18** Groundwater Surface Elevation: _____
 Water Column (feet): **29.56** LNAPL present: _____ thickness: _____
 Casing Volume (gallons/feet): **4.82** DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/feet): **14.5** Remarks: _____
 Actual Purge Volume (gallons/feet): **1.70**
 Pump Intake Depth (feet): **≈ 58** Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
0947	0								PURGE START
0956	-	18.25	6.24	3.32	113.0	100	81.23	33.72	good
1005	0.3	18.29	6.44	1.55	63.7	85	114.5	35.05	None
1010	0.5	18.30	6.47	1.29	48.2	85	137.6	36.03	
1015	0.7	18.38	6.48	1.10	39.2	85	133.5	36.82	
1020	0.8	18.39	6.49	1.05	32.8	85	132.3	37.44	
1025	1.0	18.44	6.49	1.05	28.1	84	147.6	38.27	
1030	1.2	18.49	6.51	1.00	23.3	84	162.7	39.05	
1035	1.3	18.45	6.51	1.02	18.8	85	84.40	39.94	
1040	1.5	18.39	6.51	0.99	5.6	84	96.70	40.46	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Analy	YSI	556	3/20/18
Turb.	HF Scientific	Micro TPW	3/20/18
Isolator Pump	QED	Micro Pump	
DL Lab.	Horrod	Dipper 1	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1,4 Dioxane	40 mL VOA HCl	

START 0947
END 1041

Sample 1050



Groundwater Sampling Record

WELL No. WMW-2 PROJECT # 02.20180044.00 LOCATION 4580 South Berkely Lake Road DATE 3/20/18
 SAMPLE No. WMW-2 PROJECT NAME Sechem Inc. FIELD PERSONNEL COMPANY J. McMillan, F. Coch /EarthCon
 SAMPLE TIME 10:15 SITE Norcross, GA FIELD CONDITIONS SAW OTHER

Well Condition Inspection (circle one)
 cover: (locked) not locked
 number: legible (not legible)
 outer casing: (good) fair poor
 inner casing: (good) fair poor
 well photographed: yes (no)

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 40-50

Casing Diameter: (circle one) 2" 4" 6" Other _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163, 4" = 0.653, 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618, 4" = 2.47, 6" = 5.56

Depth to Water (feet): 27.60
 Depth of Well (feet): 47.71
 Water Column (feet): 20.11
 Casing Volume (gallons/liters): 3.28
 Calculated 3 Purge Volume (gallons/liters): 9.83
 Actual Purge Volume (gallons/liters): 1.95
 Pump Intake Depth (feet): 43

Measuring Point Elevation (feet): _____
 Groundwater Surface Elevation: _____
 LNAPL present: none thickness: _____
 DNAPL present: none thickness: _____
 Remarks: _____
 Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
09:18	0								PURGE START
09:23	0.2	23.41	6.27	4.28	153.3	88	71.67	28.22	(cloudy, no odor)
09:28	0.45	23.10	5.97	4.10	155.0	84	58.12	28.31	"
09:34	0.51	22.95	5.82	4.21	148.5	76	68.73	28.30	"
09:40	0.80	22.88	5.78	4.37	148.1	69	50.34	28.30	"
09:45	0.99	22.95	5.76	4.07	149.8	68	38.25	28.30	"
09:52	1.20	23.90	5.75	4.30	151.9	68	29.92	28.30	"
09:55	1.80	23.11	5.75	4.14	153.3	68	26.94	28.30	"
10:00	1.50	23.17	5.74	4.04	155.2	68	24.57	28.30	"
10:05	1.70	23.20	5.73	4.05	155.9	67	24.16	28.30	"
10:10	1.95	23.16	5.73	4.07	158.4	66	21.74	28.30	"
10:15	5	A	M	P	L	F			

Measurement and Sampling Equipment

Type Manufacturer Model # Calibration Date
 Flow Meter YS I 556 mps Scientific Int. Micro TPL 3/20/18
 Turbidity meter Scientific Int. Micro TPL 3/20/18
 Per. Pump Geotech

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	

Flow Meter YS I 556 mps

m



Groundwater Sampling Record

WELL No. YMW-1 PROJECT # 02.20180044.00 LOCATION 4580 South Berkeley Lake Road DATE 3/20/18
 SAMPLE No. YMW-1 PROJECT NAME Sachem Inc. FIELD PERSONNEL S. Madden, F. Cook
 SAMPLE TIME: 14:10 SITE Norcross, GA FIELD CONDITIONS Sunny/Cloudy 65°F

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen interval ft bgs:
 24-39

Casing Diameter: (circle one) 2" 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2) \times \text{length}$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 27.62 Measuring Point Elevation (feet): _____
 Depth of Well (feet): 40.70 Groundwater Surface Elevation: _____
 Water Column (feet): 13.08 LNAPL present: _____ thickness: _____
 Casing Volume (gallons/feet): 2.13 DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/liters): 6.39 Remarks: _____
 Actual Purge Volume (gallons/liters): 6.25
 Pump Intake Depth (feet): 37 Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
13:30	0								PURGE START
13:35	0.1	18.71	5.56	2.13	178.7	51	1.82	28.18	clear / no odor
13:40	0.2	18.67	5.09	0.80	192.6	52	2.67	28.25	clear
13:45	0.5	18.54	3.59	0.46	288.7	56	0.61	28.29	clear
13:50	0.75	18.70	4.75	0.32	210.3	63	0.51	28.29	clear
13:55	0.99	18.80	5.32	0.26	177.5	68	0.05	28.28	clear
14:00	1.1	18.75	5.40	0.26	168.9	69	0.43	28.24	clear
14:05	1.25	18.87	5.49	0.26	156.8	70	0.24	28.24	clear
14:10	5	A	M	D	L	E			

Measurement and Sampling Equipment

Type VSI Manufacturer VSI Incorporated Model # SS6 MPS Calibration Date 3/20/18
Turbidity meter Sci. Inc. Micro TPW 3/20/18
Perc pump Geotech

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1,4 Dioxane	40 mL VOA HCl	



Groundwater Sampling Record

WELL No. YMW-2	PROJECT # 02.20180044.00	LOCATION 4580 South Berkeley Lake Road	DATE 3/20/16
SAMPLE No. YMW-2	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Madden, P. Cook	/EarthCon
SAMPLE TIME: 15:40	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Very cloudy, 60°F	
Well Condition Inspection (circle one)		Equipment Cleaning Procedures	Well Screen Interval ft bgs:
cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked		- potable water and phosphate-free soap	9-19
number: <input checked="" type="radio"/> legible <input type="radio"/> not legible		- potable water rinse	
outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor		- water rinse: <input checked="" type="radio"/> distilled <input type="radio"/> deionized	
inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor		- solvent rinse: <input type="radio"/> acetone <input type="radio"/> hexane	
well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no		- air dry	

Casing Diameter: (circle one) 2" 4" 6" Other: _____

Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.162; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 14.24

Depth of Well (feet): 22.33

Water Column (feet): 8.09

Casing Volume (gallon/feet): 1.32

Calculated J Purge Volume (gallon/feet): 3.96

Actual Purge Volume (gallon/feet): 1.95

Pump Intake Depth (feet): 16 ft bgs

Measuring Point Elevation (feet): _____

Groundwater Surface Elevation: _____

LNAPL present: none thickness: _____

DNAPL present: none thickness: _____

Remarks: _____

Ferrous Iron (mg/L): _____

Well Evacuation

Water level recovery is: very slow slow moderate fast

Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
14:55	0								PURGE START
15:00	0.50	16.03	2.50	0.46	294.3	71	54.37	14.89	cloudy
15:05	0.70	15.89	2.68	0.58	278.0	69	44.77	15.15	cloudy
15:10	0.90	15.89	3.38	0.59	238.0	69	39.81	15.22	"
15:15	1.20	16.11	4.27	0.40	188.9	70	34.67	15.29	"
15:20	1.40	16.34	4.66	0.49	161.0	72	21.27	15.37	"
15:25	1.60	16.34	4.94	0.40	143.8	76	15.84	15.41	less cloudy
15:30	1.75	16.45	5.04	0.40	136.4	76	11.40	15.34	"
15:35	1.98	16.52	5.14	0.42	124.6	78	11.37	15.28	"
15:40	5	A	M	P	L	E			

Measurement and Sampling Equipment

Type YSI Manufacturer YSI Incorporated Model # 556 MPS Calibration Date 03/20/2016

Turbidity Meter Sci. Inc. Micro TPW 03/20/2016

Per. Pump Geotech _____

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. YMW-4	PROJECT # 02.20180044.00	LOCATION 4580 South Berkely Lake Road	DATE 3/20/18																						
SAMPLE No. YMW-4	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY R. Davis	/EarthCon																						
SAMPLE TIME: 1410	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Pity Cloudy GS																							
Well Condition Inspection (circle one) cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked number: <input checked="" type="radio"/> legible <input type="radio"/> not legible outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no		Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: <input checked="" type="checkbox"/> distilled <input type="checkbox"/> deionized - solvent rinse: <input type="checkbox"/> acetone <input type="checkbox"/> hexane - air dry																							
Casing Diameter: <input checked="" type="radio"/> 2" <input type="radio"/> 4" <input type="radio"/> 6" Other: _____		Well Screen Interval ft bgs: 25-35 Casing Volume Calculation: $(\pi \times 2^2 \times 38.15) / 7.48 = 0.653$ gal/ft Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56																							
Depth to Water (feet): 32.34 Depth of Well (feet): 38.15 Water Column (feet): 5.81 Casing Volume (gallons/fters): 0.94 Calculated 3 Purge Volume (gallons/fters): 2.81 Actual Purge Volume (gallons/fters): 1.50 Pump Intake Depth (feet): ≈ 37.5'		Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: _____ thickness: _____ DNAPL present: _____ thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____																							
Well Evacuation Water level recovery is: very slow <input type="radio"/> slow <input checked="" type="radio"/> moderate <input type="radio"/> fast Bailed dry: yes <input type="radio"/> no <input checked="" type="radio"/>																									
TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS																
1300	0								PURGE START																
1315	-	21.21	5.22	6.54	83.3	63	11.52	32.60																	
1320	0.1	20.64	5.21	4.81	87.3	62	7.77	32.74																	
1325	0.25	19.27	3.75	4.65	178.9	60	5.09	32.76																	
1330	0.40	18.92	3.80	4.24	177.6	60	3.82	32.82																	
1335	0.50	18.45	4.24	4.08	157.6	61	5.87	32.86																	
1340	0.65	18.49	4.75	3.92	136.4	62	4.85	32.88																	
1345	0.80	18.82	5.07	9.75	125.0	63	6.80	32.88																	
1350	1.00	19.68	5.17	42.60	125.4	65	5.16	32.88																	
1355	1.15	20.12	5.25	40.42	126.4	66	3.10	32.88																	
1400	1.25	20.38	5.27	15.60	132.1	68	2.43	32.88																	
1405	1.35	20.03	5.32	11.26	136.1	68	5.76	32.88																	
Measurement and Sampling Equipment <table border="0"> <tr> <td>Type absorbance</td> <td>Manufacturer YSI</td> <td>Model # 556</td> <td>Calibration Date 3/20/18</td> </tr> <tr> <td>Turbidity</td> <td>HANNA</td> <td>MICROTRU</td> <td>3/20/18</td> </tr> <tr> <td>Bladder pump</td> <td>QED</td> <td>MICRO PUMP</td> <td></td> </tr> <tr> <td>HANNA</td> <td></td> <td></td> <td></td> </tr> </table>										Type absorbance	Manufacturer YSI	Model # 556	Calibration Date 3/20/18	Turbidity	HANNA	MICROTRU	3/20/18	Bladder pump	QED	MICRO PUMP		HANNA			
Type absorbance	Manufacturer YSI	Model # 556	Calibration Date 3/20/18																						
Turbidity	HANNA	MICROTRU	3/20/18																						
Bladder pump	QED	MICRO PUMP																							
HANNA																									
SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS																						
3	VOCs	40 mL VOA HCl																							
3	1,4 Dioxane	40 mL VOA HCl																							

START 1300
END 1405

Sample 1410



Groundwater Sampling Record

WELL No. YMW-5	PROJECT # 02.20180044.00	LOCATION 4580 South Berkeley Lake Road	DATE 3/21/18
SAMPLE No. YMW-5	PROJECT NAME Sachem Inc.	FIELD PERSONNEL COMPANY J. Madden, E. Cook	EarthCon
SAMPLE TIME: 11:45	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Cloudy, 45°F	

Well Condition Inspection (circle one) cover: <u>locked</u> not locked number: <u>legible</u> not legible outer casing: <u>good</u> fair poor inner casing: <u>good</u> fair poor well photographed: yes <u>no</u>	Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: distilled deionized - solvent rinse: acetone hexane - air dry	Well Screen Interval ft bgs: 24-34
--	--	--

Casing Diameter: (circle one) <u>5</u> 4" 6" Other:	Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56
Depth to Water (feet): <u>14.60</u> Depth of Well (feet): <u>36.34</u> Water Column (feet): <u>21.74</u> Casing Volume (gallons/feet): <u>3.54</u> Calculated 3 Purge Volume (gallons/feet): <u>10.62</u> Actual Purge Volume (gallons/feet): Pump Intake Depth (feet): <u>29 ft bgs</u>	Measuring Point Elevation (feet): Groundwater Surface Elevation: LNAPL present: thickness: DNAPL present: thickness: Remarks: Ferrous Iron (mg/L):

Well Evacuation
 Water level recovery is: very slow slow moderate last Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
11:45	0								PURGE START
11:20	0.50	14.50	6.72	1.63	86.3	142	1.20	14.96	clear, no odor
11:35	0.75	14.71	6.38	1.19	94.5	142	1.75	14.97	clear
11:30	1.10	15.14	6.32	1.02	100.1	140	2.58	15.00	clear
11:35	1.45	15.34	6.29	0.91	107.1	141	0.59	15.00	clear
11:40	2.75	15.34	6.25	0.89	108.9	141	0.33	15.00	clear
11:45	5	A	M	P	L	I			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
VSI	VSI Inc.	SS6 MPS	3/21/18
Turbidity Meter	Sri. Inc.	Micro TPW	3/21/18
Pump	GeoTech	GeoPump	
Water Level Meter	Axon	dipper - T	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1, 4 Dioxane	40 mL VOA HCl	



Groundwater Sampling Record

WELL No. **YMW-6** PROJECT # **02.20180044.00** LOCATION **4580 South Berkely Lake Road** DATE **3/22/18**
 SAMPLE No. **YMW-6** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL **Dr. M. Johnson, E. Co. 1** /EarthCon
 SAMPLE TIME: **14:55** DATE **Norcross, GA** FIELD CONDITIONS/WEATHER **mostly cloudy 40s**

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 15-25

Casing Diameter: (circle one) 2" 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **17.12** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **27.97** Groundwater Surface Elevation: _____
 Water Column (feet): **10.85** LNAPL present: none thickness: _____
 Casing Volume (gallons/fters): **1.77** DNAPL present: none thickness: _____
 Calculated 3 Purge Volume (gallons/fters): **5.31** Remarks: _____
 Actual Purge Volume (gallons/fters): **2.40**
 Pump Intake Depth (feet): **20 ft bgs** Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
14:10	0								PURGE START
14:15	0.50	14.67	6.47	4.22	128.2	64	2.17	17.22	clear
14:20	0.70	14.81	6.26	3.95	141.4	64	2.53	17.23	"
14:25	1.00	14.78	6.19	3.70	152.1	63	1.42	17.22	"
14:30	1.30	14.70	6.16	3.45	166.0	63	2.06	17.21	"
14:35	1.50	14.70	6.18	3.66	164.5	62	1.54	17.22	"
14:40	1.75	14.49	6.16	3.49	171.9	62	0.60	17.23	"
14:45	1.98	14.37	6.18	3.50	175.8	62	0.83	17.22	"
14:50	2.20	14.41	6.31	3.40	178.7	62	0.83	17.22	"
14:55	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
<u>VSI</u>	<u>VSI Inc.</u>	<u>556 MPS</u>	<u>03/21/18</u>
<u>Turbidity Meter</u>	<u>GeoTech</u>	<u>Micro TPW</u>	<u>03/21/18</u>
<u>Peri Pump</u>	<u>GeoTech</u>	<u>Geopump</u>	
<u>Water Level Meter</u>	<u>Heron</u>	<u>Dipper - F</u>	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1,4 Dioxane	40 mL VOA HCl	



Groundwater Sampling Record

WELL No. **YMW-7** PROJECT # **02.20180044.00** LOCATION **4580 South Berkely Lake Road** **3/21/18**
 SAMPLE No. **YMW-7** PROJECT NAME **Sechem Inc.** FIELD OPERATING **J. Maden, E. Cook**
 SAMPLE TIME **17:05** SITE **Notcross, GA** FIELD CONDITIONS **cloudy, 45°F** /EarthCon

17:10

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 11.21

Casing Diameter: (circle one) 2" 4" 6" Other _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 5.29 Measuring Point Elevation (feet): _____
 Depth of Well (feet): 22.84 Groundwater Surface Elevation _____
 Water Column (feet): 17.55 LNAPL present: _____ thickness: _____
 Casing Volume (gallons/liters): 2.96 DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/liters): 8.58 Remarks: _____
 Actual Purge Volume (gallons/liters): _____
 Pump Intake Depth (feet): 15 ft. bgs Ferrous iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µS/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
16:35	0								PURGE START
16:40	0.25	13.56	6.74	4.61	171.8	92	7.66	5.38	clear
16:45	0.45	13.58	6.79	4.26	171.8	92	5.43	5.35	"
16:50	0.55	13.42	6.75	4.87	174.2	92	4.40	5.36	"
16:55	0.60	13.67	6.74	4.27	175.0	92	4.87	5.39	"
17:00	0.70	13.60	6.73	4.37	175.5	92	5.86	5.36	"
17:05	S	A	M	P	L	E			
17:05	0.8	13.73	6.75	4.50	175.9	92	6.76	5.35	"
17:10	S	A	M	P	L	E			

5:11

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
VSI	VSI Inc.	556 MPS	03/21/18
Turbidity meter	Sci. Inc.	micro TPW	03/21/18
Water Level Meter	Hevin	dipper-T	
Perc Pump	GeoTech	Geopump	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. **YMW-8** PROJECT # **02.20180044.00** LOCATION **4580 South Berkeley Lake Road** DATE **3/21/18**
 SAMPLE No. **YMW-8** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **K. Davis** /EarthCon
 SAMPLE TIME: **1220** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **Ptly Cloudy 45°**

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 20-30

Casing Diameter: (circle one) 2" 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2 h) (7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **18.36** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **32.72** Groundwater Surface Elevation: _____
 Water Column (feet): **14.36** LNAPL present: _____ thickness: _____
 Casing Volume (gallons/fters): **2.34** DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/fters): **7.03** Remarks: _____
 Actual Purge Volume (gallons/fters): **0.80**
 Pump Intake Depth (feet): **~29'** Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1140	0								PURGE START
1148	-	12.77	5.49	10.71	265.3	40	158.1	18.48	
1155	0.2	13.56	5.50	9.07	211.3	41	62.39	18.48	
1200	0.35	13.95	5.49	8.86	208.2	41	31.36	18.48	
1205	0.50	14.12	5.46	8.50	210.0	41	16.06	18.48	
1210	0.60	14.55	5.47	8.54	210.4	42	14.81	18.48	
1215	0.70	14.45	5.49	8.41	210.9	41	9.46	18.48	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	YSI	SSP	3/21/18
Turbidity	HFSchaffner	Micro TPCW	3/21/18
Real Time	Gratech	GeoPump	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1, 4 Dioxane	40 mL VOA HCl	

START 1140 END 1215

Sample 1220



Groundwater Sampling Record

WELL No. **YMW-8** PROJECT # **02.20180044.00** LOCATION **4580 South Berkely Lake Road** DATE **3/21/18**
 SAMPLE No. **YMW-8** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **P. Davis /EarthCon**
 SAMPLE TIME: **10:30** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **Partly Cloudy 47°**

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 water rinse: distilled deionized
 solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs:
13.5-23.5

Casing Diameter:
 2" 4" Other: _____

Casing Volume Calculation: (πr² × H × 7.48 gal/ft³)
 Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 4.46 **Measuring Point Elevation (feet):** _____
Depth of Well (feet): 24.77 **Groundwater Surface Elevation:** _____
Water Column (feet): 20.31 **LNAPL present:** _____ thickness: _____
Casing Volume (gallons/feet): 3.31 **DNAPL present:** _____ thickness: _____
Calculated 3 Purge Volume (gallons/feet): 9.94 **Remarks:** _____
Actual Purge Volume (gallons/feet): 1.20
Pump Intake Depth (feet): 2.20 **Ferrous Iron (mg/L):** _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1551	0								PURGE START
1556	-	12.78	5.72	10.76	203.4	110	36.65	4.85	
1600	0.1	12.98	5.59	9.12	208.0	111	39.82	4.93	32.41
1605	0.5	13.14	5.54	8.42	209.9	111	19.56	4.96	
1610	0.4	13.19	5.52	8.09	207.3	111	16.11	4.97	
1615	0.55	13.23	5.47	7.87	204.9	111	16.11	4.98	
1620	0.70	13.29	5.46	7.79	204.0	111	13.60	5.02	
1625	0.80	13.34	5.45	7.67	203.9	111	12.78	5.04	
1630	1.00	13.39	5.40	7.77	203.2	110	9.31	5.02	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	VSI	556	3/21/18
Recovery	AF Seismic	Micus TAW	3/21/18
Per Pump	Geotech	Geo Pump	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	

START 1551
 END 1631
 Sample 1640



Groundwater Sampling Record

WELL No. **YMW-10** PROJECT # **02.20180044.00** LOCATION **4580 South Barkely Lake Road** DATE **3/21/10**
 SAMPLE No. **YMW-10** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **R. Ngau** /EarthCon
 SAMPLE TIME: **1900** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **Subcast 520**

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 14-24

Casing Diameter: 2" 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2 h) / 7.48$ gal/ft³
 Casing Volume (gallons/ft) (r: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **5.91** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **26.41** Groundwater Surface Elevation: _____
 Water Column (feet): **20.42** LNAPL present: _____ thickness: _____
 Casing Volume (gallons/feet): **3.33** DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/feet): **10.0** Remarks: _____
 Actual Purge Volume (gallons/feet): **1.50**
 Pump Intake Depth (feet): **2.21** Ferrrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1758	0								PURGE START
1805	-	13.40	6.04	8.03	150.5	153	110.0	6.05	
1810	0.25	13.32	6.02	7.72	143.0	152	48.65	6.12	
1815	0.35	13.33	6.00	6.59	140.3	152	44.21	6.11	
1820	0.50	13.46	5.99	6.22	137.9	152	36.09	6.12	
1825	0.70	13.49	6.00	6.08	134.4	152	32.44	6.12	
1830	0.80	13.53	5.99	6.00	129.7	151	32.13	6.12	
1835	0.90	13.48	5.98	6.10	127.2	150	28.42	6.11	
1840	1.00	13.42	5.98	6.09	123.9	150	21.41	6.11	
1845	1.20	13.45	5.98	6.00	121.6	149	16.97	6.12	
1850	1.35	13.55	5.98	5.84	119.2	149	9.46	6.11	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	YSI	556	3/21/10
Turbidity	HPS Scientific	AKAO TPW	3/21/10
Peru pump	Geotech	Geo pump	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1, 4 Dioxane	40 mL VOA	HCl	

START 1758
 End 1850

Sample 1900

Dup-2 collected



Groundwater Sampling Record

WELL No. YMW-11	PROJECT # 02.20180044.00	LOCATION 4580 South Barkely Lake Road	DATE 03/21/18						
SAMPLE No. YMW-11	PROJECT NAME Sechem Inc.	FIELD PERSONNEL COMPANY J. Maden, S. Cook	LABORATORY EARTHCON						
SAMPLE TIME: 16:10	SITE Norcross, GA	FIELD CONDITIONS cloudy, 50°F							
Well Condition Inspection (circle one) cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked number: <input checked="" type="radio"/> legible <input type="radio"/> not legible outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no		Equipment Cleaning Procedures <input type="checkbox"/> potable water and phosphate-free soap <input type="checkbox"/> potable water rinse water rinse: <input type="checkbox"/> distilled <input type="checkbox"/> deionized solvent rinse: <input type="checkbox"/> acetone <input type="checkbox"/> hexane <input type="checkbox"/> air dry							
Casing Diameter: (circle one) <input checked="" type="radio"/> 2" <input type="radio"/> 4" <input type="radio"/> 6" Other: _____		Well Screen Interval ft bgs: 14-24 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$ Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56							
Depth to Water (feet): <u>3.75</u> Depth of Well (feet): <u>26.15</u> Water Column (feet): <u>22.4</u> Casing Volume (gallons/feet): <u>3.65</u> Calculated 3 Purge Volume (gallons/feet): <u>10.95</u> Actual Purge Volume (gallons/feet): _____ Pump Intake Depth (feet): <u>19 ft bgs</u>		Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: _____ thickness: _____ DNAPL present: _____ thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____							
Well Evacuation Water level recovery is: <input type="checkbox"/> very slow <input type="checkbox"/> slow <input type="checkbox"/> moderate <input type="checkbox"/> fast Bailed dry: <input type="checkbox"/> yes <input type="checkbox"/> no									
TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
15:10	0								PURGE START
15:15	0.25	14.87	6.47	5.12	170.2	86	27.27	4.40	cloudy, no disc
15:20	0.60	14.17	6.46	4.07	171.4	87	24.05	4.90	" "
15:25	0.70	14.21	6.46	4.00	171.0	87	18.82	4.90	" "
15:30	0.90	14.13	6.48	3.91	171.2	87	18.67	4.95	" "
15:35	1.10	13.89	6.47	4.23	172.7	87	19.76	4.75	" "
15:40	1.30	13.66	6.49	4.35	174.3	87	16.64	4.61	" "
15:45	1.45	13.53	6.46	4.32	175.2	87	25.33	4.50	" "
15:50	1.55	13.65	6.47	4.00	175.1	87	18.25	4.56	" "
15:55	1.60	13.65	6.46	3.92	175.1	87	24.07	4.53	" "
16:00	1.75	13.55	6.44	4.00	176.1	87	21.12	4.53	" "
16:05	1.95	13.25	6.48	4.12	176.2	87	9.86	4.52	" "
16:10	5	A	M	D	L	E			
Measurement and Sampling Equipment									
Type	Manufacturer	Model #	Calibration Date						
VST	VSI Inc.	556 MPS	03/21/18						
Turbidity Meter	Sci. Inc.	Micro TPW	03/21/18						
Per Pump	GeoTech	Geo pump							
Water Level Meter	Heron	dipper T							
SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS					
3	VOCs	40 mL VOA	HCl						
3	1, 4 Dioxane	40 mL VOA	HCl						



Groundwater Sampling Record

WELL No. YMW-13	PROJECT # 02.20180044.00	LOCATION 4580 South Barkely Lake Road	DATE 3/21/18
SAMPLE No. YMW-13	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Madden, E. Cook	EARTHCON
SAMPLE TIME 10:00	SITE Norcross, GA	FIELD CONDITIONS/WEATHER cloudy, 45°F	
Well Condition Inspection (circle one)	Equipment Cleaning Procedures	Well Screen Interval ft bgs: 19-29	
cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked	- potable water and phosphate-free soap		
number: <input checked="" type="radio"/> legible <input type="radio"/> not legible	- potable water rinse		
outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	- water rinse: <input checked="" type="radio"/> distilled <input type="radio"/> deionized		
inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	- solvent rinse: acetone hexane		
well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no	- air dry		

Casing Diameter: (circle one) 2" 4" 6" Other: _____

Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 21.56

Depth of Well (feet): 31.77

Water Column (feet): 10.21

Casing Volume (gallons/feet): 1.66

Calculated Purge Volume (gallons/feet): 4.98

Actual Purge Volume (gallons/feet): 1.70

Pump Intake Depth (feet): 24

Measuring Point Elevation (feet): _____

Groundwater Surface Elevation: _____

LNAPL present: _____ thickness: _____

DNAPL present: _____ thickness: _____

Remarks: _____

Ferrous Iron (mg/L): _____

Well Evacuation

Water level recovery is: very slow slow moderate fast

Bailed dry: yes no

EC
09:10
25

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
08:11	0								PURGE START
07:30	0.30	14.19	5.14	1.23	80.3	65	2.94	22.11	clear, no odor
09:35	0.6	14.78	5.16	0.97	97.4	65	3.24	22.26	"
09:40	0.85	15.07	5.03	0.70	130.2	64	2.75	22.30	"
09:45	1.10	15.15	5.03	0.63	153.7	63	3.03	22.30	"
09:50	1.45	15.14	5.05	0.63	177.2	63	2.32	22.30	"
09:55	1.70	15.20	5.12	0.60	196.3	64	3.53	22.29	"
10:00	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
VSI	VSI Inc.	556 MPS	3/21/18
Turbidity Meter	Sci. Eng.	Micro TPW	3/21/18
Perc Pump	Geo Tech	Geo pump	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. YMW-14 PROJECT # 02.20180044.00 LOCATION 4580 South Berkeley Lake Road GA 30120
 SAMPLE No. YMW-14 PROJECT NAME Sechem Inc. FIELD OPERATOR S. Maitland, G. Cook DATE 03/20/18
 SAMPLE TIME: 16:35 SITE Norcross, GA FIELD CONDITIONS: Cloudy, 60°F

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 9-19

Casing Diameter: (circle one) 2" 4" Other: _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 9.20
 Depth of Well (feet): 22.41
 Water Column (feet): 13.21
 Casing Volume (gallons/feet): 2.15
 Calculated 3 Purge Volume (gallons/feet): 6.46
 Actual Purge Volume (gallons/feet): _____
 Pump Intake Depth (feet): 15 ft bgs
 Measuring Point Elevation (feet): _____
 Groundwater Surface Elevation: _____
 LNAPL present: _____ thickness: _____
 DNAPL present: _____ thickness: _____
 Remarks: _____
 Ferrous iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast
 Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
16:05	0								PURGE START
16:10	0.50	15.24	4.32	0.65	155.1	102	10.82	10.01	clear
16:15	0.75	15.01	4.28	0.57	171.9	102	10.67	10.02	clear
16:20	1.00	14.88	4.23	0.54	195.0	102	5.73	10.05	"
16:25	1.25	14.93	4.47	0.56	193.0	101	8.20	10.09	"
16:30	1.50	14.94	4.70	0.52	190.0	100	5.78	10.05	"
16:35	5	A	M	P	I	E			

Measurement and Sampling Equipment
 Type: YSI Manufacturer: YSI Incorporated Model #: 556 MPS Calibration Date: 03/20/2018
 Turbidity meter: Sea Inc. Manufacturer: Micro TPW Calibration Date: 03/20/2018
 Per: pump Manufacturer: L-tech

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. YMW-15	PROJECT # 02.20180044.00	LOCATION 4580 South Berkely Lake Road	DATE 3/21/16
SAMPLE No. YMW-15	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Madden, E. Cook	/EarthCon
SAMPLE TIME: 11:00	SITE Norcross, GA	FIELD CONDITIONS: cloudy 145°F	

Well Condition Inspection (circle one) cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked number: <input checked="" type="radio"/> legible <input type="radio"/> not legible outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no	Equipment Cleaning Procedures • potable water and phosphate-free soap • potable water rinse • water rinse: <input checked="" type="checkbox"/> distilled <input type="checkbox"/> deionized • solvent rinse: <input type="checkbox"/> acetone <input type="checkbox"/> hexane • air dry	Well Screen Interval ft bgs: 45-50
--	---	--

Casing Diameter: (circle one) 2" 4" 6" Other: _____

Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 15.89	Measuring Point Elevation (feet): _____
Depth of Well (feet): 40.20	Groundwater Surface Elevation: _____
Water Column (feet): 24.31	LNAPL present: _____ thickness: _____
Casing Volume (gallons/feet): 3.96	DNAPL present: _____ thickness: _____
Calculated 3 Purge Volume (gallons/feet): 11.88	Remarks: _____
Actual Purge Volume (gallons/feet): _____	
Pump Intake Depth (feet): 47.5 ft bgs	Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast
 Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µS/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
10:30	0								PURGE START
10:35	0.20	13.94	6.35	2.92	169.5	188	14.73	15.99	clear
10:40	0.50	14.69	6.57	0.75	112.2	196	5.25	16.03	"
10:45	0.99	14.73	6.52	0.50	99.1	199	1.95	16.02	"
10:50	1.25	14.89	6.51	0.53	93	199	1.46	16.03	"
10:55	1.60	14.88	6.49	0.51	89.1	201	0.01	16.04	"
11:00	S	A	M	P	L	F			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
VSI	VSI Inc.	556 MPS	3/21/16
Turbidity Meter	Sci. Inc.	Micro TPW	3/21/16
Perc Pump	Geotech	Geo Pump	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	



Groundwater Sampling Record

WELL No. YMW-16	PROJECT # 02.20180044.00	LOCATION 4580 South Berkeley Lake Road	DATE 3/21/18
SAMPLE No. YMW-16	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY K. Davis	/EarthCon
SAMPLE TIME: 1745	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Pty Cloudy 47°	
Well Condition Inspection (circle one)		Equipment Cleaning Procedures	
cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked	- potable water and phosphate-free soap		Well Screen Interval ft bgs: 29-34
number: <input checked="" type="radio"/> legible <input type="radio"/> not legible	- potable water rinse		
outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	- water rinse: <input type="checkbox"/> distilled <input type="checkbox"/> deionized		
inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	- solvent rinse: <input type="checkbox"/> acetone <input type="checkbox"/> hexane		
well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no	- air dry		

Casing Diameter: 2" 4" 6" Other: _____

Casing Volume Calculation: $(\frac{\pi}{4} \times 2^2 \times 10) \times 1.47 = 46.18 \text{ gal/ft}^3$

Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 5.05

Depth of Well (feet): 37.91

Water Column (feet): 32.86

Casing Volume (gallons/fters): 5.36

Calculated 3 Purge Volume (gallons/fters): 16.08

Actual Purge Volume (gallons/fters): 1.0

Pump Intake Depth (feet): 23'

Measuring Point Elevation (feet): _____

Groundwater Surface Elevation: _____

LNAPL present: _____ thickness: _____

DNAPL present: _____ thickness: _____

Remarks: _____

Ferrous Iron (mg/L): _____

Well Evacuation

Water level recovery is: very slow slow moderate fast

Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1707	0								PURGE START
1712		14.01	6.46	8.37	208.1	136	3.15	5.10	
1720	0.25	14.02	6.32	6.99	199.8	141	1.48	5.10	
1725	0.40	13.95	6.31	6.55	197.4	142	0.63	5.10	
1730	0.55	13.93	6.31	6.27	195.6	143	0.88	5.10	
1735	0.70	13.92	6.30	6.09	194.9	142	1.60	5.10	
1740	0.85	13.90	6.30	6.01	194.1	142	0.50	5.10	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
<u>Water Quality</u>	<u>YSI</u>	<u>SS6</u>	<u>3/21/18</u>
<u>Turbidity</u>	<u>HFS Scientific</u>	<u>Micro 9100</u>	<u>3/21/18</u>
<u>Perist Pump</u>	<u>Geotech</u>	<u>Geopump</u>	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	
3	1,4 Dioxane	40 mL VOA	HCl	

START 1707
END 1740

Sample 1745



Groundwater Sampling Record

WELL No. YMW-17	PROJECT # 02.20180044.00	LOCATION 4580 South Berkely Lake Road	DATE 3/21/18						
SAMPLE No. YMW-17	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY R. Davis	/EarthCon						
SAMPLE TIME: 1100	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Overcast 42°							
Well Condition Inspection (circle one)		Equipment Cleaning Procedures							
cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked	number: <input checked="" type="radio"/> legible <input type="radio"/> not legible	- potable water and phosphate-free soap							
outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor	- potable water rinse							
well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no		- water rinse: distilled <input type="checkbox"/> deionized							
		- solvent rinse: acetone <input type="checkbox"/> hexane							
		- air dry							
Well Screen Interval ft bgs: 43-53									
Casing Diameter: <input checked="" type="radio"/> 2" <input type="radio"/> 4" <input type="radio"/> 6" Other: _____	Casing Volume Calculation: $V = \pi r^2 h$								
	Casing Volume (gallons/ft) for 2" = 0.163, 4" = 0.653, 6" = 1.47								
	Casing Volume (liters/ft) for 2" = 0.618, 4" = 2.47, 6" = 5.56								
Depth to Water (feet): 9.30	Measuring Point Elevation (feet): _____								
Depth of Well (feet): 58.39	Groundwater Surface Elevation: _____								
Water Column (feet): 49.09	LNAPL present: _____ thickness: _____								
Casing Volume (gallons/feet): 8.01	DNAPL present: _____ thickness: _____								
Calculated 3 Purge Volume (gallons/feet): 24.03	Remarks: _____								
Actual Purge Volume (gallons/feet): 0.90									
Pump Intake Depth (feet): ~46	Ferrous Iron (mg/L): _____								
Well Evacuation									
Water level recovery is: <input type="radio"/> very slow <input type="radio"/> slow <input checked="" type="radio"/> moderate <input type="radio"/> fast		Bailed dry: <input type="radio"/> yes <input checked="" type="radio"/> no							
TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1021	0								PURGE START
1027	-	11.83	5.93	10.47	226.6	43	23.78	10.17	
1035	0.2	12.50	5.96	11.67	219.5	43	8.84	11.24	
1040	0.35	12.64	5.94	10.50	210.2	43	9.09	11.89	
1045	0.50	12.55	5.97	11.80	211.9	42	7.00	12.42	
1050	0.65	12.56	5.93	10.19	211.6	41	5.92	13.00	
1055	0.75	12.70	5.91	9.62	211.4	41	5.44	13.67	
Measurement and Sampling Equipment									
Type Water Quality Turbidity Peristaltic	Manufacturer YSI HANNA/GRACE	Model # 5510	Calibration Date 3/21/18						
		MEMO TPU	3/21/18						
		Geo Pump							
SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS					
3	VOCs	40 mL VOA	HCl						
3	1,4 Dioxane	40 mL VOA	HCl						

Start 1021
End 1057

Sample 1100



Groundwater Sampling Record

WELL No.	YMW-18	PROJECT #	02.20180044 00	LOCATION	4580 South Berkeley Lake Road	DATE	3/21/2018		
SAMPLE No.	YMW-18	PROJECT NAME	Sechem Inc.	FIELD PERSONNEL/COMPANY	K. Davis		/EarthCon		
SAMPLE TIME:	1455	SITE	Norcross, GA	FIELD CONDITIONS/WEATHER	Partly Cloudy 47°				
Well Condition Inspection (circle one)		Equipment Cleaning Procedures		Well Screen Interval ft bgs:					
cover:	locked not locked	potable water and phosphate-free soap		43-53					
number:	legible not legible	potable water rinse							
outer casing:	good fair poor	water rinse:		distilled deionized					
inner casing:	good fair poor	solvent rinse:		acetone hexane					
well photographed:	yes no	air dry							
Casing Diameter:	Casing Volume Calculation: (circle one) $\pi r^2 h$								
(circle one) 2" 4" 6" Other: _____	Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47 Casing Volume (liters/ft) for 2" = 0.618; 4" = 2.47; 6" = 5.56								
Depth to Water (feet):	10.54	Measuring Point Elevation (feet):		_____					
Depth of Well (feet):	51.95	Groundwater Surface Elevation:		_____					
Water Column (feet):	41.41	LNAPL present:		_____		thickness: _____			
Casing Volume (gallons/liters):	6.74	DNAPL present:		_____		thickness: _____			
Calculated 3 Purge Volume (gallons/liters):	20.3	Remarks:		_____					
Actual Purge Volume (gallons/liters):	_____	Ferrous Iron (mg/L):		_____					
Pump Intake Depth (feet):	~ 46'								
Well Evacuation									
Water level recovery is:	very slow (circle one) slow moderate fast	Bailed dry:		yes no (circle one)					
TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (μ S/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
1413	0								PURGE START
1419	—	12.69	6.47	11.52	227.3	92	4.47	11.42	
1425	0.2	12.86	6.50	9.18	207.7	94	4.25	12.16	
1435	0.5	13.15	6.46	8.07	202.3	94	5.94	13.28	
1440	0.7	13.30	6.47	7.77	196.7	94	5.93	13.74	
1445	0.75	13.41	6.46	7.67	195.1	94	7.61	14.28	
1450	0.85	13.47	6.47	7.65	189.8	94	8.79	14.69	
Measurement and Sampling Equipment									
Type	Manufacturer	Model #	Calibration Date						
Water Sampling	YSI	SSE	3/21/18						
Turbidity	HFS Scientific	MKA07PW	3/21/18						
Purge Pump	Geotech	Geopump							
SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS					
3	VOCs	40 mL VOA	HCl						
3	1, 4 Dioxane	40 mL VOA	HCl						

START 1413
END 1451

Sample 1455



Groundwater Sampling Record

WELL No. **YMW-19** PROJECT # **02.20180044.00** LOCATION **4580 South Barkely Lake Road** DATE **3/20/18**
 SAMPLE No. **YMW-19** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **J. Madden, C. Cook** /EarthCon
 SAMPLE TIME: **11:50** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **cloudy, 60°F**

Well Condition Inspection (circle one)
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures
 -potable water and phosphate-free soap
 -potable water rinse
 -water rinse: distilled deionized
 -solvent rinse: acetone hexane
 -air dry

Well Screen Interval ft bgs:
95-100

Casing Diameter:
 (circle one) 2" 4"
 6" Other _____

Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for 2" = 0.163, 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for 2" = 0.618, 4" = 2.47; 6" = 5.56

Depth to Water (feet): 26.95 Measuring Point Elevation (feet): _____
Depth of Well (feet): 102.64 Groundwater Surface Elevation: _____
Water Column (feet): 75.69 LNAPL present: none thickness: _____
Casing Volume (gallons/liters): 12.34 DNAPL present: none thickness: _____
Calculated 3 Purge Volume (gallons/liters): 37.02 Remarks: _____
Actual Purge Volume (gallons/liters): 97 1.45
Pump Intake Depth (feet): _____ Ferrous Iron (mg/L): _____

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
11:15	0								PURGE START
11:20	0.25	18.22	6.27	4.78	163.7	90	9.05	27.19	clear
11:25	0.50	18.03	5.49	4.78	218.8	91	5.94	27.22	clear
11:30	0.65	18.11	5.49	4.63	204.2	91	4.66	27.26	clear
11:35	0.98	17.94	5.41	4.92	180.4	91	3.48	27.25	clear
11:40	1.20	17.88	6.03	4.91	176.5	92	1.96	27.29	clear
11:45	1.40	17.94	6.16	4.96	169.7	91	2.02	27.30	clear
11:50	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type VSI 556 MPS Manufacturer VSI Incorporated Model # _____ Calibration Date 3/20/18
Turbidity meter Sciencific Inc. Micron TPW 3/26/18
Peri pump G-totech _____ _____

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1,4 Dioxane	40 mL VOA HCl	



Groundwater Sampling Record

WELL No. HMW-1	PROJECT # 02.20180044.00	LOCATION 4580 South Berkeley Lake Road	DATE 3/22/18						
SAMPLE No. HMW-1	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY P. Davis	/EarthCon						
SAMPLE TIME: 0935	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Sunny 35°							
Well Condition Inspection (circle one) cover: <input checked="" type="radio"/> locked <input type="radio"/> not locked number: <input checked="" type="radio"/> legible <input type="radio"/> not legible outer casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor inner casing: <input checked="" type="radio"/> good <input type="radio"/> fair <input type="radio"/> poor well photographed: <input checked="" type="radio"/> yes <input type="radio"/> no		Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: distilled deionized - solvent rinse: acetone hexane - air dry							
Casing Diameter: (circle one) 2" 4" 6" Other: _____		Well Screen Interval ft bgs: 54-64 Casing Volume Calculation: $(\pi r^2 h) (2.48 \text{ gal/ft}^3)$ Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47 Casing Volume (liters/ft) for 2" = 0.619; 4" = 2.47; 6" = 5.56							
Depth to Water (feet): 19.12	Measuring Point Elevation (feet): _____	Depth of Well (feet): 62.80	Groundwater Surface Elevation: _____						
Water Column (feet): 43.68	LNAPL present: _____ thickness: _____	Casing Volume (gallons/liters): 7.12 / 21.4	DNAPL present: _____ thickness: _____						
Calculated 3 Purge Volume (gallons/liters): _____	Remarks: _____	Actual Purge Volume (gallons/liters): _____							
Pump Intake Depth (feet): 26'	Ferrous Iron (mg/L): _____								
Well Evacuation Water level recovery is: very slow <input type="radio"/> slow moderate <input type="radio"/> fast <input checked="" type="radio"/> Bailed dry: yes <input type="radio"/> no <input checked="" type="radio"/>									
TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
0849	0								PURGE START
0858	-	11.19	4.98	15.90	249.2	78	6.62	19.34	
0905	0.2	10.68	5.33	12.54	221.6	76	3.63	19.35	
0910	0.3	11.06	5.50	11.53	212.6	75	4.20	19.34	
0915	0.4	10.41	5.56	11.25	207.8	74	3.60	19.31	
0920	0.5	10.45	5.53	10.93	201.9	74	1.51	19.36	
0925	0.6	11.20	5.66	10.21	200.8	74	1.62	19.35	
Measurement and Sampling Equipment Type: <u>Water Quality</u> Manufacturer: <u>V61</u> Model #: <u>550</u> Calibration Date: <u>3/22/18</u> <u>Turbidity</u> <u>HELIOS 1000</u> <u>MICROTRU</u> <u>3/22/18</u> <u>PH/TEMP</u> <u>GEORCH</u> <u>GEORCH</u>									
SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS					
3	VOCs	40 mL VOA	HCl						
3	1,4 Dioxane	40 mL VOA	HCl						

START 0849
END 0926

Sample 0935



Groundwater Sampling Record

WELL No. **HMW-2** PROJECT # **02.20180044.00** LOCATION **4580 South Berkeley Lake Road** DATE **3/22/18**
 SAMPLE No. **HMW-2** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **J. Maddon** /EarthCon
 SAMPLE TIME: **09:50** SITE **Norcross, GA** WEATHER **Sunny, 30s, clear**

Well Condition Inspection (circle one):
 cover: locked not locked
 number: legible not legible
 outer casing: good fair poor
 inner casing: good fair poor
 well photographed: yes no

Equipment Cleaning Procedures:
 - potable water and phosphate-free soap
 - potable water rinse
 - water rinse: distilled deionized
 - solvent rinse: acetone hexane
 - air dry

Well Screen Interval ft bgs: 57-67

Casing Diameter: (circle one) 4" Other: _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **25.15** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **66.55** Groundwater Surface Elevation: _____
 Water Column (feet): **41.40** LNAPL present: none thickness: _____
 Casing Volume (gallons/feet): **2.75** DNAPL present: none thickness: _____
 Calculated 3 Purge Volume (gallons/feet): **20.24** Remarks: **High turbidity appears to be caused by tiny mica flakes!**
 Actual Purge Volume (gallons/feet): _____
 Pump Intake Depth (feet): **64 ft bgs** Ferrous Iron (mg/L): _____

25.15

Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/REMARKS
09:25	0		7.09						PURGE START
09:30	0.2	15.54	6.74	6.09	191.0	94	59.46	24.92	cloudy
09:35	0.4	14.27	6.74	5.69	192.3	91	75.19	24.60	"
09:40	0.45	13.88	6.56	5.54	198.9	90	63.13	24.60	"
09:45	0.5	14.02	6.43	5.75	202.8	90	56.40	24.59	"
09:50	0.6	15.66	6.49	5.74	200.2	90	60.39	24.59	"
09:55	0.8	16.38	6.44	5.44	197.7	88	68.84	24.59	"
09:00	0.9	15.53	6.41	5.32	200.2	89	42.13	24.48	slightly cloudy
09:05	1.1	15.22	6.32	5.20	205.6	89	40.71	24.45	"
09:10	1.25	15.37	6.32	5.39	205.1	88	39.30	24.45	"
09:15	1.4	15.71	6.34	5.25	203.2	89	50.87	24.45	"
09:20	1.5	15.73	6.33	5.04	203.4	89	43.12	24.45	"
09:25	1.6	15.93	6.32	5.50	202.3	89	34.67	24.45	"
09:30	1.7	16.17	6.32	5.48	201.6	89	37.14	24.45	"
09:35	1.85	15.68	6.31	5.49	201.7	89	49.76	24.45	"
09:40	2.0	15.72	6.32	5.47	202.4	89	32.97	24.45	"
09:45	2.1	15.79	6.31	5.48	201.6	89	38.44	24.45	"
09:50	S	A	M	P	L	F			

water rising after releasing pressure created by well plug.

slightly cloudy, no odor

I sampled even w/ turbidity > 10 NTU because I don't think it will get below 30 NTU.

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Multimeter	YSI	YSI 556	3/22/18
Turbidity meter	2i instruments Inc	MicroTPW	3/22/18
Per. pump	Geotech	Geo Pump	
Water level ind.	Heron		

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA HCl	
3	1,4 Dioxane	40 mL VOA HCl	

Surface Water Sample Form

sampled by:
J. Madden, K. Davis

Site: SECHEM, INC.

Sample Date and Time: 10:55

Sample Location: SW-1

Weather: Sunny 40s

Sample ID: SW-1

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: ~ 0.2 ft

Depth of Sample: Surface

Rate of flow: Very low

Sample Appearance/Odor: clear, no odor

TEMP (°C) 9.72

pH: 5.74

Conductivity (µs/cm): 81

Dissolved Oxygen (mg/L): 20.4

ORP/EH (mv): 175.3

Turbidity (NTU): 11.48

Notes:

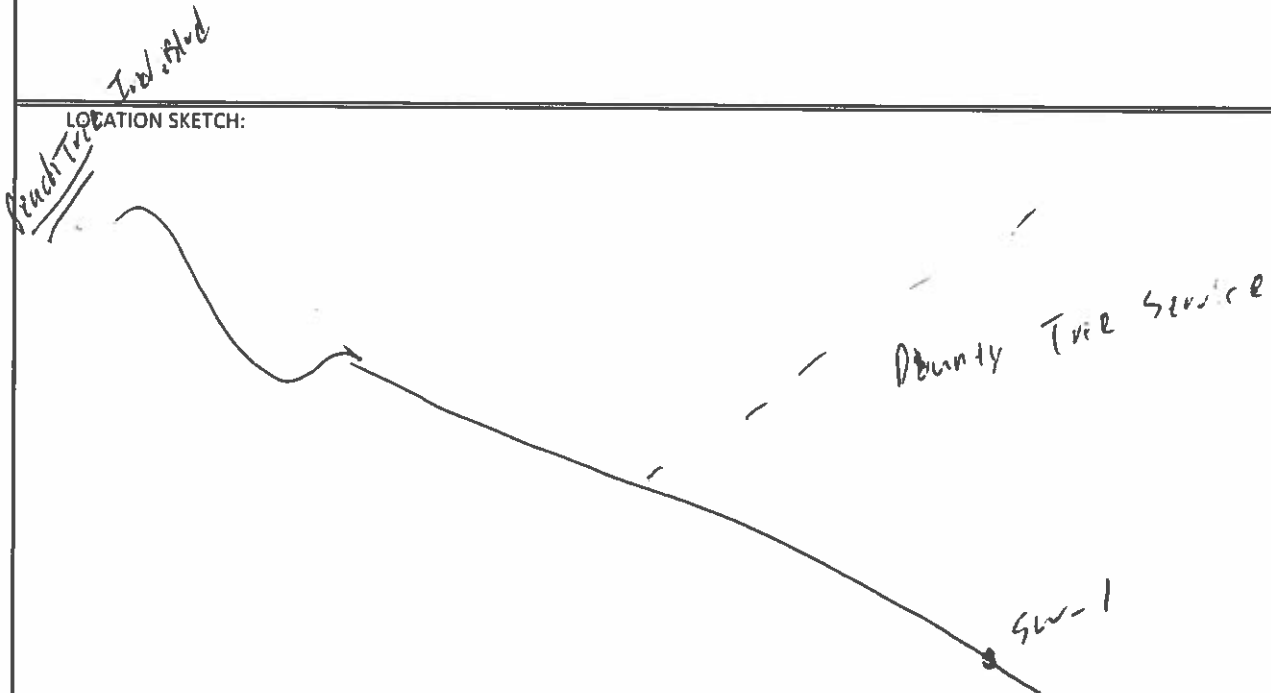
Instruments Calibrated (date): 3/22/18 YSI 556

Duplicate Sample Collection (Y/N): N If Yes, Sample ID: _____

Analytical Methods: VOCs by 8260, 1-4-Dioxane by 8260SIM

NOTES:

LOCATION SKETCH:



Surface Water Sample Form

sampled by:
S. Madden, K. Davis

Site : SECHEM, INC.

Sample Date and Time: 3/22/18 11:15

Sample Location: SW-2

Weather: Sunny 40s

Sample ID: SW-2

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: 0.25 ft.

Depth of Sample: surface

Rate of flow: Very low

Sample Appearance/Odor: Clear, no odor

TEMP (°C) 10.54

pH: 6.19

Conductivity (µs/cm): 101

Dissolved Oxygen (mg/L): 17.19

ORP/EH (mv): 141.0

Turbidity (NTU): 7.67

Notes:

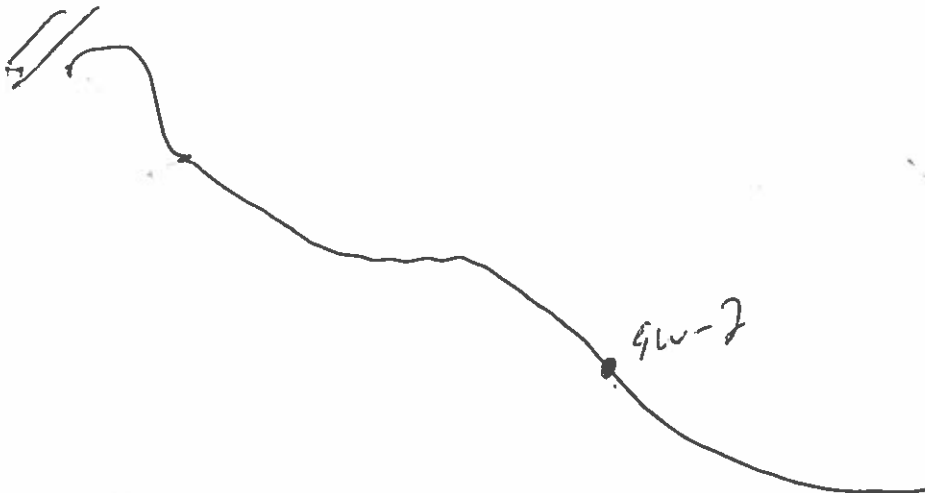
Instruments Calibrated (date): 3/22/18 YSI 556

Duplicate Sample Collection (Y/N): N If Yes, Sample ID: _____

Analytical Methods: VOCs by 8260, 1-4-Dioxane by 8260SIM

NOTES:

LOCATION SKETCH:



W

Surface Water Sample Form

Sampled by:
S. Madden, R. Davis

Site : SECHEM, INC.

Sample Date and Time: 3/22/18 11:40

Sample Location: SW-3

Weather: Sunny 40s

Sample ID: SW-3

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: 1.5 ft

Depth of Sample: surface

Rate of flow: very low

Sample Appearance/Odor: clear, no odor

TEMP (°C) 9.83

pH: 6.39

Conductivity (µs/cm): 115

Dissolved Oxygen (mg/L): 16.91

ORP/EH (mv): 135.1

Turbidity (NTU): 11.54

Notes:

Instruments Calibrated (date): 3/22/18 YSI 556

Duplicate Sample Collection (Y/N): N If Yes, Sample ID: _____

Analytical Methods: VOCs by 8260, 1-4-Dioxane by 8260SIM

NOTES:

*peach tree
and Blvd.*

LOCATION SKETCH:



mm



Environmental Challenges
BUSINESS SOLUTIONS

Surface Water Sample Form

Site : SECHEM, INC.

Sample Date and Time: 3/22/18 11:55

Sample Location: SW-4

Weather: Sunny 40s

Sample ID: SW-4 sw-4

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: 0.5 ft

Depth of Sample: surface

Rate of flow: low

Sample Appearance/Odor: clear, no odor

TEMP (°C) 10.81

pH: 6.65

Conductivity (µs/cm): 113

Dissolved Oxygen (mg/L): 16.44

ORP/EH (mv): 116.5

Turbidity (NTU): 8.39

Notes:

Instruments Calibrated (date): 3/22/18 YSI 556

Duplicate Sample Collection (Y/N): N If Yes, Sample ID: _____

Analytical Methods: VOCs by 8260, 1-4-Dioxane by 8260SIM

NOTES:

Peachtree Ind. Blvd

LOCATION SKETCH:

sw-4

Donney Tree St. SWIC

20

APPENDIX D

Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150288-1
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/2/2018 2:45:26 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	14
QC Sample Results	15
QC Association	19
Chronicle	20
Chain of Custody	21
Receipt Checklists	22
Certification Summary	23

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Job ID: 680-150288-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150288-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples HMW-1 (680-150288-1), HMW-2 (680-150288-2) and Trip Blank (680-150288-3) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/01/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-518315.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150288-1	HMW-1	Water	03/22/18 09:35	03/23/18 07:30
680-150288-2	HMW-2	Water	03/22/18 09:50	03/23/18 07:30
680-150288-3	Trip Blank	Water	03/22/18 00:00	03/23/18 07:30

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: HMW-1

Lab Sample ID: 680-150288-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0025		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: HMW-2

Lab Sample ID: 680-150288-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.0018		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150288-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah



Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: HMW-1

Lab Sample ID: 680-150288-1

Date Collected: 03/22/18 09:35

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 19:53	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 19:53	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 19:53	1
Acetone	0.010	U	0.010		mg/L			04/01/18 19:53	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 19:53	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 19:53	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 19:53	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Tetrachloroethene	0.0025		0.0010		mg/L			04/01/18 19:53	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 19:53	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 19:53	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: HMW-1
Date Collected: 03/22/18 09:35
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-1
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	91		73 - 131		04/01/18 19:53	1
4-Bromofluorobenzene (Surr)	99		80 - 120		04/01/18 19:53	1
Dibromofluoromethane (Surr)	98		80 - 122		04/01/18 19:53	1
Toluene-d8 (Surr)	99		80 - 120		04/01/18 19:53	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: HMW-2

Lab Sample ID: 680-150288-2

Date Collected: 03/22/18 09:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,1-Dichloroethene	0.0018		0.0010		mg/L			04/01/18 20:18	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 20:18	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 20:18	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 20:18	1
Acetone	0.010	U	0.010		mg/L			04/01/18 20:18	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 20:18	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 20:18	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 20:18	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 20:18	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 20:18	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: HMW-2

Date Collected: 03/22/18 09:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-2

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	91		73 - 131		04/01/18 20:18	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/01/18 20:18	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 20:18	1
Toluene-d8 (Surr)	99		80 - 120		04/01/18 20:18	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150288-3

Date Collected: 03/22/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 17:00	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 17:00	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 17:00	1
Acetone	0.010	U	0.010		mg/L			04/01/18 17:00	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 17:00	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 17:00	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 17:00	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 17:00	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 17:00	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150288-3

Date Collected: 03/22/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	91		73 - 131		04/01/18 17:00	1
4-Bromofluorobenzene (Surr)	99		80 - 120		04/01/18 17:00	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 17:00	1
Toluene-d8 (Surr)	98		80 - 120		04/01/18 17:00	1

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(73-131)	(80-120)	(80-122)	(80-120)
680-150288-1	HMW-1	91	99	98	99
680-150288-2	HMW-2	91	96	97	99
680-150288-3	Trip Blank	91	99	97	98
LCS 680-518315/4	Lab Control Sample	96	97	101	98
LCSD 680-518315/5	Lab Control Sample Dup	97	96	101	98
MB 680-518315/8	Method Blank	92	95	97	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

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

Lab Sample ID: MB 680-518315/8

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
Acetone	0.010	U	0.010		mg/L			04/01/18 16:11	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 16:11	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 16:11	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 16:11	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

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

Lab Sample ID: MB 680-518315/8

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 16:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/01/18 16:11	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/01/18 16:11	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 16:11	1
Toluene-d8 (Surr)	101		80 - 120		04/01/18 16:11	1

Lab Sample ID: LCS 680-518315/4

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0497		mg/L		99	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0531		mg/L		106	75 - 128
1,1,2-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120
1,1-Dichloroethane	0.0500	0.0498		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0518		mg/L		104	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0507		mg/L		101	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0508		mg/L		102	74 - 120
1,2-Dibromoethane	0.0500	0.0504		mg/L		101	75 - 126
1,2-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0492		mg/L		98	72 - 128
1,2-Dichloropropane	0.0500	0.0492		mg/L		98	80 - 120
1,3-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
2-Butanone	0.250	0.252		mg/L		101	79 - 125
2-Hexanone	0.250	0.239		mg/L		95	80 - 131
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134
Acetone	0.250	0.222		mg/L		89	68 - 132
Benzene	0.0500	0.0499		mg/L		100	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0516		mg/L		103	52 - 122
Bromomethane	0.0500	0.0565		mg/L		113	43 - 146
Carbon disulfide	0.0500	0.0501		mg/L		100	77 - 129
Carbon tetrachloride	0.0500	0.0532		mg/L		106	67 - 125
Chlorobenzene	0.0500	0.0497		mg/L		99	80 - 120
Chloroethane	0.0500	0.0533		mg/L		107	48 - 145
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0512		mg/L		102	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 129
Cyclohexane	0.0500	0.0508		mg/L		102	80 - 132
Dibromochloromethane	0.0500	0.0525		mg/L		105	68 - 120
Dichlorodifluoromethane	0.0500	0.0514		mg/L		103	70 - 137
Ethylbenzene	0.0500	0.0498		mg/L		100	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

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

Lab Sample ID: LCS 680-518315/4

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	0.0500	0.0507		mg/L		101	79 - 126
Methyl acetate	0.100	0.0936		mg/L		94	73 - 139
Methyl tert-butyl ether	0.0500	0.0507		mg/L		101	80 - 122
Methylcyclohexane	0.0500	0.0521		mg/L		104	80 - 138
Methylene Chloride	0.0500	0.0519		mg/L		104	80 - 120
Naphthalene	0.0500	0.0506		mg/L		101	61 - 136
Styrene	0.0500	0.0513		mg/L		103	80 - 126
Tetrachloroethene	0.0500	0.0520		mg/L		104	71 - 123
Toluene	0.0500	0.0507		mg/L		101	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0527		mg/L		105	80 - 128
Trichloroethene	0.0500	0.0504		mg/L		101	80 - 120
Trichlorofluoromethane	0.0500	0.0493		mg/L		99	58 - 127
Vinyl chloride	0.0500	0.0520		mg/L		104	80 - 129
Xylenes, Total	0.100	0.100		mg/L		100	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-518315/5

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120	0	20
1,1,1,2-Tetrachloroethane	0.0500	0.0494		mg/L		99	76 - 126	1	20
1,1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0520		mg/L		104	75 - 128	2	20
1,1,2-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120	1	20
1,1-Dichloroethane	0.0500	0.0497		mg/L		99	80 - 120	0	20
1,1-Dichloroethene	0.0500	0.0506		mg/L		101	80 - 120	2	20
1,2,4-Trichlorobenzene	0.0500	0.0524		mg/L		105	71 - 126	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0497		mg/L		99	74 - 120	2	20
1,2-Dibromoethane	0.0500	0.0506		mg/L		101	75 - 126	1	20
1,2-Dichlorobenzene	0.0500	0.0494		mg/L		99	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0483		mg/L		97	72 - 128	2	50
1,2-Dichloropropane	0.0500	0.0499		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0486		mg/L		97	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120	0	20
2-Butanone	0.250	0.250		mg/L		100	79 - 125	1	20
2-Hexanone	0.250	0.236		mg/L		94	80 - 131	1	20
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134	0	20
Acetone	0.250	0.220		mg/L		88	68 - 132	1	30
Benzene	0.0500	0.0496		mg/L		99	80 - 120	1	20
Bromodichloromethane	0.0500	0.0507		mg/L		101	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

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

Lab Sample ID: LCSD 680-518315/5

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Bromoform	0.0500	0.0516		mg/L		103	52 - 122	0	20
Bromomethane	0.0500	0.0525		mg/L		105	43 - 146	7	20
Carbon disulfide	0.0500	0.0494		mg/L		99	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0518		mg/L		104	67 - 125	3	20
Chlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0519		mg/L		104	48 - 145	3	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0503		mg/L		101	76 - 149	2	30
cis-1,2-Dichloroethene	0.0500	0.0500		mg/L		100	80 - 120	2	20
cis-1,3-Dichloropropene	0.0500	0.0526		mg/L		105	80 - 129	1	20
Cyclohexane	0.0500	0.0496		mg/L		99	80 - 132	2	20
Dibromochloromethane	0.0500	0.0524		mg/L		105	68 - 120	0	20
Dichlorodifluoromethane	0.0500	0.0493		mg/L		99	70 - 137	4	40
Ethylbenzene	0.0500	0.0491		mg/L		98	80 - 120	1	20
Isopropylbenzene	0.0500	0.0503		mg/L		101	79 - 126	1	20
Methyl acetate	0.100	0.0932		mg/L		93	73 - 139	0	20
Methyl tert-butyl ether	0.0500	0.0508		mg/L		102	80 - 122	0	20
Methylcyclohexane	0.0500	0.0508		mg/L		102	80 - 138	3	20
Methylene Chloride	0.0500	0.0521		mg/L		104	80 - 120	0	20
Naphthalene	0.0500	0.0500		mg/L		100	61 - 136	1	20
Styrene	0.0500	0.0512		mg/L		102	80 - 126	0	20
Tetrachloroethene	0.0500	0.0515		mg/L		103	71 - 123	1	20
Toluene	0.0500	0.0506		mg/L		101	80 - 120	0	20
trans-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 128	1	30
Trichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0475		mg/L		95	58 - 127	4	20
Vinyl chloride	0.0500	0.0508		mg/L		102	80 - 129	2	20
Xylenes, Total	0.100	0.0997		mg/L		100	80 - 120	0	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

GC/MS VOA

Analysis Batch: 518315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150288-1	HMW-1	Total/NA	Water	8260B	
680-150288-2	HMW-2	Total/NA	Water	8260B	
680-150288-3	Trip Blank	Total/NA	Water	8260B	
MB 680-518315/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518315/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518315/5	Lab Control Sample Dup	Total/NA	Water	8260B	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Client Sample ID: HMW-1

Date Collected: 03/22/18 09:35

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 19:53	Y1S	TAL SAV

Client Sample ID: HMW-2

Date Collected: 03/22/18 09:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 20:18	Y1S	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 03/22/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 17:00	Y1S	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Client Contact

Company Name: Environ Serv Consultants, Inc.
Address: 1880 W. Oak Pkwy Bldg 100, STE 100
City/State/Zip: MAINTA GA 30882
Phone: 770-973-2104
Fax: 770-973-7395
Project Name: Sedaw
Site:

Regulatory Program: DW NPDES RCRA Other:

Project Manager: Jeffrey Maden Site Contact: JMaddan

Tel/Fax: (770) 328-5232 Lab Contact:

Analysis Turnaround Time

CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

COC No: 1 of 1 COCS

Sampler:

For Lab Use Only:

Walk-in Client:

Lab Sampling:

Job / SDG No.:

Sample Specific Notes:

Carrier: 1/4-DICKANE

Perform MS/MSD (Y/N)

Filtered Sample (Y/N)

Sample Date

Sample Time

Sample Type (C-Comp, G-Grab)

Matrix

of Cont.

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0

3/22/18 0935 G CW 0

3/22/18 0940 G CW 0



Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
If questions call Jeffrey Maden (770) 328-5232.

Custody Seal No.:

Relinquished by: Jeffrey Maden Date/Time: 3/22/18 14:50

Relinquished by: JM Date/Time: 3/22/18 1645

Relinquished by: JM Date/Time: 3/22/18 1645

Relinquished by: JM Date/Time: 3/22/18 1645

Relinquished by: JM Date/Time: 3/22/18 1645

Relinquished by: JM Date/Time: 3/22/18 1645

Cooler Temp. (°C): Obs'd: 77 Corrid: 77

Received by: JM Company: TA Date/Time: 3/22/18 1450

Received by: JM Company: TA Date/Time: 3/22/18 1450

Received in Laboratory by: JM Company: TASAV Date/Time: 3-23-18/730

Received in Laboratory by: JM Company: TASAV Date/Time: 3-23-18/730

Received in Laboratory by: JM Company: TASAV Date/Time: 3-23-18/730

Received in Laboratory by: JM Company: TASAV Date/Time: 3-23-18/730

1.1°C, 1.0°C (CF) 1.2, 1.1°C



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150288-1

Login Number: 150288

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150288-2
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/4/2018 4:06:19 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	11
QC Sample Results	12
QC Association	13
Chronicle	14
Chain of Custody	15
Receipt Checklists	18
Certification Summary	19

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Job ID: 680-150288-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150288-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples HMW-1 (680-150288-1), HMW-2 (680-150288-2) and Trip Blank (680-150288-3) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 03/27/2018.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150288-1	HMW-1	Water	03/22/18 09:35	03/23/18 07:30
680-150288-2	HMW-2	Water	03/22/18 09:50	03/23/18 07:30
680-150288-3	Trip Blank	Water	03/22/18 00:00	03/23/18 07:30

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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



Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Client Sample ID: HMW-1

Lab Sample ID: 680-150288-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00046	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: HMW-2

Lab Sample ID: 680-150288-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00030	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150288-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah



Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Client Sample ID: HMW-1
Date Collected: 03/22/18 09:35
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00046	J	0.0020	0.00024	mg/L			03/27/18 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 125					03/27/18 20:48	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Client Sample ID: HMW-2

Lab Sample ID: 680-150288-2

Date Collected: 03/22/18 09:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00030	J	0.0020	0.00024	mg/L			03/27/18 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		63 - 125					03/27/18 21:13	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Client Sample ID: Trip Blank

Lab Sample ID: 680-150288-3

Date Collected: 03/22/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 13:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 125					03/27/18 13:15	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (63-125)
680-150288-1	HMW-1	85
680-150288-2	HMW-2	83
680-150288-3	Trip Blank	87
LCS 240-320226/4	Lab Control Sample	77
MB 240-320226/5	Method Blank	91

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

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

Lab Sample ID: MB 240-320226/5

Matrix: Water

Analysis Batch: 320226

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L	-		03/27/18 12:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 125					03/27/18 12:00	1

Lab Sample ID: LCS 240-320226/4

Matrix: Water

Analysis Batch: 320226

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00846		mg/L	-	85	59 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	77		63 - 125				

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

GC/MS VOA

Analysis Batch: 320226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150288-1	HMW-1	Total/NA	Water	8260B SIM	
680-150288-2	HMW-2	Total/NA	Water	8260B SIM	
680-150288-3	Trip Blank	Total/NA	Water	8260B SIM	
MB 240-320226/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320226/4	Lab Control Sample	Total/NA	Water	8260B SIM	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Client Sample ID: HMW-1

Date Collected: 03/22/18 09:35

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 20:48	SAM	TAL CAN

Client Sample ID: HMW-2

Date Collected: 03/22/18 09:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 21:13	SAM	TAL CAN

Client Sample ID: Trip Blank

Date Collected: 03/22/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150288-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 13:15	SAM	TAL CAN

Laboratory References:

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

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Client Contact

Company Name: *Environ Serv Consultants, Inc.*
Address: *1880 W. 10th Street, Marietta, GA 30067*
City/State/Zip: *MARIETTA, GA 30067*
Phone: *770-973-2100*
Fax: *770-973-7395*
Project Name: *Sedaw*
Site:

Regulatory Program: DW NPDES RCRA Other:

Project Manager: *Jeffrey Maden*
Site Contact: *JMaddm*
Lab Contact:

Date: *3/22/18*
Carrier:

COC No.: *1* of *1* COCS
Sampler:

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Tell/Fax: *770 328-5232*
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)
<i>3/22/18</i>	<i>0935</i>	<i>G</i>	<i>GW</i>	<i>0</i>	<i>Y</i>	<i>Y</i>
<i>3/22/18</i>	<i>0945</i>	<i>G</i>	<i>GW</i>	<i>0</i>	<i>Y</i>	<i>Y</i>



Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other
Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant
 Poison B Unknown
Special Instructions/QC Requirements & Comments:
If questions call Jeffrey Maden (770) 328-5232.
Custody Seal No.:
Company: *Environ Serv Consultants, Inc.* Date/Time: *3/22/18 14:50*
Company: *JMaddm* Date/Time: *3/22/18 1645*
Company: *JMaddm* Date/Time: *3/23/18 730*

Return to Client Disposal by Lab Archive for _____ Months
Cooler Temp. (°C): Obs'd: _____
Received by: *JMaddm* Company: *JMaddm* Date/Time: *3/22/18 1450*
Received by: _____ Company: *JMaddm* Date/Time: *3/23/18 730*

1.1° 1.0°C (CF) 1.2, 1.1°C

TestAmerica Savannah
 5102 LaRoche Avenue
 Savannah, GA 31404
 Phone (912) 354-7858 Fax (912) 352-0165

2.0 / C2.1

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:			
Client Contact: Shipping/Receiving		Phone:	Lanier, Jerry A	State of Origin: Georgia	680-512819.1			
Company: TestAmerica Laboratories, Inc.		E-Mail: jerry.lanier@testamericainc.com		Page 1 of 1				
Address: 4101 Shuffel Street NW,		Accreditations Required (See note): NELAP - Florida		Job #:	680-150288-2			
City: North Canton	Due Date Requested: 4/4/2018	Analysis Requested						
State, Zip: OH, 44720	TAT Requested (days):							
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:							
Email:	WO #:							
Project Name: GCHI-SECHEM INC	Project #: 68002623							
Site:	SSOW#:							
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=volatile, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:
HMW-1 (680-150288-1)	3/22/18	09:35 Eastern	Water	Water	X	X	3	
HMW-2 (680-150288-2)	3/22/18	09:50 Eastern	Water	Water	X	X	3	
Trip Blank (680-150288-3)	3/22/18	Eastern	Water	Water	X		2	
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>								
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Special Instructions/QC Requirements:								
Empty Kit Relinquished by:			Date:			Method of Shipment:		
Relinquished by: <i>Monte Edwards</i>			Date: 3/21/18			Company: <i>PLCO</i>		
Relinquished by:			Date/Time:			Company:		
Relinquished by:			Date/Time:			Company:		
Custody Seals Intact: Δ Yes Δ No			Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:		



TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login #: 680-150288

Client TA Savannah Site Name _____

Cooler unpacked by:

Cooler Received on 3/24/18 Opened on 3/24/18

Derry Bunn

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

See Multiple Cooler Form

1. Cooler temperature upon receipt
 IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp 2.0 °C Corrected Cooler Temp. 2.1 °C
 IR GUN #36 (CF +0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # 627 (CF -1.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
- Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
- Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
- Were tamper/custody seals intact and uncompromised? Yes No NA
- 3. Shippers' packing slip attached to the cooler(s)? Yes No
- 4. Did custody papers accompany the sample(s)? Yes No
- 5. Were the custody papers relinquished & signed in the appropriate place? Yes No
- 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- 7. Did all bottles arrive in good condition (Unbroken)? Yes No
- 8. Could all bottle labels be reconciled with the COC? Yes No
- 9. Were correct bottle(s) used for the test(s) indicated? Yes No
- 10. Sufficient quantity received to perform indicated analyses? Yes No
- 11. Are these work share samples?
 If yes, Questions 12-16 have been checked at the originating laboratory.
- 12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC732776
- 13. Were VOAs on the COC? Yes No
- 14. Were air bubbles >6 mm in any VOA vials? Yes No NA
- 15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
- 16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

Samples processed by:

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150288-2

Login Number: 150288

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150288-2

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150291-1
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/2/2018 2:49:30 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	9
Surrogate Summary	23
QC Sample Results	24
QC Association	28
Chronicle	29
Chain of Custody	31
Receipt Checklists	32
Certification Summary	33

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Job ID: 680-150291-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150291-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SMW-1 (680-150291-1), Equipment Blank (680-150291-2), SRW-1 (680-150291-3), SMW-3 (680-150291-4), SMW-4 (680-150291-5), SMW-2 (680-150291-6) and Trip Blank (680-150291-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/01/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-518315.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150291-1	SMW-1	Water	03/20/18 16:20	03/23/18 07:30
680-150291-2	Equipment Blank	Water	03/20/18 17:05	03/23/18 07:30
680-150291-3	SRW-1	Water	03/20/18 17:40	03/23/18 07:30
680-150291-4	SMW-3	Water	03/20/18 18:20	03/23/18 07:30
680-150291-5	SMW-4	Water	03/21/18 08:50	03/23/18 07:30
680-150291-6	SMW-2	Water	03/21/18 08:45	03/23/18 07:30
680-150291-7	Trip Blank	Water	03/21/18 00:00	03/23/18 07:30

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858



Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-1

Lab Sample ID: 680-150291-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0010		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.0018		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0055		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0044		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0079		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: Equipment Blank

Lab Sample ID: 680-150291-2

No Detections.

Client Sample ID: SRW-1

Lab Sample ID: 680-150291-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0082		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.016		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.029		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.069		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.086		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.059		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SMW-3

Lab Sample ID: 680-150291-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0011		0.0010		mg/L	1		8260B	Total/NA
1,1,2-Trichloroethane	0.0021		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0073		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0073		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.12		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.037		0.0010		mg/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.029		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.019		0.0010		mg/L	1		8260B	Total/NA
4-Methyl-2-pentanone	0.33		0.010		mg/L	1		8260B	Total/NA
Acetone	0.030		0.010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.044		0.0010		mg/L	1		8260B	Total/NA
Ethylbenzene	0.0025		0.0010		mg/L	1		8260B	Total/NA
Naphthalene	0.0073		0.0050		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.012		0.0010		mg/L	1		8260B	Total/NA
Toluene	0.0041		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0086		0.0010		mg/L	1		8260B	Total/NA
Vinyl chloride	0.015		0.0010		mg/L	1		8260B	Total/NA
Xylenes, Total	0.091		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SMW-4

Lab Sample ID: 680-150291-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.0014		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0038		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SMW-2

Lab Sample ID: 680-150291-6

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-2 (Continued)

Lab Sample ID: 680-150291-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0012		0.0010		mg/L			1	8260B	Total/NA
1,2-Dichlorobenzene	0.0036		0.0010		mg/L			1	8260B	Total/NA
1,2-Dichloroethane	0.0072		0.0010		mg/L			1	8260B	Total/NA
1,3-Dichlorobenzene	0.0023		0.0010		mg/L			1	8260B	Total/NA
1,4-Dichlorobenzene	0.0080		0.0010		mg/L			1	8260B	Total/NA
Chlorobenzene	0.043		0.0010		mg/L			1	8260B	Total/NA
cis-1,2-Dichloroethene	0.0039		0.0010		mg/L			1	8260B	Total/NA
Ethylbenzene	0.0048		0.0010		mg/L			1	8260B	Total/NA
Tetrachloroethene	0.0080		0.0010		mg/L			1	8260B	Total/NA
trans-1,2-Dichloroethene	0.0011		0.0010		mg/L			1	8260B	Total/NA
Trichloroethene	0.0028		0.0010		mg/L			1	8260B	Total/NA
Vinyl chloride	0.0011		0.0010		mg/L			1	8260B	Total/NA
Xylenes, Total	0.0011		0.0010		mg/L			1	8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-1

Lab Sample ID: 680-150291-1

Date Collected: 03/20/18 16:20

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,1-Dichloroethane	0.0010		0.0010		mg/L			04/01/18 20:43	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,2-Dichloroethane	0.0018		0.0010		mg/L			04/01/18 20:43	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 20:43	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 20:43	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 20:43	1
Acetone	0.010	U	0.010		mg/L			04/01/18 20:43	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 20:43	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
cis-1,2-Dichloroethene	0.0055		0.0010		mg/L			04/01/18 20:43	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 20:43	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 20:43	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Tetrachloroethene	0.0044		0.0010		mg/L			04/01/18 20:43	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Trichloroethene	0.0079		0.0010		mg/L			04/01/18 20:43	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 20:43	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 20:43	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-1
Date Collected: 03/20/18 16:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-1
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		73 - 131		04/01/18 20:43	1
4-Bromofluorobenzene (Surr)	99		80 - 120		04/01/18 20:43	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 20:43	1
Toluene-d8 (Surr)	99		80 - 120		04/01/18 20:43	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: Equipment Blank

Lab Sample ID: 680-150291-2

Date Collected: 03/20/18 17:05

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 21:07	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 21:07	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 21:07	1
Acetone	0.010	U	0.010		mg/L			04/01/18 21:07	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 21:07	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 21:07	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 21:07	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 21:07	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 21:07	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: Equipment Blank

Lab Sample ID: 680-150291-2

Date Collected: 03/20/18 17:05

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		73 - 131		04/01/18 21:07	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/01/18 21:07	1
Dibromofluoromethane (Surr)	99		80 - 122		04/01/18 21:07	1
Toluene-d8 (Surr)	99		80 - 120		04/01/18 21:07	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SRW-1

Lab Sample ID: 680-150291-3

Date Collected: 03/20/18 17:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,1-Dichloroethane	0.0082		0.0010		mg/L			04/01/18 21:56	1
1,1-Dichloroethene	0.016		0.0010		mg/L			04/01/18 21:56	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,2-Dichloroethane	0.029		0.0010		mg/L			04/01/18 21:56	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 21:56	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 21:56	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 21:56	1
Acetone	0.010	U	0.010		mg/L			04/01/18 21:56	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 21:56	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
cis-1,2-Dichloroethene	0.069		0.0010		mg/L			04/01/18 21:56	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 21:56	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 21:56	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Tetrachloroethene	0.086		0.0010		mg/L			04/01/18 21:56	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Trichloroethene	0.059		0.0010		mg/L			04/01/18 21:56	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 21:56	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 21:56	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SRW-1
Date Collected: 03/20/18 17:40
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-3
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		04/01/18 21:56	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/01/18 21:56	1
Dibromofluoromethane (Surr)	103		80 - 122		04/01/18 21:56	1
Toluene-d8 (Surr)	95		80 - 120		04/01/18 21:56	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-3

Lab Sample ID: 680-150291-4

Date Collected: 03/20/18 18:20

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0011		0.0010		mg/L			04/01/18 22:21	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
1,1,2-Trichloroethane	0.0021		0.0010		mg/L			04/01/18 22:21	1
1,1-Dichloroethane	0.0073		0.0010		mg/L			04/01/18 22:21	1
1,1-Dichloroethene	0.0073		0.0010		mg/L			04/01/18 22:21	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 22:21	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 22:21	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
1,2-Dichlorobenzene	0.12		0.0010		mg/L			04/01/18 22:21	1
1,2-Dichloroethane	0.037		0.0010		mg/L			04/01/18 22:21	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
1,3-Dichlorobenzene	0.029		0.0010		mg/L			04/01/18 22:21	1
1,4-Dichlorobenzene	0.019		0.0010		mg/L			04/01/18 22:21	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 22:21	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 22:21	1
4-Methyl-2-pentanone	0.33		0.010		mg/L			04/01/18 22:21	1
Acetone	0.030		0.010		mg/L			04/01/18 22:21	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 22:21	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 22:21	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 22:21	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
cis-1,2-Dichloroethene	0.044		0.0010		mg/L			04/01/18 22:21	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Ethylbenzene	0.0025		0.0010		mg/L			04/01/18 22:21	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 22:21	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 22:21	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 22:21	1
Naphthalene	0.0073		0.0050		mg/L			04/01/18 22:21	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Tetrachloroethene	0.012		0.0010		mg/L			04/01/18 22:21	1
Toluene	0.0041		0.0010		mg/L			04/01/18 22:21	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Trichloroethene	0.0086		0.0010		mg/L			04/01/18 22:21	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 22:21	1
Vinyl chloride	0.015		0.0010		mg/L			04/01/18 22:21	1
Xylenes, Total	0.091		0.0010		mg/L			04/01/18 22:21	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-3
Date Collected: 03/20/18 18:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-4
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	103		73 - 131		04/01/18 22:21	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/01/18 22:21	1
Dibromofluoromethane (Surr)	102		80 - 122		04/01/18 22:21	1
Toluene-d8 (Surr)	94		80 - 120		04/01/18 22:21	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-4

Lab Sample ID: 680-150291-5

Date Collected: 03/21/18 08:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,2-Dichlorobenzene	0.0014		0.0010		mg/L			04/01/18 22:46	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 22:46	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 22:46	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 22:46	1
Acetone	0.010	U	0.010		mg/L			04/01/18 22:46	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 22:46	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 22:46	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 22:46	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Tetrachloroethene	0.0038		0.0010		mg/L			04/01/18 22:46	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 22:46	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 22:46	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-4
Date Collected: 03/21/18 08:50
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-5
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		04/01/18 22:46	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/01/18 22:46	1
Dibromofluoromethane (Surr)	98		80 - 122		04/01/18 22:46	1
Toluene-d8 (Surr)	98		80 - 120		04/01/18 22:46	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-2

Lab Sample ID: 680-150291-6

Date Collected: 03/21/18 08:45

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,1-Dichloroethane	0.0012		0.0010		mg/L			04/01/18 23:10	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,2-Dichlorobenzene	0.0036		0.0010		mg/L			04/01/18 23:10	1
1,2-Dichloroethane	0.0072		0.0010		mg/L			04/01/18 23:10	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
1,3-Dichlorobenzene	0.0023		0.0010		mg/L			04/01/18 23:10	1
1,4-Dichlorobenzene	0.0080		0.0010		mg/L			04/01/18 23:10	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 23:10	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 23:10	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 23:10	1
Acetone	0.010	U	0.010		mg/L			04/01/18 23:10	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 23:10	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Chlorobenzene	0.043		0.0010		mg/L			04/01/18 23:10	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
cis-1,2-Dichloroethene	0.0039		0.0010		mg/L			04/01/18 23:10	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Ethylbenzene	0.0048		0.0010		mg/L			04/01/18 23:10	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 23:10	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 23:10	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Tetrachloroethene	0.0080		0.0010		mg/L			04/01/18 23:10	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
trans-1,2-Dichloroethene	0.0011		0.0010		mg/L			04/01/18 23:10	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Trichloroethene	0.0028		0.0010		mg/L			04/01/18 23:10	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 23:10	1
Vinyl chloride	0.0011		0.0010		mg/L			04/01/18 23:10	1
Xylenes, Total	0.0011		0.0010		mg/L			04/01/18 23:10	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-2
Date Collected: 03/21/18 08:45
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-6
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	113		73 - 131		04/01/18 23:10	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/01/18 23:10	1
Dibromofluoromethane (Surr)	107		80 - 122		04/01/18 23:10	1
Toluene-d8 (Surr)	93		80 - 120		04/01/18 23:10	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 21:32	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 21:32	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 21:32	1
Acetone	0.010	U	0.010		mg/L			04/01/18 21:32	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 21:32	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 21:32	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 21:32	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 21:32	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 21:32	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/01/18 21:32	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/01/18 21:32	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 21:32	1
Toluene-d8 (Surr)	98		80 - 120		04/01/18 21:32	1

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (73-131)	BFB (80-120)	DBFM (80-122)	TOL (80-120)
680-150291-1	SMW-1	93	99	97	99
680-150291-2	Equipment Blank	93	97	99	99
680-150291-3	SRW-1	101	96	103	95
680-150291-4	SMW-3	103	96	102	94
680-150291-5	SMW-4	95	97	98	98
680-150291-6	SMW-2	113	95	107	93
680-150291-7	Trip Blank	92	95	97	98
LCS 680-518315/4	Lab Control Sample	96	97	101	98
LCSD 680-518315/5	Lab Control Sample Dup	97	96	101	98
MB 680-518315/8	Method Blank	92	95	97	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

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

Lab Sample ID: MB 680-518315/8

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
Acetone	0.010	U	0.010		mg/L			04/01/18 16:11	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 16:11	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 16:11	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 16:11	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

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

Lab Sample ID: MB 680-518315/8

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 16:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/01/18 16:11	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/01/18 16:11	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 16:11	1
Toluene-d8 (Surr)	101		80 - 120		04/01/18 16:11	1

Lab Sample ID: LCS 680-518315/4

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0497		mg/L		99	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0531		mg/L		106	75 - 128
1,1,2-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120
1,1-Dichloroethane	0.0500	0.0498		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0518		mg/L		104	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0507		mg/L		101	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0508		mg/L		102	74 - 120
1,2-Dibromoethane	0.0500	0.0504		mg/L		101	75 - 126
1,2-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0492		mg/L		98	72 - 128
1,2-Dichloropropane	0.0500	0.0492		mg/L		98	80 - 120
1,3-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
2-Butanone	0.250	0.252		mg/L		101	79 - 125
2-Hexanone	0.250	0.239		mg/L		95	80 - 131
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134
Acetone	0.250	0.222		mg/L		89	68 - 132
Benzene	0.0500	0.0499		mg/L		100	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0516		mg/L		103	52 - 122
Bromomethane	0.0500	0.0565		mg/L		113	43 - 146
Carbon disulfide	0.0500	0.0501		mg/L		100	77 - 129
Carbon tetrachloride	0.0500	0.0532		mg/L		106	67 - 125
Chlorobenzene	0.0500	0.0497		mg/L		99	80 - 120
Chloroethane	0.0500	0.0533		mg/L		107	48 - 145
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0512		mg/L		102	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 129
Cyclohexane	0.0500	0.0508		mg/L		102	80 - 132
Dibromochloromethane	0.0500	0.0525		mg/L		105	68 - 120
Dichlorodifluoromethane	0.0500	0.0514		mg/L		103	70 - 137
Ethylbenzene	0.0500	0.0498		mg/L		100	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

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

Lab Sample ID: LCS 680-518315/4

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	0.0500	0.0507		mg/L		101	79 - 126
Methyl acetate	0.100	0.0936		mg/L		94	73 - 139
Methyl tert-butyl ether	0.0500	0.0507		mg/L		101	80 - 122
Methylcyclohexane	0.0500	0.0521		mg/L		104	80 - 138
Methylene Chloride	0.0500	0.0519		mg/L		104	80 - 120
Naphthalene	0.0500	0.0506		mg/L		101	61 - 136
Styrene	0.0500	0.0513		mg/L		103	80 - 126
Tetrachloroethene	0.0500	0.0520		mg/L		104	71 - 123
Toluene	0.0500	0.0507		mg/L		101	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0527		mg/L		105	80 - 128
Trichloroethene	0.0500	0.0504		mg/L		101	80 - 120
Trichlorofluoromethane	0.0500	0.0493		mg/L		99	58 - 127
Vinyl chloride	0.0500	0.0520		mg/L		104	80 - 129
Xylenes, Total	0.100	0.100		mg/L		100	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-518315/5

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120	0	20
1,1,1,2-Tetrachloroethane	0.0500	0.0494		mg/L		99	76 - 126	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0520		mg/L		104	75 - 128	2	20
1,1,2-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120	1	20
1,1-Dichloroethane	0.0500	0.0497		mg/L		99	80 - 120	0	20
1,1-Dichloroethene	0.0500	0.0506		mg/L		101	80 - 120	2	20
1,2,4-Trichlorobenzene	0.0500	0.0524		mg/L		105	71 - 126	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0497		mg/L		99	74 - 120	2	20
1,2-Dibromoethane	0.0500	0.0506		mg/L		101	75 - 126	1	20
1,2-Dichlorobenzene	0.0500	0.0494		mg/L		99	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0483		mg/L		97	72 - 128	2	50
1,2-Dichloropropane	0.0500	0.0499		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0486		mg/L		97	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120	0	20
2-Butanone	0.250	0.250		mg/L		100	79 - 125	1	20
2-Hexanone	0.250	0.236		mg/L		94	80 - 131	1	20
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134	0	20
Acetone	0.250	0.220		mg/L		88	68 - 132	1	30
Benzene	0.0500	0.0496		mg/L		99	80 - 120	1	20
Bromodichloromethane	0.0500	0.0507		mg/L		101	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

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

Lab Sample ID: LCSD 680-518315/5

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Bromoform	0.0500	0.0516		mg/L		103	52 - 122	0	20
Bromomethane	0.0500	0.0525		mg/L		105	43 - 146	7	20
Carbon disulfide	0.0500	0.0494		mg/L		99	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0518		mg/L		104	67 - 125	3	20
Chlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0519		mg/L		104	48 - 145	3	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0503		mg/L		101	76 - 149	2	30
cis-1,2-Dichloroethene	0.0500	0.0500		mg/L		100	80 - 120	2	20
cis-1,3-Dichloropropene	0.0500	0.0526		mg/L		105	80 - 129	1	20
Cyclohexane	0.0500	0.0496		mg/L		99	80 - 132	2	20
Dibromochloromethane	0.0500	0.0524		mg/L		105	68 - 120	0	20
Dichlorodifluoromethane	0.0500	0.0493		mg/L		99	70 - 137	4	40
Ethylbenzene	0.0500	0.0491		mg/L		98	80 - 120	1	20
Isopropylbenzene	0.0500	0.0503		mg/L		101	79 - 126	1	20
Methyl acetate	0.100	0.0932		mg/L		93	73 - 139	0	20
Methyl tert-butyl ether	0.0500	0.0508		mg/L		102	80 - 122	0	20
Methylcyclohexane	0.0500	0.0508		mg/L		102	80 - 138	3	20
Methylene Chloride	0.0500	0.0521		mg/L		104	80 - 120	0	20
Naphthalene	0.0500	0.0500		mg/L		100	61 - 136	1	20
Styrene	0.0500	0.0512		mg/L		102	80 - 126	0	20
Tetrachloroethene	0.0500	0.0515		mg/L		103	71 - 123	1	20
Toluene	0.0500	0.0506		mg/L		101	80 - 120	0	20
trans-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 128	1	30
Trichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0475		mg/L		95	58 - 127	4	20
Vinyl chloride	0.0500	0.0508		mg/L		102	80 - 129	2	20
Xylenes, Total	0.100	0.0997		mg/L		100	80 - 120	0	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

GC/MS VOA

Analysis Batch: 518315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150291-1	SMW-1	Total/NA	Water	8260B	
680-150291-2	Equipment Blank	Total/NA	Water	8260B	
680-150291-3	SRW-1	Total/NA	Water	8260B	
680-150291-4	SMW-3	Total/NA	Water	8260B	
680-150291-5	SMW-4	Total/NA	Water	8260B	
680-150291-6	SMW-2	Total/NA	Water	8260B	
680-150291-7	Trip Blank	Total/NA	Water	8260B	
MB 680-518315/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518315/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518315/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: SMW-1

Date Collected: 03/20/18 16:20

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 20:43	Y1S	TAL SAV

Client Sample ID: Equipment Blank

Date Collected: 03/20/18 17:05

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 21:07	Y1S	TAL SAV

Client Sample ID: SRW-1

Date Collected: 03/20/18 17:40

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 21:56	Y1S	TAL SAV

Client Sample ID: SMW-3

Date Collected: 03/20/18 18:20

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 22:21	Y1S	TAL SAV

Client Sample ID: SMW-4

Date Collected: 03/21/18 08:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 22:46	Y1S	TAL SAV

Client Sample ID: SMW-2

Date Collected: 03/21/18 08:45

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 23:10	Y1S	TAL SAV

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 21:32	Y1S	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Client Contact

Company Name: EastCo
Address: 1880 West Oak Street, Blount County, GA 30802
City/State/Zip: Warrenton, GA 30862
Phone: 770-973-7100
Fax: 770-973-7395
Project Name: Seckow
Site:
P O #:

Regulatory Program: DW NPDES RCRA Other:

Project Manager: J. Madden Site Contact: J. Madden Date: 3/22/18

Tel/Fax: 770-328-5237 Lab Contact: 1/4 Diakane Carrier:

Analysis Turnaround Time

CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

COC No: _____ of _____ COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
SMW-1	3/20/18	1620	G	GW	6			
Equipment Blank	3/20/18	1705	G	W	6			
SMW-1	3/20/18	1740	G	GW	6			
SMW-3	3/20/18	1820	G	GW	6			
SMW-4	3/21/18	0850	G	GW	6			
SMW-2	3/21/18	0845	G	GW	6			



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:
It questions, call J. Madden (770) 328-5232.

Custody Seal No.: _____
Relinquished by: J. Madden Date/Time: 3/22/18 14:50
Relinquished by: DT Date/Time: 3/22/18 1645
Relinquished by: _____ Date/Time: _____
Cooler Temp. (°C): Obs'd: _____
Received by: DT Company: EA Date/Time: 3/22/18 1450
Received by: _____ Company: _____ Date/Time: _____
Received in Laboratory: DT Company: TASAV Date/Time: 3-23-18 / 730

1.1°C, 1.0°C (CF) 1.2°C, +0.1°C



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150291-1

Login Number: 150291

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

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

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150291-2
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/4/2018 4:19:55 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	15
QC Sample Results	16
QC Association	18
Chronicle	19
Chain of Custody	21
Receipt Checklists	24
Certification Summary	25

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Job ID: 680-150291-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150291-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SMW-1 (680-150291-1), Equipment Blank (680-150291-2), SRW-1 (680-150291-3), SMW-3 (680-150291-4), SMW-4 (680-150291-5), SMW-2 (680-150291-6) and Trip Blank (680-150291-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 03/27/2018, 03/29/2018 and 03/30/2018.

Sample SMW-3 (680-150291-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150291-1	SMW-1	Water	03/20/18 16:20	03/23/18 07:30
680-150291-2	Equipment Blank	Water	03/20/18 17:05	03/23/18 07:30
680-150291-3	SRW-1	Water	03/20/18 17:40	03/23/18 07:30
680-150291-4	SMW-3	Water	03/20/18 18:20	03/23/18 07:30
680-150291-5	SMW-4	Water	03/21/18 08:50	03/23/18 07:30
680-150291-6	SMW-2	Water	03/21/18 08:45	03/23/18 07:30
680-150291-7	Trip Blank	Water	03/21/18 00:00	03/23/18 07:30



Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SMW-1

Lab Sample ID: 680-150291-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0022		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Equipment Blank

Lab Sample ID: 680-150291-2

No Detections.

Client Sample ID: SRW-1

Lab Sample ID: 680-150291-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.030		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SMW-3

Lab Sample ID: 680-150291-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.54		0.010	0.0012	mg/L	5		8260B SIM	Total/NA

Client Sample ID: SMW-4

Lab Sample ID: 680-150291-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0035		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SMW-2

Lab Sample ID: 680-150291-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.14		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SMW-1

Lab Sample ID: 680-150291-1

Date Collected: 03/20/18 16:20

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0022		0.0020	0.00024	mg/L			03/27/18 21:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		63 - 125					03/27/18 21:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: Equipment Blank

Lab Sample ID: 680-150291-2

Date Collected: 03/20/18 17:05

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/29/18 12:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 125					03/29/18 12:30	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SRW-1

Lab Sample ID: 680-150291-3

Date Collected: 03/20/18 17:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.030		0.0020	0.00024	mg/L			03/29/18 13:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		63 - 125					03/29/18 13:21	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SMW-3
Date Collected: 03/20/18 18:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.54		0.010	0.0012	mg/L			03/30/18 22:16	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		63 - 125					03/30/18 22:16	5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SMW-4

Lab Sample ID: 680-150291-5

Date Collected: 03/21/18 08:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0035		0.0020	0.00024	mg/L			03/30/18 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 125					03/30/18 13:30	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SMW-2
Date Collected: 03/21/18 08:45
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.14		0.0020	0.00024	mg/L			03/29/18 14:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		63 - 125					03/29/18 14:37	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/29/18 12:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		63 - 125					03/29/18 12:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (63-125)
680-150291-1	SMW-1	79
680-150291-2	Equipment Blank	84
680-150291-3	SRW-1	77
680-150291-4	SMW-3	78
680-150291-5	SMW-4	85
680-150291-6	SMW-2	77
680-150291-6 MS	SMW-2	77
680-150291-6 MSD	SMW-2	79
680-150291-7	Trip Blank	81
LCS 240-320226/4	Lab Control Sample	77
LCS 240-320558/4	Lab Control Sample	74
LCS 240-320742/4	Lab Control Sample	87
MB 240-320226/5	Method Blank	91
MB 240-320558/5	Method Blank	81
MB 240-320742/5	Method Blank	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

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

Lab Sample ID: MB 240-320226/5

Matrix: Water

Analysis Batch: 320226

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 12:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 125					03/27/18 12:00	1

Lab Sample ID: LCS 240-320226/4

Matrix: Water

Analysis Batch: 320226

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00846		mg/L		85	59 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	77		63 - 125				

Lab Sample ID: MB 240-320558/5

Matrix: Water

Analysis Batch: 320558

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/29/18 10:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		63 - 125					03/29/18 10:50	1

Lab Sample ID: LCS 240-320558/4

Matrix: Water

Analysis Batch: 320558

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00861		mg/L		86	59 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	74		63 - 125				

Lab Sample ID: 680-150291-6 MS

Matrix: Water

Analysis Batch: 320558

Client Sample ID: SMW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.14		0.0100	0.145	4	mg/L		53	52 - 129
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	77		63 - 125						

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

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

Lab Sample ID: 680-150291-6 MSD

Matrix: Water

Analysis Batch: 320558

Client Sample ID: SMW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.14		0.0100	0.147	4	mg/L		70	52 - 129	1	13
Surrogate	%Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	79		63 - 125								

Lab Sample ID: MB 240-320742/5

Matrix: Water

Analysis Batch: 320742

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/30/18 12:14	1
Surrogate	%Recovery	MB Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	92		63 - 125						

Lab Sample ID: LCS 240-320742/4

Matrix: Water

Analysis Batch: 320742

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00890		mg/L		89	59 - 131
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	87		63 - 125				

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

GC/MS VOA

Analysis Batch: 320226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150291-1	SMW-1	Total/NA	Water	8260B SIM	
MB 240-320226/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320226/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 320558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150291-2	Equipment Blank	Total/NA	Water	8260B SIM	
680-150291-3	SRW-1	Total/NA	Water	8260B SIM	
680-150291-6	SMW-2	Total/NA	Water	8260B SIM	
680-150291-7	Trip Blank	Total/NA	Water	8260B SIM	
MB 240-320558/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320558/4	Lab Control Sample	Total/NA	Water	8260B SIM	
680-150291-6 MS	SMW-2	Total/NA	Water	8260B SIM	
680-150291-6 MSD	SMW-2	Total/NA	Water	8260B SIM	

Analysis Batch: 320742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150291-4	SMW-3	Total/NA	Water	8260B SIM	
680-150291-5	SMW-4	Total/NA	Water	8260B SIM	
MB 240-320742/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320742/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: SMW-1

Date Collected: 03/20/18 16:20

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 21:38	SAM	TAL CAN

Client Sample ID: Equipment Blank

Date Collected: 03/20/18 17:05

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 12:30	SAM	TAL CAN

Client Sample ID: SRW-1

Date Collected: 03/20/18 17:40

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 13:21	SAM	TAL CAN

Client Sample ID: SMW-3

Date Collected: 03/20/18 18:20

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		5	320742	03/30/18 22:16	SAM	TAL CAN

Client Sample ID: SMW-4

Date Collected: 03/21/18 08:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320742	03/30/18 13:30	SAM	TAL CAN

Client Sample ID: SMW-2

Date Collected: 03/21/18 08:45

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150291-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 14:37	SAM	TAL CAN

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Client Sample ID: Trip Blank

Lab Sample ID: 680-150291-7

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 12:05	SAM	TAL CAN

Laboratory References:

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: DW NPDES RCRA Other:

Company Name: EastCo
Address: 1880 West Oak Street Bldg 100 SE 100
City/State/Zip: MARIETTA GA 30062
Phone: 770-473-7100
Fax: 770-473-7395
Project Name: Seckow
Site:
P O #:

Client Contact
Project Manager: J. Madden Site Contact: J. Madden Date: 3/22/18
Tel/Fax: 770-328-5237 Lab Contact:
1/4 Diakane

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

COC No: _____ of _____ COCs
Sampler: _____
For Lab Use Only:
Walk-in Client: _____
Lab Sampling: _____
Job / SDG No.: _____

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Carrier:	COC No:	Sample Specific Notes:
SMW-1	3/20/18	1620	G	GW	6					
Equipment Blank	3/20/18	1705	G	W	6					
SMW-1	3/20/18	1740	G	GW	6					
SMW-3	3/20/18	1820	G	GW	6					
SMW-4	3/21/18	0850	G	GW	6					
SMW-2	3/21/18	0845	G	GW	6					



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: _____
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:
It questions, call J. Madden (770) 328-5232.

Cooler Temp. (°C): Obs'd: _____ Corrd: _____ Therm ID No.: _____
Received by: JF Company: EA Date/Time: 3/22/18 1450
Received by: JF Company: EA Date/Time: 3/22/18 1645
Received in Laboratory: JF Company: TASAV Date/Time: 3-23-18 / 730
Relinquished by: JF Company: EA Date/Time: 3/22/18 1450
Relinquished by: JF Company: EA Date/Time: 3/22/18 1645
Relinquished by: JF Company: EA Date/Time: 3-23-18 / 730

1.1°C, 1.0°C (CF) 1.2°C, +0.1°C



Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Jerry Lanier, Jerry A Shipping/Receiving: jerry.lanier@testamericainc.com Company: TestAmerica Laboratories, Inc. Address: 4101 Shuffel Street NW, North Canton, OH, 44720 Phone: 330-497-9396(Tel) 330-497-0772(Fax) Email:		Lab PM: Jerry Lanier, Jerry A E-Mail: jerry.lanier@testamericainc.com Carrier Tracking No(s): 680-512819.1 State of Origin: Georgia Page: Page 1 of 1 Job #: 680-150291-2	
Due Date Requested: 4/4/2018 TAT Requested (days):		Accreditations Required (See note): NELAP - Florida	
PO #:		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 Other:	
Project #: 68002623 SSOW#:		Analysis Requested:	
Sample Identification - Client ID (Lab ID)		Total Number of Containers	
Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=water, BT=Tissue, AA=Air)	Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=water, BT=Tissue, AA=Air)	Preservation Code: Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No)	Special Instructions/Note:
SMW-1 (680-150291-1) Equipment Blank (680-150291-2) SRW-1 (680-150291-3) SMW-3 (680-150291-4) SMW-4 (680-150291-5) SMW-2 (680-150291-6) Trip Blank (680-150291-7)	3/20/18 16:20 Eastern Water 3/20/18 17:05 Eastern Water 3/20/18 17:40 Eastern Water 3/20/18 18:20 Eastern Water 3/21/18 08:50 Eastern Water 3/21/18 08:45 Eastern Water 3/21/18 Eastern Water	X X X X X X X	3 3 3 3 3 3 2
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements:			
Relinquished by: [Signature] Date/Time: 3/21/18 17:00 Company: [Signature]		Relinquished by: [Signature] Date/Time: 3/24/18 09:30 Company: IA	
Relinquished by: [Signature] Date/Time:		Relinquished by: [Signature] Date/Time:	
Relinquished by: [Signature] Date/Time:		Relinquished by: [Signature] Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	



TestAmerica Canton Sample Receipt Form/Narrative

Login #: 680-150291

Canton Facility

Client TA Savannah Site Name

Cooler unpacked by:

Cooler Received on 3/24/18 Opened on 3/24/18

Denny Bunn

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp 2.0 °C Corrected Cooler Temp. 2.1 °C
IR GUN #36 (CF +0.3 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
IR GUN # 627 (CF -1.3 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
- Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
- Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
- Were tamper/custody seals intact and uncompromised? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC732776
13. Were VOAs on the COC? Yes No NA
14. Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

Samples processed by:

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Blank lines for Chain of Custody and Sample Discrepancies

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150291-2

Login Number: 150291

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

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

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150291-2

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150292-1
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/3/2018 2:01:39 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	11
Surrogate Summary	55
QC Sample Results	56
QC Association	72
Chronicle	73
Chain of Custody	77
Receipt Checklists	79
Certification Summary	80

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Job ID: 680-150292-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150292-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WMW-2 (680-150292-1), WMW-1 (680-150292-2), YMW-19 (680-150292-3), YMW-4 (680-150292-4), YMW-1 (680-150292-5), YMW-2 (680-150292-6), YMW-14 (680-150292-7), YMW-17 (680-150292-8), YMW-8 (680-150292-9), YMW-13 (680-150292-10), YMW-15 (680-150292-11), YMW-5 (680-150292-12), YMW-18 (680-150292-13), YMW-9 (680-150292-14), YMW-16 (680-150292-15), YMW-10 (680-150292-16), Dup-2 (680-150292-17), YMW-6 (680-150292-18), YMW-11 (680-150292-19), YMW-7 (680-150292-20), Dup-1 (680-150292-21) and Trip Blank (680-150292-22) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/31/2018, 04/01/2018 and 04/02/2018.

Samples YMW-2 (680-150292-6)[5X], YMW-13 (680-150292-10)[2X], YMW-15 (680-150292-11)[20X], YMW-5 (680-150292-12)[10X], YMW-16 (680-150292-15)[5X], YMW-10 (680-150292-16)[10X], Dup-2 (680-150292-17)[5X], YMW-6 (680-150292-18)[2X] and YMW-7 (680-150292-20)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 680-518236, 680-518315, 680-518345, and 680-518342 .

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150292-1	WMW-2	Water	03/20/18 10:15	03/23/18 07:30
680-150292-2	WMW-1	Water	03/20/18 10:50	03/23/18 07:30
680-150292-3	YMW-19	Water	03/20/18 11:50	03/23/18 07:30
680-150292-4	YMW-4	Water	03/20/18 14:10	03/23/18 07:30
680-150292-5	YMW-1	Water	03/20/18 14:10	03/23/18 07:30
680-150292-6	YMW-2	Water	03/20/18 15:40	03/23/18 07:30
680-150292-7	YMW-14	Water	03/20/18 16:35	03/23/18 07:30
680-150292-8	YMW-17	Water	03/21/18 11:00	03/23/18 07:30
680-150292-9	YMW-8	Water	03/21/18 12:20	03/23/18 07:30
680-150292-10	YMW-13	Water	03/21/18 10:00	03/23/18 07:30
680-150292-11	YMW-15	Water	03/21/18 11:00	03/23/18 07:30
680-150292-12	YMW-5	Water	03/21/18 11:45	03/23/18 07:30
680-150292-13	YMW-18	Water	03/21/18 14:55	03/23/18 07:30
680-150292-14	YMW-9	Water	03/21/18 16:40	03/23/18 07:30
680-150292-15	YMW-16	Water	03/21/18 17:45	03/23/18 07:30
680-150292-16	YMW-10	Water	03/21/18 19:00	03/23/18 07:30
680-150292-17	Dup-2	Water	03/21/18 00:00	03/23/18 07:30
680-150292-18	YMW-6	Water	03/21/18 14:55	03/23/18 07:30
680-150292-19	YMW-11	Water	03/21/18 16:10	03/23/18 07:30
680-150292-20	YMW-7	Water	03/21/18 17:10	03/23/18 07:30
680-150292-21	Dup-1	Water	03/21/18 00:00	03/23/18 07:30
680-150292-22	Trip Blank	Water	03/21/18 00:00	03/23/18 07:30

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: WMW-2

Lab Sample ID: 680-150292-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.0011		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: WMW-1

Lab Sample ID: 680-150292-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.0017		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0011		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0012		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-19

Lab Sample ID: 680-150292-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	0.0033		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0096		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.024		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.030		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.073		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.11		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.17		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-4

Lab Sample ID: 680-150292-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0010		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-1

Lab Sample ID: 680-150292-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0032		0.0010		mg/L	1		8260B	Total/NA
1,1,2-Trichloroethane	0.0010		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0044		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.013		0.0010		mg/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.0045		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.0031		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.043		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.057		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.029		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-2

Lab Sample ID: 680-150292-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.030		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.010		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0053		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.086		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.095		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene - DL	0.34		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-14

Lab Sample ID: 680-150292-7

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-14 (Continued)

Lab Sample ID: 680-150292-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.015		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.081		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0057		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-17

Lab Sample ID: 680-150292-8

No Detections.

Client Sample ID: YMW-8

Lab Sample ID: 680-150292-9

No Detections.

Client Sample ID: YMW-13

Lab Sample ID: 680-150292-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0046		0.0020		mg/L	2		8260B	Total/NA
1,1-Dichloroethane	0.0048		0.0020		mg/L	2		8260B	Total/NA
1,1-Dichloroethene	0.15		0.0020		mg/L	2		8260B	Total/NA
1,2-Dichloroethane	0.057		0.0020		mg/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	0.27		0.0020		mg/L	2		8260B	Total/NA
Tetrachloroethene	0.092		0.0020		mg/L	2		8260B	Total/NA
Trichloroethene	0.19		0.0020		mg/L	2		8260B	Total/NA

Client Sample ID: YMW-15

Lab Sample ID: 680-150292-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.079		0.020		mg/L	20		8260B	Total/NA
1,1-Dichloroethene	0.31		0.020		mg/L	20		8260B	Total/NA
1,2-Dichlorobenzene	0.31		0.020		mg/L	20		8260B	Total/NA
1,2-Dichloroethane	0.20		0.020		mg/L	20		8260B	Total/NA
1,3-Dichlorobenzene	0.058		0.020		mg/L	20		8260B	Total/NA
1,4-Dichlorobenzene	0.066		0.020		mg/L	20		8260B	Total/NA
cis-1,2-Dichloroethene	1.9		0.020		mg/L	20		8260B	Total/NA
Tetrachloroethene	0.89		0.020		mg/L	20		8260B	Total/NA
Trichloroethene	0.76		0.020		mg/L	20		8260B	Total/NA
Vinyl chloride	0.098		0.020		mg/L	20		8260B	Total/NA

Client Sample ID: YMW-5

Lab Sample ID: 680-150292-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.019		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.034		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.16		0.010		mg/L	10		8260B	Total/NA
1,2-Dichlorobenzene	0.12		0.010		mg/L	10		8260B	Total/NA
1,2-Dichloroethane	0.026		0.010		mg/L	10		8260B	Total/NA
1,3-Dichlorobenzene	0.035		0.010		mg/L	10		8260B	Total/NA
1,4-Dichlorobenzene	0.027		0.010		mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	0.76		0.010		mg/L	10		8260B	Total/NA
Tetrachloroethene	0.96		0.010		mg/L	10		8260B	Total/NA
Trichloroethene	0.82		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.041		0.010		mg/L	10		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-18

Lab Sample ID: 680-150292-13

No Detections.

Client Sample ID: YMW-9

Lab Sample ID: 680-150292-14

No Detections.

Client Sample ID: YMW-16

Lab Sample ID: 680-150292-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0067		0.0050		mg/L	5		8260B	Total/NA
1,1,2-Trichloroethane	0.0058		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethane	0.029		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethene	0.16		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.044		0.0050		mg/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	0.79		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.68		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.54		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-10

Lab Sample ID: 680-150292-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.011		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.028		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.097		0.010		mg/L	10		8260B	Total/NA
1,2-Dichlorobenzene	0.088		0.010		mg/L	10		8260B	Total/NA
1,2-Dichloroethane	0.029		0.010		mg/L	10		8260B	Total/NA
1,3-Dichlorobenzene	0.022		0.010		mg/L	10		8260B	Total/NA
1,4-Dichlorobenzene	0.018		0.010		mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	0.56		0.010		mg/L	10		8260B	Total/NA
Tetrachloroethene	0.50		0.010		mg/L	10		8260B	Total/NA
Trichloroethene	0.49		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.039		0.010		mg/L	10		8260B	Total/NA

Client Sample ID: Dup-2

Lab Sample ID: 680-150292-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.13		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.053		0.0050		mg/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	0.24		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.079		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.17		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-6

Lab Sample ID: 680-150292-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0023		0.0020		mg/L	2		8260B	Total/NA
1,1-Dichloroethene	0.0046		0.0020		mg/L	2		8260B	Total/NA
1,2-Dichloroethane	0.0085		0.0020		mg/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	0.023		0.0020		mg/L	2		8260B	Total/NA
Tetrachloroethene	0.019		0.0020		mg/L	2		8260B	Total/NA
Trichloroethene	0.082		0.0020		mg/L	2		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-11

Lab Sample ID: 680-150292-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.0014		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-7

Lab Sample ID: 680-150292-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0084		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethene	0.034		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.054		0.0050		mg/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	0.072		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.11		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.35		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: Dup-1

Lab Sample ID: 680-150292-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0024		0.0010		mg/L	1		8260B	Total/NA
1,1,2-Trichloroethane	0.0013		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0059		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.021		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.018		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.0059		0.0010		mg/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.0045		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.0037		0.0010		mg/L	1		8260B	Total/NA
Chlorobenzene	0.0013		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.12		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.10		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.11		0.0010		mg/L	1		8260B	Total/NA
Vinyl chloride	0.0079		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150292-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: WMW-2

Lab Sample ID: 680-150292-1

Date Collected: 03/20/18 10:15

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 14:22	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 14:22	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 14:22	1
Acetone	0.010	U	0.010		mg/L			03/31/18 14:22	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 14:22	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
Chloroform	0.0011		0.0010		mg/L			03/31/18 14:22	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 14:22	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 14:22	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 14:22	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 14:22	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: WMW-2

Date Collected: 03/20/18 10:15

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-1

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		03/31/18 14:22	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 14:22	1
Dibromofluoromethane (Surr)	96		80 - 122		03/31/18 14:22	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 14:22	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: WMW-1

Lab Sample ID: 680-150292-2

Date Collected: 03/20/18 10:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,2-Dichloroethane	0.0017		0.0010		mg/L			03/31/18 14:44	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 14:44	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 14:44	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 14:44	1
Acetone	0.010	U	0.010		mg/L			03/31/18 14:44	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 14:44	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
cis-1,2-Dichloroethene	0.0011		0.0010		mg/L			03/31/18 14:44	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 14:44	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 14:44	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Trichloroethene	0.0012		0.0010		mg/L			03/31/18 14:44	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 14:44	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 14:44	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: WMW-1

Date Collected: 03/20/18 10:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-2

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		03/31/18 14:44	1
4-Bromofluorobenzene (Surr)	98		80 - 120		03/31/18 14:44	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 14:44	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 14:44	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-19

Lab Sample ID: 680-150292-3

Date Collected: 03/20/18 11:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,1,2-Trichloroethane	0.0033		0.0010		mg/L			04/02/18 18:29	1
1,1-Dichloroethane	0.0096		0.0010		mg/L			04/02/18 18:29	1
1,1-Dichloroethene	0.024		0.0010		mg/L			04/02/18 18:29	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,2-Dichloroethane	0.030		0.0010		mg/L			04/02/18 18:29	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
2-Butanone	0.010	U	0.010		mg/L			04/02/18 18:29	1
2-Hexanone	0.010	U	0.010		mg/L			04/02/18 18:29	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/02/18 18:29	1
Acetone	0.010	U	0.010		mg/L			04/02/18 18:29	1
Benzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Bromoform	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Bromomethane	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/02/18 18:29	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Chloroethane	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
Chloroform	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Chloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
cis-1,2-Dichloroethene	0.073		0.0010		mg/L			04/02/18 18:29	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/02/18 18:29	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
Naphthalene	0.0050	U	0.0050		mg/L			04/02/18 18:29	1
Styrene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Tetrachloroethene	0.11		0.0010		mg/L			04/02/18 18:29	1
Toluene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Trichloroethene	0.17		0.0010		mg/L			04/02/18 18:29	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/02/18 18:29	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/02/18 18:29	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-19

Lab Sample ID: 680-150292-3

Date Collected: 03/20/18 11:50

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		04/02/18 18:29	1
4-Bromofluorobenzene (Surr)	91		80 - 120		04/02/18 18:29	1
Dibromofluoromethane (Surr)	98		80 - 122		04/02/18 18:29	1
Toluene-d8 (Surr)	96		80 - 120		04/02/18 18:29	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-4
Date Collected: 03/20/18 14:10
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 15:06	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 15:06	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 15:06	1
Acetone	0.010	U	0.010		mg/L			03/31/18 15:06	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 15:06	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 15:06	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 15:06	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Tetrachloroethene	0.0010		0.0010		mg/L			03/31/18 15:06	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 15:06	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 15:06	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-4
Date Collected: 03/20/18 14:10
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-4
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		03/31/18 15:06	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 15:06	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 15:06	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 15:06	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-1

Lab Sample ID: 680-150292-5

Date Collected: 03/20/18 14:10

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0032		0.0010		mg/L			04/02/18 18:51	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
1,1,2-Trichloroethane	0.0010		0.0010		mg/L			04/02/18 18:51	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
1,1-Dichloroethene	0.0044		0.0010		mg/L			04/02/18 18:51	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
1,2-Dichlorobenzene	0.013		0.0010		mg/L			04/02/18 18:51	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
1,3-Dichlorobenzene	0.0045		0.0010		mg/L			04/02/18 18:51	1
1,4-Dichlorobenzene	0.0031		0.0010		mg/L			04/02/18 18:51	1
2-Butanone	0.010	U	0.010		mg/L			04/02/18 18:51	1
2-Hexanone	0.010	U	0.010		mg/L			04/02/18 18:51	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/02/18 18:51	1
Acetone	0.010	U	0.010		mg/L			04/02/18 18:51	1
Benzene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Bromoform	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Bromomethane	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/02/18 18:51	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Chloroethane	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
Chloroform	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Chloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
cis-1,2-Dichloroethene	0.043		0.0010		mg/L			04/02/18 18:51	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/02/18 18:51	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
Naphthalene	0.0050	U	0.0050		mg/L			04/02/18 18:51	1
Styrene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Tetrachloroethene	0.057		0.0010		mg/L			04/02/18 18:51	1
Toluene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Trichloroethene	0.029		0.0010		mg/L			04/02/18 18:51	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/02/18 18:51	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/02/18 18:51	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-1
Date Collected: 03/20/18 14:10
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-5
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		04/02/18 18:51	1
4-Bromofluorobenzene (Surr)	91		80 - 120		04/02/18 18:51	1
Dibromofluoromethane (Surr)	99		80 - 122		04/02/18 18:51	1
Toluene-d8 (Surr)	95		80 - 120		04/02/18 18:51	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-2

Lab Sample ID: 680-150292-6

Date Collected: 03/20/18 15:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.030		0.0010		mg/L			03/31/18 15:29	1
1,1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,1-Dichloroethane	0.010		0.0010		mg/L			03/31/18 15:29	1
1,1-Dichloroethene	0.0053		0.0010		mg/L			03/31/18 15:29	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 15:29	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 15:29	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 15:29	1
Acetone	0.010	U	0.010		mg/L			03/31/18 15:29	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 15:29	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 15:29	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 15:29	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Tetrachloroethene	0.086		0.0010		mg/L			03/31/18 15:29	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Trichloroethene	0.095		0.0010		mg/L			03/31/18 15:29	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 15:29	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 15:29	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-2
Date Collected: 03/20/18 15:40
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		03/31/18 15:29	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/31/18 15:29	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 15:29	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 15:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.34		0.0050		mg/L			04/02/18 20:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		73 - 131		04/02/18 20:35	5
4-Bromofluorobenzene (Surr)	96		80 - 120		04/02/18 20:35	5
Dibromofluoromethane (Surr)	103		80 - 122		04/02/18 20:35	5
Toluene-d8 (Surr)	95		80 - 120		04/02/18 20:35	5

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-14

Lab Sample ID: 680-150292-7

Date Collected: 03/20/18 16:35

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
2-Butanone	0.010	U	0.010		mg/L			04/02/18 18:08	1
2-Hexanone	0.010	U	0.010		mg/L			04/02/18 18:08	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/02/18 18:08	1
Acetone	0.010	U	0.010		mg/L			04/02/18 18:08	1
Benzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Bromoform	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Bromomethane	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/02/18 18:08	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Chloroethane	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
Chloroform	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Chloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
cis-1,2-Dichloroethene	0.015		0.0010		mg/L			04/02/18 18:08	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/02/18 18:08	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
Naphthalene	0.0050	U	0.0050		mg/L			04/02/18 18:08	1
Styrene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Tetrachloroethene	0.081		0.0010		mg/L			04/02/18 18:08	1
Toluene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Trichloroethene	0.0057		0.0010		mg/L			04/02/18 18:08	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/02/18 18:08	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/02/18 18:08	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-14
Date Collected: 03/20/18 16:35
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-7
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		04/02/18 18:08	1
4-Bromofluorobenzene (Surr)	91		80 - 120		04/02/18 18:08	1
Dibromofluoromethane (Surr)	100		80 - 122		04/02/18 18:08	1
Toluene-d8 (Surr)	96		80 - 120		04/02/18 18:08	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-17

Lab Sample ID: 680-150292-8

Date Collected: 03/21/18 11:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 16:13	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 16:13	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 16:13	1
Acetone	0.010	U	0.010		mg/L			03/31/18 16:13	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 16:13	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 16:13	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 16:13	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 16:13	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 16:13	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-17

Date Collected: 03/21/18 11:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-8

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		03/31/18 16:13	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 16:13	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 16:13	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 16:13	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-8

Lab Sample ID: 680-150292-9

Date Collected: 03/21/18 12:20

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 16:35	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 16:35	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 16:35	1
Acetone	0.010	U	0.010		mg/L			03/31/18 16:35	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 16:35	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 16:35	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 16:35	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 16:35	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 16:35	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-8
Date Collected: 03/21/18 12:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-9
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		03/31/18 16:35	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/31/18 16:35	1
Dibromofluoromethane (Surr)	96		80 - 122		03/31/18 16:35	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 16:35	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-13

Lab Sample ID: 680-150292-10

Date Collected: 03/21/18 10:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0046		0.0020		mg/L			04/02/18 19:29	2
1,1,2,2-Tetrachloroethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,1,2-Trichloroethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,1-Dichloroethane	0.0048		0.0020		mg/L			04/02/18 19:29	2
1,1-Dichloroethene	0.15		0.0020		mg/L			04/02/18 19:29	2
1,2,4-Trichlorobenzene	0.010	U	0.010		mg/L			04/02/18 19:29	2
1,2-Dibromo-3-Chloropropane	0.010	U	0.010		mg/L			04/02/18 19:29	2
1,2-Dibromoethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,2-Dichlorobenzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,2-Dichloroethane	0.057		0.0020		mg/L			04/02/18 19:29	2
1,2-Dichloropropane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,3-Dichlorobenzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
1,4-Dichlorobenzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
2-Butanone	0.020	U	0.020		mg/L			04/02/18 19:29	2
2-Hexanone	0.020	U	0.020		mg/L			04/02/18 19:29	2
4-Methyl-2-pentanone	0.020	U	0.020		mg/L			04/02/18 19:29	2
Acetone	0.020	U	0.020		mg/L			04/02/18 19:29	2
Benzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Bromodichloromethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Bromoform	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Bromomethane	0.010	U	0.010		mg/L			04/02/18 19:29	2
Carbon disulfide	0.0040	U	0.0040		mg/L			04/02/18 19:29	2
Carbon tetrachloride	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Chlorobenzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Chloroethane	0.010	U	0.010		mg/L			04/02/18 19:29	2
Chloroform	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Chloromethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
cis-1,2-Dichloroethene	0.27		0.0020		mg/L			04/02/18 19:29	2
cis-1,3-Dichloropropene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Cyclohexane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Dibromochloromethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Dichlorodifluoromethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Ethylbenzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Isopropylbenzene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Methyl acetate	0.010	U	0.010		mg/L			04/02/18 19:29	2
Methyl tert-butyl ether	0.020	U	0.020		mg/L			04/02/18 19:29	2
Methylcyclohexane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Methylene Chloride	0.010	U	0.010		mg/L			04/02/18 19:29	2
Naphthalene	0.010	U	0.010		mg/L			04/02/18 19:29	2
Styrene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Tetrachloroethene	0.092		0.0020		mg/L			04/02/18 19:29	2
Toluene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
trans-1,2-Dichloroethene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
trans-1,3-Dichloropropene	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Trichloroethene	0.19		0.0020		mg/L			04/02/18 19:29	2
Trichlorofluoromethane	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Vinyl chloride	0.0020	U	0.0020		mg/L			04/02/18 19:29	2
Xylenes, Total	0.0020	U	0.0020		mg/L			04/02/18 19:29	2

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-13

Lab Sample ID: 680-150292-10

Date Collected: 03/21/18 10:00

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	112		73 - 131		04/02/18 19:29	2
4-Bromofluorobenzene (Surr)	95		80 - 120		04/02/18 19:29	2
Dibromofluoromethane (Surr)	107		80 - 122		04/02/18 19:29	2
Toluene-d8 (Surr)	92		80 - 120		04/02/18 19:29	2

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-15

Lab Sample ID: 680-150292-11

Date Collected: 03/21/18 11:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
1,1,2,2-Tetrachloroethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
1,1,2-Trichloroethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
1,1-Dichloroethane	0.079		0.020		mg/L			04/02/18 19:07	20
1,1-Dichloroethene	0.31		0.020		mg/L			04/02/18 19:07	20
1,2,4-Trichlorobenzene	0.10	U	0.10		mg/L			04/02/18 19:07	20
1,2-Dibromo-3-Chloropropane	0.10	U	0.10		mg/L			04/02/18 19:07	20
1,2-Dibromoethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
1,2-Dichlorobenzene	0.31		0.020		mg/L			04/02/18 19:07	20
1,2-Dichloroethane	0.20		0.020		mg/L			04/02/18 19:07	20
1,2-Dichloropropane	0.020	U	0.020		mg/L			04/02/18 19:07	20
1,3-Dichlorobenzene	0.058		0.020		mg/L			04/02/18 19:07	20
1,4-Dichlorobenzene	0.066		0.020		mg/L			04/02/18 19:07	20
2-Butanone	0.20	U	0.20		mg/L			04/02/18 19:07	20
2-Hexanone	0.20	U	0.20		mg/L			04/02/18 19:07	20
4-Methyl-2-pentanone	0.20	U	0.20		mg/L			04/02/18 19:07	20
Acetone	0.20	U	0.20		mg/L			04/02/18 19:07	20
Benzene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Bromodichloromethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
Bromoform	0.020	U	0.020		mg/L			04/02/18 19:07	20
Bromomethane	0.10	U	0.10		mg/L			04/02/18 19:07	20
Carbon disulfide	0.040	U	0.040		mg/L			04/02/18 19:07	20
Carbon tetrachloride	0.020	U	0.020		mg/L			04/02/18 19:07	20
Chlorobenzene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Chloroethane	0.10	U	0.10		mg/L			04/02/18 19:07	20
Chloroform	0.020	U	0.020		mg/L			04/02/18 19:07	20
Chloromethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
cis-1,2-Dichloroethene	1.9		0.020		mg/L			04/02/18 19:07	20
cis-1,3-Dichloropropene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Cyclohexane	0.020	U	0.020		mg/L			04/02/18 19:07	20
Dibromochloromethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
Dichlorodifluoromethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
Ethylbenzene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Isopropylbenzene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Methyl acetate	0.10	U	0.10		mg/L			04/02/18 19:07	20
Methyl tert-butyl ether	0.20	U	0.20		mg/L			04/02/18 19:07	20
Methylcyclohexane	0.020	U	0.020		mg/L			04/02/18 19:07	20
Methylene Chloride	0.10	U	0.10		mg/L			04/02/18 19:07	20
Naphthalene	0.10	U	0.10		mg/L			04/02/18 19:07	20
Styrene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Tetrachloroethene	0.89		0.020		mg/L			04/02/18 19:07	20
Toluene	0.020	U	0.020		mg/L			04/02/18 19:07	20
trans-1,2-Dichloroethene	0.020	U	0.020		mg/L			04/02/18 19:07	20
trans-1,3-Dichloropropene	0.020	U	0.020		mg/L			04/02/18 19:07	20
Trichloroethene	0.76		0.020		mg/L			04/02/18 19:07	20
Trichlorofluoromethane	0.020	U	0.020		mg/L			04/02/18 19:07	20
Vinyl chloride	0.098		0.020		mg/L			04/02/18 19:07	20
Xylenes, Total	0.020	U	0.020		mg/L			04/02/18 19:07	20

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-15

Date Collected: 03/21/18 11:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-11

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	100		73 - 131		04/02/18 19:07	20
4-Bromofluorobenzene (Surr)	96		80 - 120		04/02/18 19:07	20
Dibromofluoromethane (Surr)	98		80 - 122		04/02/18 19:07	20
Toluene-d8 (Surr)	98		80 - 120		04/02/18 19:07	20

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-5
Date Collected: 03/21/18 11:45
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.019		0.010		mg/L			04/02/18 20:13	10
1,1,2,2-Tetrachloroethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
1,1,2-Trichloroethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
1,1-Dichloroethane	0.034		0.010		mg/L			04/02/18 20:13	10
1,1-Dichloroethene	0.16		0.010		mg/L			04/02/18 20:13	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			04/02/18 20:13	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			04/02/18 20:13	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
1,2-Dichlorobenzene	0.12		0.010		mg/L			04/02/18 20:13	10
1,2-Dichloroethane	0.026		0.010		mg/L			04/02/18 20:13	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			04/02/18 20:13	10
1,3-Dichlorobenzene	0.035		0.010		mg/L			04/02/18 20:13	10
1,4-Dichlorobenzene	0.027		0.010		mg/L			04/02/18 20:13	10
2-Butanone	0.10	U	0.10		mg/L			04/02/18 20:13	10
2-Hexanone	0.10	U	0.10		mg/L			04/02/18 20:13	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			04/02/18 20:13	10
Acetone	0.10	U	0.10		mg/L			04/02/18 20:13	10
Benzene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Bromodichloromethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
Bromoform	0.010	U	0.010		mg/L			04/02/18 20:13	10
Bromomethane	0.050	U	0.050		mg/L			04/02/18 20:13	10
Carbon disulfide	0.020	U	0.020		mg/L			04/02/18 20:13	10
Carbon tetrachloride	0.010	U	0.010		mg/L			04/02/18 20:13	10
Chlorobenzene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Chloroethane	0.050	U	0.050		mg/L			04/02/18 20:13	10
Chloroform	0.010	U	0.010		mg/L			04/02/18 20:13	10
Chloromethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
cis-1,2-Dichloroethene	0.76		0.010		mg/L			04/02/18 20:13	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Cyclohexane	0.010	U	0.010		mg/L			04/02/18 20:13	10
Dibromochloromethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
Ethylbenzene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Isopropylbenzene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Methyl acetate	0.050	U	0.050		mg/L			04/02/18 20:13	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			04/02/18 20:13	10
Methylcyclohexane	0.010	U	0.010		mg/L			04/02/18 20:13	10
Methylene Chloride	0.050	U	0.050		mg/L			04/02/18 20:13	10
Naphthalene	0.050	U	0.050		mg/L			04/02/18 20:13	10
Styrene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Tetrachloroethene	0.96		0.010		mg/L			04/02/18 20:13	10
Toluene	0.010	U	0.010		mg/L			04/02/18 20:13	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			04/02/18 20:13	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			04/02/18 20:13	10
Trichloroethene	0.82		0.010		mg/L			04/02/18 20:13	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			04/02/18 20:13	10
Vinyl chloride	0.041		0.010		mg/L			04/02/18 20:13	10
Xylenes, Total	0.010	U	0.010		mg/L			04/02/18 20:13	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-5
Date Collected: 03/21/18 11:45
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-12
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	100		73 - 131		04/02/18 20:13	10
4-Bromofluorobenzene (Surr)	96		80 - 120		04/02/18 20:13	10
Dibromofluoromethane (Surr)	101		80 - 122		04/02/18 20:13	10
Toluene-d8 (Surr)	96		80 - 120		04/02/18 20:13	10

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-18

Lab Sample ID: 680-150292-13

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 13:16	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 13:16	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 13:16	1
Acetone	0.010	U	0.010		mg/L			03/31/18 13:16	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 13:16	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 13:16	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 13:16	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 13:16	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 13:16	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-18

Date Collected: 03/21/18 14:55

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-13

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		03/31/18 13:16	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 13:16	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 13:16	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 13:16	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-9

Lab Sample ID: 680-150292-14

Date Collected: 03/21/18 16:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 13:38	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 13:38	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 13:38	1
Acetone	0.010	U	0.010		mg/L			03/31/18 13:38	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 13:38	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 13:38	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 13:38	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 13:38	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 13:38	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-9
Date Collected: 03/21/18 16:40
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-14
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		73 - 131		03/31/18 13:38	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/31/18 13:38	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 13:38	1
Toluene-d8 (Surr)	98		80 - 120		03/31/18 13:38	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-16

Lab Sample ID: 680-150292-15

Date Collected: 03/21/18 17:45

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0067		0.0050		mg/L			03/31/18 18:03	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
1,1,2-Trichloroethane	0.0058		0.0050		mg/L			03/31/18 18:03	5
1,1-Dichloroethane	0.029		0.0050		mg/L			03/31/18 18:03	5
1,1-Dichloroethene	0.16		0.0050		mg/L			03/31/18 18:03	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			03/31/18 18:03	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			03/31/18 18:03	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
1,2-Dichloroethane	0.044		0.0050		mg/L			03/31/18 18:03	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
2-Butanone	0.050	U	0.050		mg/L			03/31/18 18:03	5
2-Hexanone	0.050	U	0.050		mg/L			03/31/18 18:03	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			03/31/18 18:03	5
Acetone	0.050	U	0.050		mg/L			03/31/18 18:03	5
Benzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Bromoform	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Bromomethane	0.025	U	0.025		mg/L			03/31/18 18:03	5
Carbon disulfide	0.010	U	0.010		mg/L			03/31/18 18:03	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Chlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Chloroethane	0.025	U	0.025		mg/L			03/31/18 18:03	5
Chloroform	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Chloromethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
cis-1,2-Dichloroethene	0.79		0.0050		mg/L			03/31/18 18:03	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Cyclohexane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Ethylbenzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Methyl acetate	0.025	U	0.025		mg/L			03/31/18 18:03	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			03/31/18 18:03	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Methylene Chloride	0.025	U	0.025		mg/L			03/31/18 18:03	5
Naphthalene	0.025	U	0.025		mg/L			03/31/18 18:03	5
Styrene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Tetrachloroethene	0.68		0.0050		mg/L			03/31/18 18:03	5
Toluene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Trichloroethene	0.54		0.0050		mg/L			03/31/18 18:03	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Vinyl chloride	0.0050	U	0.0050		mg/L			03/31/18 18:03	5
Xylenes, Total	0.0050	U	0.0050		mg/L			03/31/18 18:03	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-16

Date Collected: 03/21/18 17:45

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-15

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	107		73 - 131		03/31/18 18:03	5
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 18:03	5
Dibromofluoromethane (Surr)	104		80 - 122		03/31/18 18:03	5
Toluene-d8 (Surr)	95		80 - 120		03/31/18 18:03	5

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-10

Lab Sample ID: 680-150292-16

Date Collected: 03/21/18 19:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.011		0.010		mg/L			03/31/18 19:54	10
1,1,2,2-Tetrachloroethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
1,1,2-Trichloroethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
1,1-Dichloroethane	0.028		0.010		mg/L			03/31/18 19:54	10
1,1-Dichloroethene	0.097		0.010		mg/L			03/31/18 19:54	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			03/31/18 19:54	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			03/31/18 19:54	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
1,2-Dichlorobenzene	0.088		0.010		mg/L			03/31/18 19:54	10
1,2-Dichloroethane	0.029		0.010		mg/L			03/31/18 19:54	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			03/31/18 19:54	10
1,3-Dichlorobenzene	0.022		0.010		mg/L			03/31/18 19:54	10
1,4-Dichlorobenzene	0.018		0.010		mg/L			03/31/18 19:54	10
2-Butanone	0.10	U	0.10		mg/L			03/31/18 19:54	10
2-Hexanone	0.10	U	0.10		mg/L			03/31/18 19:54	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			03/31/18 19:54	10
Acetone	0.10	U	0.10		mg/L			03/31/18 19:54	10
Benzene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Bromodichloromethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
Bromoform	0.010	U	0.010		mg/L			03/31/18 19:54	10
Bromomethane	0.050	U	0.050		mg/L			03/31/18 19:54	10
Carbon disulfide	0.020	U	0.020		mg/L			03/31/18 19:54	10
Carbon tetrachloride	0.010	U	0.010		mg/L			03/31/18 19:54	10
Chlorobenzene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Chloroethane	0.050	U	0.050		mg/L			03/31/18 19:54	10
Chloroform	0.010	U	0.010		mg/L			03/31/18 19:54	10
Chloromethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
cis-1,2-Dichloroethene	0.56		0.010		mg/L			03/31/18 19:54	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Cyclohexane	0.010	U	0.010		mg/L			03/31/18 19:54	10
Dibromochloromethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
Ethylbenzene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Isopropylbenzene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Methyl acetate	0.050	U	0.050		mg/L			03/31/18 19:54	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			03/31/18 19:54	10
Methylcyclohexane	0.010	U	0.010		mg/L			03/31/18 19:54	10
Methylene Chloride	0.050	U	0.050		mg/L			03/31/18 19:54	10
Naphthalene	0.050	U	0.050		mg/L			03/31/18 19:54	10
Styrene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Tetrachloroethene	0.50		0.010		mg/L			03/31/18 19:54	10
Toluene	0.010	U	0.010		mg/L			03/31/18 19:54	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			03/31/18 19:54	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			03/31/18 19:54	10
Trichloroethene	0.49		0.010		mg/L			03/31/18 19:54	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			03/31/18 19:54	10
Vinyl chloride	0.039		0.010		mg/L			03/31/18 19:54	10
Xylenes, Total	0.010	U	0.010		mg/L			03/31/18 19:54	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-10

Date Collected: 03/21/18 19:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-16

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	102		73 - 131		03/31/18 19:54	10
4-Bromofluorobenzene (Surr)	98		80 - 120		03/31/18 19:54	10
Dibromofluoromethane (Surr)	101		80 - 122		03/31/18 19:54	10
Toluene-d8 (Surr)	96		80 - 120		03/31/18 19:54	10

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: Dup-2

Lab Sample ID: 680-150292-17

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,1-Dichloroethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,1-Dichloroethene	0.13		0.0050		mg/L			03/31/18 17:41	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			03/31/18 17:41	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			03/31/18 17:41	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,2-Dichloroethane	0.053		0.0050		mg/L			03/31/18 17:41	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
2-Butanone	0.050	U	0.050		mg/L			03/31/18 17:41	5
2-Hexanone	0.050	U	0.050		mg/L			03/31/18 17:41	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			03/31/18 17:41	5
Acetone	0.050	U	0.050		mg/L			03/31/18 17:41	5
Benzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Bromoform	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Bromomethane	0.025	U	0.025		mg/L			03/31/18 17:41	5
Carbon disulfide	0.010	U	0.010		mg/L			03/31/18 17:41	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Chlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Chloroethane	0.025	U	0.025		mg/L			03/31/18 17:41	5
Chloroform	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Chloromethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
cis-1,2-Dichloroethene	0.24		0.0050		mg/L			03/31/18 17:41	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Cyclohexane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Ethylbenzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Methyl acetate	0.025	U	0.025		mg/L			03/31/18 17:41	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			03/31/18 17:41	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Methylene Chloride	0.025	U	0.025		mg/L			03/31/18 17:41	5
Naphthalene	0.025	U	0.025		mg/L			03/31/18 17:41	5
Styrene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Tetrachloroethene	0.079		0.0050		mg/L			03/31/18 17:41	5
Toluene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Trichloroethene	0.17		0.0050		mg/L			03/31/18 17:41	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Vinyl chloride	0.0050	U	0.0050		mg/L			03/31/18 17:41	5
Xylenes, Total	0.0050	U	0.0050		mg/L			03/31/18 17:41	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: Dup-2

Date Collected: 03/21/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-17

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	107		73 - 131		03/31/18 17:41	5
4-Bromofluorobenzene (Surr)	98		80 - 120		03/31/18 17:41	5
Dibromofluoromethane (Surr)	104		80 - 122		03/31/18 17:41	5
Toluene-d8 (Surr)	96		80 - 120		03/31/18 17:41	5

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-6

Lab Sample ID: 680-150292-18

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,1,2,2-Tetrachloroethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,1,2-Trichloroethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,1-Dichloroethane	0.0023		0.0020		mg/L			03/31/18 16:57	2
1,1-Dichloroethene	0.0046		0.0020		mg/L			03/31/18 16:57	2
1,2,4-Trichlorobenzene	0.010	U	0.010		mg/L			03/31/18 16:57	2
1,2-Dibromo-3-Chloropropane	0.010	U	0.010		mg/L			03/31/18 16:57	2
1,2-Dibromoethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,2-Dichlorobenzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,2-Dichloroethane	0.0085		0.0020		mg/L			03/31/18 16:57	2
1,2-Dichloropropane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,3-Dichlorobenzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
1,4-Dichlorobenzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
2-Butanone	0.020	U	0.020		mg/L			03/31/18 16:57	2
2-Hexanone	0.020	U	0.020		mg/L			03/31/18 16:57	2
4-Methyl-2-pentanone	0.020	U	0.020		mg/L			03/31/18 16:57	2
Acetone	0.020	U	0.020		mg/L			03/31/18 16:57	2
Benzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Bromodichloromethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Bromoform	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Bromomethane	0.010	U	0.010		mg/L			03/31/18 16:57	2
Carbon disulfide	0.0040	U	0.0040		mg/L			03/31/18 16:57	2
Carbon tetrachloride	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Chlorobenzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Chloroethane	0.010	U	0.010		mg/L			03/31/18 16:57	2
Chloroform	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Chloromethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
cis-1,2-Dichloroethene	0.023		0.0020		mg/L			03/31/18 16:57	2
cis-1,3-Dichloropropene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Cyclohexane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Dibromochloromethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Dichlorodifluoromethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Ethylbenzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Isopropylbenzene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Methyl acetate	0.010	U	0.010		mg/L			03/31/18 16:57	2
Methyl tert-butyl ether	0.020	U	0.020		mg/L			03/31/18 16:57	2
Methylcyclohexane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Methylene Chloride	0.010	U	0.010		mg/L			03/31/18 16:57	2
Naphthalene	0.010	U	0.010		mg/L			03/31/18 16:57	2
Styrene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Tetrachloroethene	0.019		0.0020		mg/L			03/31/18 16:57	2
Toluene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
trans-1,2-Dichloroethene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
trans-1,3-Dichloropropene	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Trichloroethene	0.082		0.0020		mg/L			03/31/18 16:57	2
Trichlorofluoromethane	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Vinyl chloride	0.0020	U	0.0020		mg/L			03/31/18 16:57	2
Xylenes, Total	0.0020	U	0.0020		mg/L			03/31/18 16:57	2

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-6
Date Collected: 03/21/18 14:55
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-18
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	115		73 - 131		03/31/18 16:57	2
4-Bromofluorobenzene (Surr)	96		80 - 120		03/31/18 16:57	2
Dibromofluoromethane (Surr)	109		80 - 122		03/31/18 16:57	2
Toluene-d8 (Surr)	93		80 - 120		03/31/18 16:57	2



Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-11

Lab Sample ID: 680-150292-19

Date Collected: 03/21/18 16:10

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 14:00	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 14:00	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 14:00	1
Acetone	0.010	U	0.010		mg/L			03/31/18 14:00	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 14:00	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
Chloroform	0.0014		0.0010		mg/L			03/31/18 14:00	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 14:00	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 14:00	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 14:00	1
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 14:00	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-11

Date Collected: 03/21/18 16:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-19

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		03/31/18 14:00	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 14:00	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 14:00	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 14:00	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-7

Lab Sample ID: 680-150292-20

Date Collected: 03/21/18 17:10

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,1-Dichloroethane	0.0084		0.0050		mg/L			03/31/18 18:25	5
1,1-Dichloroethene	0.034		0.0050		mg/L			03/31/18 18:25	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			03/31/18 18:25	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			03/31/18 18:25	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,2-Dichloroethane	0.054		0.0050		mg/L			03/31/18 18:25	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
2-Butanone	0.050	U	0.050		mg/L			03/31/18 18:25	5
2-Hexanone	0.050	U	0.050		mg/L			03/31/18 18:25	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			03/31/18 18:25	5
Acetone	0.050	U	0.050		mg/L			03/31/18 18:25	5
Benzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Bromoform	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Bromomethane	0.025	U	0.025		mg/L			03/31/18 18:25	5
Carbon disulfide	0.010	U	0.010		mg/L			03/31/18 18:25	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Chlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Chloroethane	0.025	U	0.025		mg/L			03/31/18 18:25	5
Chloroform	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Chloromethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
cis-1,2-Dichloroethene	0.072		0.0050		mg/L			03/31/18 18:25	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Cyclohexane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Ethylbenzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Methyl acetate	0.025	U	0.025		mg/L			03/31/18 18:25	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			03/31/18 18:25	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Methylene Chloride	0.025	U	0.025		mg/L			03/31/18 18:25	5
Naphthalene	0.025	U	0.025		mg/L			03/31/18 18:25	5
Styrene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Tetrachloroethene	0.11		0.0050		mg/L			03/31/18 18:25	5
Toluene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Trichloroethene	0.35		0.0050		mg/L			03/31/18 18:25	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Vinyl chloride	0.0050	U	0.0050		mg/L			03/31/18 18:25	5
Xylenes, Total	0.0050	U	0.0050		mg/L			03/31/18 18:25	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-7
Date Collected: 03/21/18 17:10
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-20
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	107		73 - 131		03/31/18 18:25	5
4-Bromofluorobenzene (Surr)	96		80 - 120		03/31/18 18:25	5
Dibromofluoromethane (Surr)	105		80 - 122		03/31/18 18:25	5
Toluene-d8 (Surr)	93		80 - 120		03/31/18 18:25	5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: Dup-1
Date Collected: 03/21/18 00:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0024		0.0010		mg/L			04/01/18 23:35	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
1,1,2-Trichloroethane	0.0013		0.0010		mg/L			04/01/18 23:35	1
1,1-Dichloroethane	0.0059		0.0010		mg/L			04/01/18 23:35	1
1,1-Dichloroethene	0.021		0.0010		mg/L			04/01/18 23:35	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
1,2-Dichlorobenzene	0.018		0.0010		mg/L			04/01/18 23:35	1
1,2-Dichloroethane	0.0059		0.0010		mg/L			04/01/18 23:35	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
1,3-Dichlorobenzene	0.0045		0.0010		mg/L			04/01/18 23:35	1
1,4-Dichlorobenzene	0.0037		0.0010		mg/L			04/01/18 23:35	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 23:35	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 23:35	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 23:35	1
Acetone	0.010	U	0.010		mg/L			04/01/18 23:35	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 23:35	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Chlorobenzene	0.0013		0.0010		mg/L			04/01/18 23:35	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
cis-1,2-Dichloroethene	0.12		0.0010		mg/L			04/01/18 23:35	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 23:35	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 23:35	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Tetrachloroethene	0.10		0.0010		mg/L			04/01/18 23:35	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Trichloroethene	0.11		0.0010		mg/L			04/01/18 23:35	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 23:35	1
Vinyl chloride	0.0079		0.0010		mg/L			04/01/18 23:35	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 23:35	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: Dup-1

Date Collected: 03/21/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-21

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	104		73 - 131		04/01/18 23:35	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/01/18 23:35	1
Dibromofluoromethane (Surr)	104		80 - 122		04/01/18 23:35	1
Toluene-d8 (Surr)	94		80 - 120		04/01/18 23:35	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150292-22

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 17:25	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 17:25	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 17:25	1
Acetone	0.010	U	0.010		mg/L			04/01/18 17:25	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 17:25	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 17:25	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 17:25	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 17:25	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 17:25	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150292-22

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/01/18 17:25	1
4-Bromofluorobenzene (Surr)	99		80 - 120		04/01/18 17:25	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 17:25	1
Toluene-d8 (Surr)	99		80 - 120		04/01/18 17:25	1

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (73-131)	BFB (80-120)	DBFM (80-122)	TOL (80-120)
680-150292-1	WMW-2	94	97	96	99
680-150292-2	WMW-1	94	98	97	99
680-150292-3	YMW-19	94	91	98	96
680-150292-4	YMW-4	95	97	97	99
680-150292-5	YMW-1	95	91	99	95
680-150292-6	YMW-2	94	96	97	99
680-150292-6 - DL	YMW-2	104	96	103	95
680-150292-7	YMW-14	95	91	100	96
680-150292-8	YMW-17	95	97	97	99
680-150292-9	YMW-8	95	95	96	99
680-150292-10	YMW-13	112	95	107	92
680-150292-11	YMW-15	100	96	98	98
680-150292-12	YMW-5	100	96	101	96
680-150292-13	YMW-18	94	97	97	99
680-150292-14	YMW-9	93	96	97	98
680-150292-15	YMW-16	107	97	104	95
680-150292-16	YMW-10	102	98	101	96
680-150292-17	Dup-2	107	98	104	96
680-150292-18	YMW-6	115	96	109	93
680-150292-19	YMW-11	96	97	97	99
680-150292-20	YMW-7	107	96	105	93
680-150292-21	Dup-1	104	96	104	94
680-150292-22	Trip Blank	92	99	97	99
LCS 680-518236/4	Lab Control Sample	100	98	101	99
LCS 680-518315/4	Lab Control Sample	96	97	101	98
LCS 680-518342/3	Lab Control Sample	97	95	97	97
LCS 680-518345/4	Lab Control Sample	100	98	100	101
LCSD 680-518236/5	Lab Control Sample Dup	99	98	101	100
LCSD 680-518315/5	Lab Control Sample Dup	97	96	101	98
LCSD 680-518342/4	Lab Control Sample Dup	95	96	98	99
LCSD 680-518345/5	Lab Control Sample Dup	96	97	99	101
MB 680-518236/10	Method Blank	95	97	97	99
MB 680-518315/8	Method Blank	92	95	97	101
MB 680-518342/7	Method Blank	95	92	99	96
MB 680-518345/8	Method Blank	92	95	96	100

Surrogate Legend

- DCA = 1,2-Dichloroethane-d4 (Surr)
- BFB = 4-Bromofluorobenzene (Surr)
- DBFM = Dibromofluoromethane (Surr)
- TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: MB 680-518236/10

Matrix: Water

Analysis Batch: 518236

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
2-Butanone	0.010	U	0.010		mg/L			03/31/18 12:54	1
2-Hexanone	0.010	U	0.010		mg/L			03/31/18 12:54	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			03/31/18 12:54	1
Acetone	0.010	U	0.010		mg/L			03/31/18 12:54	1
Benzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Bromoform	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Bromomethane	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
Carbon disulfide	0.0020	U	0.0020		mg/L			03/31/18 12:54	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Chlorobenzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Chloroethane	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
Chloroform	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Chloromethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Cyclohexane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Ethylbenzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Methyl acetate	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			03/31/18 12:54	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Methylene Chloride	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
Naphthalene	0.0050	U	0.0050		mg/L			03/31/18 12:54	1
Styrene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Toluene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Trichloroethene	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			03/31/18 12:54	1
Vinyl chloride	0.0010	U	0.0010		mg/L			03/31/18 12:54	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: MB 680-518236/10

Matrix: Water

Analysis Batch: 518236

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.0010	U	0.0010		mg/L			03/31/18 12:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		03/31/18 12:54	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/31/18 12:54	1
Dibromofluoromethane (Surr)	97		80 - 122		03/31/18 12:54	1
Toluene-d8 (Surr)	99		80 - 120		03/31/18 12:54	1

Lab Sample ID: LCS 680-518236/4

Matrix: Water

Analysis Batch: 518236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0518		mg/L		104	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0472		mg/L		94	75 - 128
1,1,2-Trichloroethane	0.0500	0.0523		mg/L		105	80 - 120
1,1-Dichloroethane	0.0500	0.0498		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0496		mg/L		99	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0526		mg/L		105	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0535		mg/L		107	74 - 120
1,2-Dibromoethane	0.0500	0.0522		mg/L		104	75 - 126
1,2-Dichlorobenzene	0.0500	0.0503		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	72 - 128
1,2-Dichloropropane	0.0500	0.0526		mg/L		105	80 - 120
1,3-Dichlorobenzene	0.0500	0.0503		mg/L		101	80 - 120
1,4-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120
2-Butanone	0.250	0.270		mg/L		108	79 - 125
2-Hexanone	0.250	0.273		mg/L		109	80 - 131
4-Methyl-2-pentanone	0.250	0.266		mg/L		106	80 - 134
Acetone	0.250	0.268		mg/L		107	68 - 132
Benzene	0.0500	0.0493		mg/L		99	80 - 120
Bromodichloromethane	0.0500	0.0520		mg/L		104	80 - 120
Bromoform	0.0500	0.0523		mg/L		105	52 - 122
Bromomethane	0.0500	0.0479		mg/L		96	43 - 146
Carbon disulfide	0.0500	0.0463		mg/L		93	77 - 129
Carbon tetrachloride	0.0500	0.0489		mg/L		98	67 - 125
Chlorobenzene	0.0500	0.0496		mg/L		99	80 - 120
Chloroethane	0.0500	0.0465		mg/L		93	48 - 145
Chloroform	0.0500	0.0505		mg/L		101	80 - 120
Chloromethane	0.0500	0.0424		mg/L		85	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0502		mg/L		100	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0560		mg/L		112	80 - 129
Cyclohexane	0.0500	0.0488		mg/L		98	80 - 132
Dibromochloromethane	0.0500	0.0536		mg/L		107	68 - 120
Dichlorodifluoromethane	0.0500	0.0411		mg/L		82	70 - 137
Ethylbenzene	0.0500	0.0503		mg/L		101	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCS 680-518236/4

Matrix: Water

Analysis Batch: 518236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Isopropylbenzene	0.0500	0.0512		mg/L		102	79 - 126	
Methyl acetate	0.100	0.100		mg/L		100	73 - 139	
Methyl tert-butyl ether	0.0500	0.0526		mg/L		105	80 - 122	
Methylcyclohexane	0.0500	0.0477		mg/L		95	80 - 138	
Methylene Chloride	0.0500	0.0492		mg/L		98	80 - 120	
Naphthalene	0.0500	0.0615		mg/L		123	61 - 136	
Styrene	0.0500	0.0511		mg/L		102	80 - 126	
Tetrachloroethene	0.0500	0.0488		mg/L		98	71 - 123	
Toluene	0.0500	0.0515		mg/L		103	80 - 120	
trans-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120	
trans-1,3-Dichloropropene	0.0500	0.0537		mg/L		107	80 - 128	
Trichloroethene	0.0500	0.0488		mg/L		98	80 - 120	
Trichlorofluoromethane	0.0500	0.0472		mg/L		94	58 - 127	
Vinyl chloride	0.0500	0.0418		mg/L		84	80 - 129	
Xylenes, Total	0.100	0.102		mg/L		102	80 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		73 - 131
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 680-518236/5

Matrix: Water

Analysis Batch: 518236

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0503		mg/L		101	80 - 120	0	20	
1,1,1,2-Tetrachloroethane	0.0500	0.0514		mg/L		103	76 - 126	1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0475		mg/L		95	75 - 128	1	20	
1,1,2-Trichloroethane	0.0500	0.0520		mg/L		104	80 - 120	1	20	
1,1-Dichloroethane	0.0500	0.0498		mg/L		100	80 - 120	0	20	
1,1-Dichloroethene	0.0500	0.0497		mg/L		99	80 - 120	0	20	
1,2,4-Trichlorobenzene	0.0500	0.0530		mg/L		106	71 - 126	1	20	
1,2-Dibromo-3-Chloropropane	0.0500	0.0532		mg/L		106	74 - 120	1	20	
1,2-Dibromoethane	0.0500	0.0507		mg/L		101	75 - 126	3	20	
1,2-Dichlorobenzene	0.0500	0.0503		mg/L		101	80 - 120	0	20	
1,2-Dichloroethane	0.0500	0.0494		mg/L		99	72 - 128	4	50	
1,2-Dichloropropane	0.0500	0.0517		mg/L		103	80 - 120	2	20	
1,3-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120	1	20	
1,4-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120	0	20	
2-Butanone	0.250	0.264		mg/L		106	79 - 125	2	20	
2-Hexanone	0.250	0.262		mg/L		105	80 - 131	4	20	
4-Methyl-2-pentanone	0.250	0.257		mg/L		103	80 - 134	3	20	
Acetone	0.250	0.257		mg/L		103	68 - 132	4	30	
Benzene	0.0500	0.0493		mg/L		99	80 - 120	0	20	
Bromodichloromethane	0.0500	0.0507		mg/L		101	80 - 120	2	20	

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCSD 680-518236/5

Matrix: Water

Analysis Batch: 518236

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.0500	0.0520		mg/L		104	52 - 122	1	20
Bromomethane	0.0500	0.0487		mg/L		97	43 - 146	2	20
Carbon disulfide	0.0500	0.0468		mg/L		94	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0492		mg/L		98	67 - 125	1	20
Chlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0463		mg/L		93	48 - 145	0	20
Chloroform	0.0500	0.0500		mg/L		100	80 - 120	1	20
Chloromethane	0.0500	0.0420		mg/L		84	76 - 149	1	30
cis-1,2-Dichloroethene	0.0500	0.0499		mg/L		100	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0555		mg/L		111	80 - 129	1	20
Cyclohexane	0.0500	0.0496		mg/L		99	80 - 132	2	20
Dibromochloromethane	0.0500	0.0529		mg/L		106	68 - 120	1	20
Dichlorodifluoromethane	0.0500	0.0401		mg/L		80	70 - 137	3	40
Ethylbenzene	0.0500	0.0507		mg/L		101	80 - 120	1	20
Isopropylbenzene	0.0500	0.0522		mg/L		104	79 - 126	2	20
Methyl acetate	0.100	0.0994		mg/L		99	73 - 139	1	20
Methyl tert-butyl ether	0.0500	0.0514		mg/L		103	80 - 122	2	20
Methylcyclohexane	0.0500	0.0476		mg/L		95	80 - 138	0	20
Methylene Chloride	0.0500	0.0491		mg/L		98	80 - 120	0	20
Naphthalene	0.0500	0.0612		mg/L		122	61 - 136	1	20
Styrene	0.0500	0.0513		mg/L		103	80 - 126	0	20
Tetrachloroethene	0.0500	0.0485		mg/L		97	71 - 123	1	20
Toluene	0.0500	0.0510		mg/L		102	80 - 120	1	20
trans-1,2-Dichloroethene	0.0500	0.0509		mg/L		102	80 - 120	0	20
trans-1,3-Dichloropropene	0.0500	0.0532		mg/L		106	80 - 128	1	30
Trichloroethene	0.0500	0.0492		mg/L		98	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0460		mg/L		92	58 - 127	2	20
Vinyl chloride	0.0500	0.0417		mg/L		83	80 - 129	0	20
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120	1	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		73 - 131
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: MB 680-518315/8

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/01/18 16:11	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: MB 680-518315/8

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
2-Butanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
2-Hexanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/01/18 16:11	1
Acetone	0.010	U	0.010		mg/L			04/01/18 16:11	1
Benzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromoform	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Bromomethane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/01/18 16:11	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chloroethane	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Chloroform	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Chloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/01/18 16:11	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Naphthalene	0.0050	U	0.0050		mg/L			04/01/18 16:11	1
Styrene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Toluene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/01/18 16:11	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/01/18 16:11	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/01/18 16:11	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/01/18 16:11	1
Dibromofluoromethane (Surr)	97		80 - 122		04/01/18 16:11	1
Toluene-d8 (Surr)	101		80 - 120		04/01/18 16:11	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Lab Sample ID: LCS 680-518315/4

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0497		mg/L		99	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0531		mg/L		106	75 - 128
1,1,2-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120
1,1-Dichloroethane	0.0500	0.0498		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0518		mg/L		104	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0507		mg/L		101	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0508		mg/L		102	74 - 120
1,2-Dibromoethane	0.0500	0.0504		mg/L		101	75 - 126
1,2-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0492		mg/L		98	72 - 128
1,2-Dichloropropane	0.0500	0.0492		mg/L		98	80 - 120
1,3-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
2-Butanone	0.250	0.252		mg/L		101	79 - 125
2-Hexanone	0.250	0.239		mg/L		95	80 - 131
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134
Acetone	0.250	0.222		mg/L		89	68 - 132
Benzene	0.0500	0.0499		mg/L		100	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0516		mg/L		103	52 - 122
Bromomethane	0.0500	0.0565		mg/L		113	43 - 146
Carbon disulfide	0.0500	0.0501		mg/L		100	77 - 129
Carbon tetrachloride	0.0500	0.0532		mg/L		106	67 - 125
Chlorobenzene	0.0500	0.0497		mg/L		99	80 - 120
Chloroethane	0.0500	0.0533		mg/L		107	48 - 145
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0512		mg/L		102	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 129
Cyclohexane	0.0500	0.0508		mg/L		102	80 - 132
Dibromochloromethane	0.0500	0.0525		mg/L		105	68 - 120
Dichlorodifluoromethane	0.0500	0.0514		mg/L		103	70 - 137
Ethylbenzene	0.0500	0.0498		mg/L		100	80 - 120
Isopropylbenzene	0.0500	0.0507		mg/L		101	79 - 126
Methyl acetate	0.100	0.0936		mg/L		94	73 - 139
Methyl tert-butyl ether	0.0500	0.0507		mg/L		101	80 - 122
Methylcyclohexane	0.0500	0.0521		mg/L		104	80 - 138
Methylene Chloride	0.0500	0.0519		mg/L		104	80 - 120
Naphthalene	0.0500	0.0506		mg/L		101	61 - 136
Styrene	0.0500	0.0513		mg/L		103	80 - 126
Tetrachloroethene	0.0500	0.0520		mg/L		104	71 - 123
Toluene	0.0500	0.0507		mg/L		101	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0527		mg/L		105	80 - 128
Trichloroethene	0.0500	0.0504		mg/L		101	80 - 120
Trichlorofluoromethane	0.0500	0.0493		mg/L		99	58 - 127
Vinyl chloride	0.0500	0.0520		mg/L		104	80 - 129
Xylenes, Total	0.100	0.100		mg/L		100	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCS 680-518315/4

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-518315/5

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120	0	20
1,1,2,2-Tetrachloroethane	0.0500	0.0494		mg/L		99	76 - 126	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0520		mg/L		104	75 - 128	2	20
1,1,2-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120	1	20
1,1-Dichloroethane	0.0500	0.0497		mg/L		99	80 - 120	0	20
1,1-Dichloroethene	0.0500	0.0506		mg/L		101	80 - 120	2	20
1,2,4-Trichlorobenzene	0.0500	0.0524		mg/L		105	71 - 126	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0497		mg/L		99	74 - 120	2	20
1,2-Dibromoethane	0.0500	0.0506		mg/L		101	75 - 126	1	20
1,2-Dichlorobenzene	0.0500	0.0494		mg/L		99	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0483		mg/L		97	72 - 128	2	50
1,2-Dichloropropane	0.0500	0.0499		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0486		mg/L		97	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120	0	20
2-Butanone	0.250	0.250		mg/L		100	79 - 125	1	20
2-Hexanone	0.250	0.236		mg/L		94	80 - 131	1	20
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134	0	20
Acetone	0.250	0.220		mg/L		88	68 - 132	1	30
Benzene	0.0500	0.0496		mg/L		99	80 - 120	1	20
Bromodichloromethane	0.0500	0.0507		mg/L		101	80 - 120	0	20
Bromoform	0.0500	0.0516		mg/L		103	52 - 122	0	20
Bromomethane	0.0500	0.0525		mg/L		105	43 - 146	7	20
Carbon disulfide	0.0500	0.0494		mg/L		99	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0518		mg/L		104	67 - 125	3	20
Chlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0519		mg/L		104	48 - 145	3	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0503		mg/L		101	76 - 149	2	30
cis-1,2-Dichloroethene	0.0500	0.0500		mg/L		100	80 - 120	2	20
cis-1,3-Dichloropropene	0.0500	0.0526		mg/L		105	80 - 129	1	20
Cyclohexane	0.0500	0.0496		mg/L		99	80 - 132	2	20
Dibromochloromethane	0.0500	0.0524		mg/L		105	68 - 120	0	20
Dichlorodifluoromethane	0.0500	0.0493		mg/L		99	70 - 137	4	40
Ethylbenzene	0.0500	0.0491		mg/L		98	80 - 120	1	20
Isopropylbenzene	0.0500	0.0503		mg/L		101	79 - 126	1	20
Methyl acetate	0.100	0.0932		mg/L		93	73 - 139	0	20
Methyl tert-butyl ether	0.0500	0.0508		mg/L		102	80 - 122	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCSD 680-518315/5

Matrix: Water

Analysis Batch: 518315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Methylcyclohexane	0.0500	0.0508		mg/L		102	80 - 138	3		20
Methylene Chloride	0.0500	0.0521		mg/L		104	80 - 120	0		20
Naphthalene	0.0500	0.0500		mg/L		100	61 - 136	1		20
Styrene	0.0500	0.0512		mg/L		102	80 - 126	0		20
Tetrachloroethene	0.0500	0.0515		mg/L		103	71 - 123	1		20
Toluene	0.0500	0.0506		mg/L		101	80 - 120	0		20
trans-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120	1		20
trans-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 128	1		30
Trichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1		20
Trichlorofluoromethane	0.0500	0.0475		mg/L		95	58 - 127	4		20
Vinyl chloride	0.0500	0.0508		mg/L		102	80 - 129	2		20
Xylenes, Total	0.100	0.0997		mg/L		100	80 - 120	0		20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 680-518342/7

Matrix: Water

Analysis Batch: 518342

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
2-Butanone	0.010	U	0.010		mg/L			04/02/18 11:36	1
2-Hexanone	0.010	U	0.010		mg/L			04/02/18 11:36	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/02/18 11:36	1
Acetone	0.010	U	0.010		mg/L			04/02/18 11:36	1
Benzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Bromoform	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Bromomethane	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/02/18 11:36	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/02/18 11:36	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: MB 680-518342/7

Matrix: Water

Analysis Batch: 518342

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Chloroethane	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
Chloroform	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Chloromethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/02/18 11:36	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
Naphthalene	0.0050	U	0.0050		mg/L			04/02/18 11:36	1
Styrene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Toluene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/02/18 11:36	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/02/18 11:36	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		04/02/18 11:36	1
4-Bromofluorobenzene (Surr)	92		80 - 120		04/02/18 11:36	1
Dibromofluoromethane (Surr)	99		80 - 122		04/02/18 11:36	1
Toluene-d8 (Surr)	96		80 - 120		04/02/18 11:36	1

Lab Sample ID: LCS 680-518342/3

Matrix: Water

Analysis Batch: 518342

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	0.0500	0.0488		mg/L		98	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0489		mg/L		98	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0467		mg/L		93	75 - 128
1,1,2-Trichloroethane	0.0500	0.0509		mg/L		102	80 - 120
1,1-Dichloroethane	0.0500	0.0494		mg/L		99	80 - 120
1,1-Dichloroethene	0.0500	0.0512		mg/L		102	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0543		mg/L		109	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0502		mg/L		100	74 - 120
1,2-Dibromoethane	0.0500	0.0488		mg/L		98	75 - 126
1,2-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCS 680-518342/3

Matrix: Water

Analysis Batch: 518342

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0487		mg/L		97	72 - 128
1,2-Dichloropropane	0.0500	0.0518		mg/L		104	80 - 120
1,3-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120
2-Butanone	0.250	0.243		mg/L		97	79 - 125
2-Hexanone	0.250	0.233		mg/L		93	80 - 131
4-Methyl-2-pentanone	0.250	0.238		mg/L		95	80 - 134
Acetone	0.250	0.240		mg/L		96	68 - 132
Benzene	0.0500	0.0481		mg/L		96	80 - 120
Bromodichloromethane	0.0500	0.0506		mg/L		101	80 - 120
Bromoform	0.0500	0.0506		mg/L		101	52 - 122
Bromomethane	0.0500	0.0549		mg/L		110	43 - 146
Carbon disulfide	0.0500	0.0484		mg/L		97	77 - 129
Carbon tetrachloride	0.0500	0.0483		mg/L		97	67 - 125
Chlorobenzene	0.0500	0.0503		mg/L		101	80 - 120
Chloroethane	0.0500	0.0579		mg/L		116	48 - 145
Chloroform	0.0500	0.0488		mg/L		98	80 - 120
Chloromethane	0.0500	0.0412		mg/L		82	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0486		mg/L		97	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0530		mg/L		106	80 - 129
Cyclohexane	0.0500	0.0472		mg/L		94	80 - 132
Dibromochloromethane	0.0500	0.0510		mg/L		102	68 - 120
Dichlorodifluoromethane	0.0500	0.0442		mg/L		88	70 - 137
Ethylbenzene	0.0500	0.0490		mg/L		98	80 - 120
Isopropylbenzene	0.0500	0.0496		mg/L		99	79 - 126
Methyl acetate	0.100	0.103		mg/L		103	73 - 139
Methyl tert-butyl ether	0.0500	0.0496		mg/L		99	80 - 122
Methylcyclohexane	0.0500	0.0471		mg/L		94	80 - 138
Methylene Chloride	0.0500	0.0493		mg/L		99	80 - 120
Naphthalene	0.0500	0.0520		mg/L		104	61 - 136
Styrene	0.0500	0.0485		mg/L		97	80 - 126
Tetrachloroethene	0.0500	0.0497		mg/L		99	71 - 123
Toluene	0.0500	0.0494		mg/L		99	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0495		mg/L		99	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 128
Trichloroethene	0.0500	0.0498		mg/L		100	80 - 120
Trichlorofluoromethane	0.0500	0.0545		mg/L		109	58 - 127
Vinyl chloride	0.0500	0.0544		mg/L		109	80 - 129
Xylenes, Total	0.100	0.0987		mg/L		99	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	97		80 - 122
Toluene-d8 (Surr)	97		80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCSD 680-518342/4

Matrix: Water

Analysis Batch: 518342

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0489		mg/L		98	80 - 120	0	20
1,1,2,2-Tetrachloroethane	0.0500	0.0494		mg/L		99	76 - 126	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0494		mg/L		99	75 - 128	6	20
1,1,1,2-Trichloroethane	0.0500	0.0515		mg/L		103	80 - 120	1	20
1,1-Dichloroethane	0.0500	0.0498		mg/L		100	80 - 120	1	20
1,1-Dichloroethene	0.0500	0.0521		mg/L		104	80 - 120	2	20
1,2,4-Trichlorobenzene	0.0500	0.0539		mg/L		108	71 - 126	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0509		mg/L		102	74 - 120	1	20
1,2-Dibromoethane	0.0500	0.0488		mg/L		98	75 - 126	0	20
1,2-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0484		mg/L		97	72 - 128	1	50
1,2-Dichloropropane	0.0500	0.0518		mg/L		104	80 - 120	0	20
1,3-Dichlorobenzene	0.0500	0.0507		mg/L		101	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	0	20
2-Butanone	0.250	0.243		mg/L		97	79 - 125	0	20
2-Hexanone	0.250	0.235		mg/L		94	80 - 131	1	20
4-Methyl-2-pentanone	0.250	0.240		mg/L		96	80 - 134	1	20
Acetone	0.250	0.233		mg/L		93	68 - 132	3	30
Benzene	0.0500	0.0489		mg/L		98	80 - 120	2	20
Bromodichloromethane	0.0500	0.0504		mg/L		101	80 - 120	0	20
Bromoform	0.0500	0.0513		mg/L		103	52 - 122	1	20
Bromomethane	0.0500	0.0519		mg/L		104	43 - 146	6	20
Carbon disulfide	0.0500	0.0486		mg/L		97	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0492		mg/L		98	67 - 125	2	20
Chlorobenzene	0.0500	0.0516		mg/L		103	80 - 120	3	20
Chloroethane	0.0500	0.0577		mg/L		115	48 - 145	0	20
Chloroform	0.0500	0.0494		mg/L		99	80 - 120	1	20
Chloromethane	0.0500	0.0422		mg/L		84	76 - 149	3	30
cis-1,2-Dichloroethene	0.0500	0.0495		mg/L		99	80 - 120	2	20
cis-1,3-Dichloropropene	0.0500	0.0530		mg/L		106	80 - 129	0	20
Cyclohexane	0.0500	0.0480		mg/L		96	80 - 132	2	20
Dibromochloromethane	0.0500	0.0514		mg/L		103	68 - 120	1	20
Dichlorodifluoromethane	0.0500	0.0462		mg/L		92	70 - 137	4	40
Ethylbenzene	0.0500	0.0499		mg/L		100	80 - 120	2	20
Isopropylbenzene	0.0500	0.0506		mg/L		101	79 - 126	2	20
Methyl acetate	0.100	0.0997		mg/L		100	73 - 139	3	20
Methyl tert-butyl ether	0.0500	0.0493		mg/L		99	80 - 122	1	20
Methylcyclohexane	0.0500	0.0482		mg/L		96	80 - 138	2	20
Methylene Chloride	0.0500	0.0496		mg/L		99	80 - 120	0	20
Naphthalene	0.0500	0.0521		mg/L		104	61 - 136	0	20
Styrene	0.0500	0.0493		mg/L		99	80 - 126	2	20
Tetrachloroethene	0.0500	0.0503		mg/L		101	71 - 123	1	20
Toluene	0.0500	0.0498		mg/L		100	80 - 120	1	20
trans-1,2-Dichloroethene	0.0500	0.0505		mg/L		101	80 - 120	2	20
trans-1,3-Dichloropropene	0.0500	0.0505		mg/L		101	80 - 128	1	30
Trichloroethene	0.0500	0.0507		mg/L		101	80 - 120	2	20
Trichlorofluoromethane	0.0500	0.0555		mg/L		111	58 - 127	2	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCSD 680-518342/4

Matrix: Water

Analysis Batch: 518342

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	0.0500	0.0494		mg/L		99	80 - 129	10	20
Xylenes, Total	0.100	0.101		mg/L		101	80 - 120	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	95		73 - 131
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	98		80 - 122
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: MB 680-518345/8

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
2-Butanone	0.010	U	0.010		mg/L			04/02/18 14:23	1
2-Hexanone	0.010	U	0.010		mg/L			04/02/18 14:23	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/02/18 14:23	1
Acetone	0.010	U	0.010		mg/L			04/02/18 14:23	1
Benzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Bromoform	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Bromomethane	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/02/18 14:23	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Chloroethane	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
Chloroform	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Chloromethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: MB 680-518345/8

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/02/18 14:23	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
Naphthalene	0.0050	U	0.0050		mg/L			04/02/18 14:23	1
Styrene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Toluene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/02/18 14:23	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/02/18 14:23	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/02/18 14:23	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/02/18 14:23	1
Dibromofluoromethane (Surr)	96		80 - 122		04/02/18 14:23	1
Toluene-d8 (Surr)	100		80 - 120		04/02/18 14:23	1

Lab Sample ID: LCS 680-518345/4

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	0.0500	0.0507		mg/L		101	80 - 120
1,1,1,2-Tetrachloroethane	0.0500	0.0503		mg/L		101	76 - 126
1,1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0480		mg/L		96	75 - 128
1,1,1,2-Trichloroethane	0.0500	0.0511		mg/L		102	80 - 120
1,1-Dichloroethane	0.0500	0.0503		mg/L		101	80 - 120
1,1-Dichloroethene	0.0500	0.0482		mg/L		96	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0535		mg/L		107	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0530		mg/L		106	74 - 120
1,2-Dibromoethane	0.0500	0.0506		mg/L		101	75 - 126
1,2-Dichlorobenzene	0.0500	0.0495		mg/L		99	80 - 120
1,2-Dichloroethane	0.0500	0.0496		mg/L		99	72 - 128
1,2-Dichloropropane	0.0500	0.0522		mg/L		104	80 - 120
1,3-Dichlorobenzene	0.0500	0.0507		mg/L		101	80 - 120
1,4-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
2-Butanone	0.250	0.261		mg/L		104	79 - 125
2-Hexanone	0.250	0.263		mg/L		105	80 - 131
4-Methyl-2-pentanone	0.250	0.259		mg/L		103	80 - 134
Acetone	0.250	0.269		mg/L		108	68 - 132
Benzene	0.0500	0.0492		mg/L		98	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCS 680-518345/4

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	0.0500	0.0528		mg/L		106	52 - 122
Bromomethane	0.0500	0.0522		mg/L		104	43 - 146
Carbon disulfide	0.0500	0.0478		mg/L		96	77 - 129
Carbon tetrachloride	0.0500	0.0494		mg/L		99	67 - 125
Chlorobenzene	0.0500	0.0503		mg/L		101	80 - 120
Chloroethane	0.0500	0.0482		mg/L		96	48 - 145
Chloroform	0.0500	0.0497		mg/L		99	80 - 120
Chloromethane	0.0500	0.0430		mg/L		86	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0510		mg/L		102	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0557		mg/L		111	80 - 129
Cyclohexane	0.0500	0.0495		mg/L		99	80 - 132
Dibromochloromethane	0.0500	0.0531		mg/L		106	68 - 120
Dichlorodifluoromethane	0.0500	0.0389		mg/L		78	70 - 137
Ethylbenzene	0.0500	0.0508		mg/L		102	80 - 120
Isopropylbenzene	0.0500	0.0527		mg/L		105	79 - 126
Methyl acetate	0.100	0.0982		mg/L		98	73 - 139
Methyl tert-butyl ether	0.0500	0.0510		mg/L		102	80 - 122
Methylcyclohexane	0.0500	0.0495		mg/L		99	80 - 138
Methylene Chloride	0.0500	0.0490		mg/L		98	80 - 120
Naphthalene	0.0500	0.0647		mg/L		129	61 - 136
Styrene	0.0500	0.0517		mg/L		103	80 - 126
Tetrachloroethene	0.0500	0.0495		mg/L		99	71 - 123
Toluene	0.0500	0.0510		mg/L		102	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0515		mg/L		103	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0538		mg/L		108	80 - 128
Trichloroethene	0.0500	0.0490		mg/L		98	80 - 120
Trichlorofluoromethane	0.0500	0.0455		mg/L		91	58 - 127
Vinyl chloride	0.0500	0.0419		mg/L		84	80 - 129
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		73 - 131
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: LCSD 680-518345/5

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
1,1,1-Trichloroethane	0.0500	0.0502		mg/L		100	80 - 120	1	20
1,1,2,2-Tetrachloroethane	0.0500	0.0495		mg/L		99	76 - 126	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0478		mg/L		96	75 - 128	0	20
1,1,2-Trichloroethane	0.0500	0.0494		mg/L		99	80 - 120	3	20
1,1-Dichloroethane	0.0500	0.0502		mg/L		100	80 - 120	0	20
1,1-Dichloroethene	0.0500	0.0480		mg/L		96	80 - 120	1	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCSD 680-518345/5

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
1,2,4-Trichlorobenzene	0.0500	0.0536		mg/L		107	71 - 126	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0525		mg/L		105	74 - 120	1	20
1,2-Dibromoethane	0.0500	0.0489		mg/L		98	75 - 126	3	20
1,2-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0486		mg/L		97	72 - 128	2	50
1,2-Dichloropropane	0.0500	0.0515		mg/L		103	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0505		mg/L		101	80 - 120	0	20
1,4-Dichlorobenzene	0.0500	0.0493		mg/L		99	80 - 120	2	20
2-Butanone	0.250	0.255		mg/L		102	79 - 125	2	20
2-Hexanone	0.250	0.255		mg/L		102	80 - 131	3	20
4-Methyl-2-pentanone	0.250	0.248		mg/L		99	80 - 134	4	20
Acetone	0.250	0.260		mg/L		104	68 - 132	3	30
Benzene	0.0500	0.0490		mg/L		98	80 - 120	0	20
Bromodichloromethane	0.0500	0.0503		mg/L		101	80 - 120	1	20
Bromoform	0.0500	0.0520		mg/L		104	52 - 122	2	20
Bromomethane	0.0500	0.0528		mg/L		106	43 - 146	1	20
Carbon disulfide	0.0500	0.0481		mg/L		96	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0497		mg/L		99	67 - 125	1	20
Chlorobenzene	0.0500	0.0502		mg/L		100	80 - 120	0	20
Chloroethane	0.0500	0.0479		mg/L		96	48 - 145	1	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	1	20
Chloromethane	0.0500	0.0434		mg/L		87	76 - 149	1	30
cis-1,2-Dichloroethene	0.0500	0.0503		mg/L		101	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0550		mg/L		110	80 - 129	1	20
Cyclohexane	0.0500	0.0493		mg/L		99	80 - 132	0	20
Dibromochloromethane	0.0500	0.0512		mg/L		102	68 - 120	4	20
Dichlorodifluoromethane	0.0500	0.0388		mg/L		78	70 - 137	0	40
Ethylbenzene	0.0500	0.0511		mg/L		102	80 - 120	1	20
Isopropylbenzene	0.0500	0.0530		mg/L		106	79 - 126	1	20
Methyl acetate	0.100	0.0954		mg/L		95	73 - 139	3	20
Methyl tert-butyl ether	0.0500	0.0495		mg/L		99	80 - 122	3	20
Methylcyclohexane	0.0500	0.0479		mg/L		96	80 - 138	3	20
Methylene Chloride	0.0500	0.0486		mg/L		97	80 - 120	1	20
Naphthalene	0.0500	0.0641		mg/L		128	61 - 136	1	20
Styrene	0.0500	0.0511		mg/L		102	80 - 126	1	20
Tetrachloroethene	0.0500	0.0490		mg/L		98	71 - 123	1	20
Toluene	0.0500	0.0507		mg/L		101	80 - 120	1	20
trans-1,2-Dichloroethene	0.0500	0.0509		mg/L		102	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0523		mg/L		105	80 - 128	3	30
Trichloroethene	0.0500	0.0490		mg/L		98	80 - 120	0	20
Trichlorofluoromethane	0.0500	0.0455		mg/L		91	58 - 127	0	20
Vinyl chloride	0.0500	0.0418		mg/L		84	80 - 129	0	20
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120	0	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	99		80 - 122

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

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

Lab Sample ID: LCSD 680-518345/5

Matrix: Water

Analysis Batch: 518345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

<i>Surrogate</i>	<i>LCSD</i>	<i>LCSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>Toluene-d8 (Surr)</i>	101		80 - 120

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

GC/MS VOA

Analysis Batch: 518236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-1	WMW-2	Total/NA	Water	8260B	
680-150292-2	WMW-1	Total/NA	Water	8260B	
680-150292-4	YMW-4	Total/NA	Water	8260B	
680-150292-6	YMW-2	Total/NA	Water	8260B	
680-150292-8	YMW-17	Total/NA	Water	8260B	
680-150292-9	YMW-8	Total/NA	Water	8260B	
680-150292-13	YMW-18	Total/NA	Water	8260B	
680-150292-14	YMW-9	Total/NA	Water	8260B	
680-150292-15	YMW-16	Total/NA	Water	8260B	
680-150292-16	YMW-10	Total/NA	Water	8260B	
680-150292-17	Dup-2	Total/NA	Water	8260B	
680-150292-18	YMW-6	Total/NA	Water	8260B	
680-150292-19	YMW-11	Total/NA	Water	8260B	
680-150292-20	YMW-7	Total/NA	Water	8260B	
MB 680-518236/10	Method Blank	Total/NA	Water	8260B	
LCS 680-518236/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518236/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 518315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-21	Dup-1	Total/NA	Water	8260B	
680-150292-22	Trip Blank	Total/NA	Water	8260B	
MB 680-518315/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518315/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518315/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 518342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-3	YMW-19	Total/NA	Water	8260B	
680-150292-5	YMW-1	Total/NA	Water	8260B	
680-150292-7	YMW-14	Total/NA	Water	8260B	
MB 680-518342/7	Method Blank	Total/NA	Water	8260B	
LCS 680-518342/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518342/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 518345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-6 - DL	YMW-2	Total/NA	Water	8260B	
680-150292-10	YMW-13	Total/NA	Water	8260B	
680-150292-11	YMW-15	Total/NA	Water	8260B	
680-150292-12	YMW-5	Total/NA	Water	8260B	
MB 680-518345/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518345/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518345/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: WMW-2

Date Collected: 03/20/18 10:15

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 14:22	Y1S	TAL SAV

Client Sample ID: WMW-1

Date Collected: 03/20/18 10:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 14:44	Y1S	TAL SAV

Client Sample ID: YMW-19

Date Collected: 03/20/18 11:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518342	04/02/18 18:29	UI	TAL SAV

Client Sample ID: YMW-4

Date Collected: 03/20/18 14:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 15:06	Y1S	TAL SAV

Client Sample ID: YMW-1

Date Collected: 03/20/18 14:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518342	04/02/18 18:51	UI	TAL SAV

Client Sample ID: YMW-2

Date Collected: 03/20/18 15:40

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 15:29	Y1S	TAL SAV
Total/NA	Analysis	8260B	DL	5	518345	04/02/18 20:35	AMM	TAL SAV

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-14

Date Collected: 03/20/18 16:35
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518342	04/02/18 18:08	UI	TAL SAV

Client Sample ID: YMW-17

Date Collected: 03/21/18 11:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 16:13	Y1S	TAL SAV

Client Sample ID: YMW-8

Date Collected: 03/21/18 12:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 16:35	Y1S	TAL SAV

Client Sample ID: YMW-13

Date Collected: 03/21/18 10:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	518345	04/02/18 19:29	AMM	TAL SAV

Client Sample ID: YMW-15

Date Collected: 03/21/18 11:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	518345	04/02/18 19:07	AMM	TAL SAV

Client Sample ID: YMW-5

Date Collected: 03/21/18 11:45
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	518345	04/02/18 20:13	AMM	TAL SAV

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-18

Lab Sample ID: 680-150292-13

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 13:16	Y1S	TAL SAV

Client Sample ID: YMW-9

Lab Sample ID: 680-150292-14

Date Collected: 03/21/18 16:40

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 13:38	Y1S	TAL SAV

Client Sample ID: YMW-16

Lab Sample ID: 680-150292-15

Date Collected: 03/21/18 17:45

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	518236	03/31/18 18:03	Y1S	TAL SAV

Client Sample ID: YMW-10

Lab Sample ID: 680-150292-16

Date Collected: 03/21/18 19:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	518236	03/31/18 19:54	Y1S	TAL SAV

Client Sample ID: Dup-2

Lab Sample ID: 680-150292-17

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	518236	03/31/18 17:41	Y1S	TAL SAV

Client Sample ID: YMW-6

Lab Sample ID: 680-150292-18

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	518236	03/31/18 16:57	Y1S	TAL SAV

TestAmerica Savannah

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Client Sample ID: YMW-11

Date Collected: 03/21/18 16:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518236	03/31/18 14:00	Y1S	TAL SAV

Client Sample ID: YMW-7

Date Collected: 03/21/18 17:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	518236	03/31/18 18:25	Y1S	TAL SAV

Client Sample ID: Dup-1

Date Collected: 03/21/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 23:35	Y1S	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 03/21/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518315	04/01/18 17:25	Y1S	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Client Contact

Company Name: *Carroll's Consulting, Inc.*
Address: *1800 West Oak Alley Blvd. Bldg 9E106*
City/State/Zip: *MARIETTA, GA 30062*
Phone: *770-973-2100*
Fax: *770-973-7395*
Project Name: *Sechewin*
Site:
P.O.#

Regulatory Program: DW NPDES RCRA Other:

Project Manager: *Jeffrey Madden*
Tel/Fax: *(770) 328-5232*
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS

Site Contact: *Jeffrey Madden* Date: *3/22/18*
Lab Contact:

COC No.: *2* of *2* COCS
Sampler: *JAM*

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
YMW-2	3/20/18	1015	G	GW	4			
YMW-1	3/20/18	1050	G	GW	6			
YMW-19	3/20/18	1150	G	GW	4			
YMW-4	3/20/18	1410	G	GW	4			
YMW-1	3/20/18	1410	G	GW	4			
YMW-2	3/20/18	1540	G	GW	4			
YMW-14	3/20/18	1635	G	GW	4			
YMW-17	3/21/18	1100	G	GW	4			
YMW-8	3/21/18	1220	G	GW	6			
YMW-13	3/21/18	1000	G	GW	6			
YMW-15	3/21/18	11:00	G	GW	6			
YMW-5	3/21/18	11:45	G	GW	6			



Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: *If questions, call Jeffrey Madden (770) 328-5232*

Relinquished by:	Company:	Date/Time:	Custody Seal No.:	Received by:	Company:	Date/Time:	Therm ID No.:
<i>Jeffrey Madden</i>	<i>Fambien</i>	<i>3/22/18 14:50</i>		<i>JK</i>	<i>TA</i>	<i>3/22/18 14:50</i>	
<i>JK</i>	<i>TA</i>	<i>3/22/18 16:45</i>		<i>JK</i>	<i>TA</i>	<i>3/22/18 16:45</i>	
				<i>JK</i>	<i>TASAV</i>	<i>3-23-18 17:30</i>	

1.1 ± 0.1 °C (RF) 1.2 °C (1.1 °C)



681-Atlanta

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: DW NPDES RCRA Other:

Client Contact Company Name: <u>Environ Cow Consultants, Inc</u> Address: <u>880 West Oak Pkwy Bldg 100 S15166</u> City/State/Zip: <u>MARIETTA, GA 30062</u> Phone: <u>770-973-2100</u> Fax: <u>770-973-2395</u> Project Name: <u>Sechem</u> Site: P O #		Site Contact Project Manager: <u>Jeffery Maddox</u> Site Contact: Tel/Fax: <u>770-973-2100 (770) 326-5332</u> Lab Contact: Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Date: _____ Carrier: _____ COC No: <u>2</u> of <u>2</u> COCs Sampler: <u>JA</u> For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: Sample Specific Notes:			
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)
YMW-18	3/21/18	1455	G	GW	6		
YMW-9	3/21/18	1640	G	GW	6		
YMW-16	3/21/18	1745	G	GW	6		
YMW-10	3/21/18	1900	G	GW	6		
Dup-2	3/21/18	-	G	GW	6		
YMW-4	3/21/18	1455	G	GW	6		
YMW-11	3/21/18	1610	G	GW	6		
YMW-7	3/21/18	1710	G	GW	6		
Dup-1	3/21/18	-	G	GW	6		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							
Special Instructions/QC Requirements & Comments: <u>2 f questions call Jeffrey Maddox (770) 326-5332</u>							
Custody Seal No.: _____ Relinquished by: <u>Jeffery Maddox</u> Relinquished by: <u>JA</u> Relinquished by:		Company: <u>Environ</u> Company: <u>JA</u> Company:		Date/Time: <u>3/22/18 14:50</u> Date/Time: <u>3/22/18 14:50</u> Date/Time:		Cooler Temp. (°C): Obs'd: _____ Corrd: _____ Company: <u>JA</u> Company: <u>JA</u> Company: <u>TASAV</u>	
Date/Time: <u>3/22/18 14:50</u> Date/Time: <u>3/22/18 14:50</u> Date/Time:		Date/Time: <u>3/22/18 14:50</u> Date/Time: <u>3/22/18 14:50</u> Date/Time:		Date/Time: <u>3/22/18 14:50</u> Date/Time: <u>3/22/18 14:50</u> Date/Time:		Date/Time: <u>3-23-18 1730</u> Date/Time: <u>3-23-18 1730</u> Date/Time:	

1.1°C, 1.0°C (CF) 1.2°C, 1.1°C



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150292-1

Login Number: 150292

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150292-2
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/4/2018 4:18:08 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	9
Surrogate Summary	31
QC Sample Results	32
QC Association	34
Chronicle	35
Chain of Custody	39
Receipt Checklists	45
Certification Summary	46

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Job ID: 680-150292-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150292-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WMW-2 (680-150292-1), WMW-1 (680-150292-2), YMW-19 (680-150292-3), YMW-4 (680-150292-4), YMW-1 (680-150292-5), YMW-2 (680-150292-6), YMW-14 (680-150292-7), YMW-17 (680-150292-8), YMW-8 (680-150292-9), YMW-13 (680-150292-10), YMW-15 (680-150292-11), YMW-5 (680-150292-12), YMW-18 (680-150292-13), YMW-9 (680-150292-14), YMW-16 (680-150292-15), YMW-10 (680-150292-16), Dup-2 (680-150292-17), YMW-6 (680-150292-18), YMW-11 (680-150292-19), YMW-7 (680-150292-20), Dup-1 (680-150292-21) and Trip Blank (680-150292-22) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 03/26/2018, 03/27/2018 and 03/29/2018.

1,4-Dioxane failed the recovery criteria low for the MS/MSD of sample YMW-5 (680-150292-12) in batch 240-320226.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Sample YMW-15 (680-150292-11)[3X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150292-1	WMW-2	Water	03/20/18 10:15	03/23/18 07:30
680-150292-2	WMW-1	Water	03/20/18 10:50	03/23/18 07:30
680-150292-3	YMW-19	Water	03/20/18 11:50	03/23/18 07:30
680-150292-4	YMW-4	Water	03/20/18 14:10	03/23/18 07:30
680-150292-5	YMW-1	Water	03/20/18 14:10	03/23/18 07:30
680-150292-6	YMW-2	Water	03/20/18 15:40	03/23/18 07:30
680-150292-7	YMW-14	Water	03/20/18 16:35	03/23/18 07:30
680-150292-8	YMW-17	Water	03/21/18 11:00	03/23/18 07:30
680-150292-9	YMW-8	Water	03/21/18 12:20	03/23/18 07:30
680-150292-10	YMW-13	Water	03/21/18 10:00	03/23/18 07:30
680-150292-11	YMW-15	Water	03/21/18 11:00	03/23/18 07:30
680-150292-12	YMW-5	Water	03/21/18 11:45	03/23/18 07:30
680-150292-13	YMW-18	Water	03/21/18 14:55	03/23/18 07:30
680-150292-14	YMW-9	Water	03/21/18 16:40	03/23/18 07:30
680-150292-15	YMW-16	Water	03/21/18 17:45	03/23/18 07:30
680-150292-16	YMW-10	Water	03/21/18 19:00	03/23/18 07:30
680-150292-17	Dup-2	Water	03/21/18 00:00	03/23/18 07:30
680-150292-18	YMW-6	Water	03/21/18 14:55	03/23/18 07:30
680-150292-19	YMW-11	Water	03/21/18 16:10	03/23/18 07:30
680-150292-20	YMW-7	Water	03/21/18 17:10	03/23/18 07:30
680-150292-21	Dup-1	Water	03/21/18 00:00	03/23/18 07:30
680-150292-22	Trip Blank	Water	03/21/18 00:00	03/23/18 07:30

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: WMW-2

Lab Sample ID: 680-150292-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00033	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: WMW-1

Lab Sample ID: 680-150292-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00074	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-19

Lab Sample ID: 680-150292-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0082		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-4

Lab Sample ID: 680-150292-4

No Detections.

Client Sample ID: YMW-1

Lab Sample ID: 680-150292-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.062		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-2

Lab Sample ID: 680-150292-6

No Detections.

Client Sample ID: YMW-14

Lab Sample ID: 680-150292-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00038	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-17

Lab Sample ID: 680-150292-8

No Detections.

Client Sample ID: YMW-8

Lab Sample ID: 680-150292-9

No Detections.

Client Sample ID: YMW-13

Lab Sample ID: 680-150292-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.016		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-15

Lab Sample ID: 680-150292-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.42		0.0060	0.00072	mg/L	3		8260B SIM	Total/NA

Client Sample ID: YMW-5

Lab Sample ID: 680-150292-12

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-5 (Continued)

Lab Sample ID: 680-150292-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.16		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-18

Lab Sample ID: 680-150292-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00040	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-9

Lab Sample ID: 680-150292-14

No Detections.

Client Sample ID: YMW-16

Lab Sample ID: 680-150292-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.099		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-10

Lab Sample ID: 680-150292-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.15		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Dup-2

Lab Sample ID: 680-150292-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.017		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-6

Lab Sample ID: 680-150292-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0019	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-11

Lab Sample ID: 680-150292-19

No Detections.

Client Sample ID: YMW-7

Lab Sample ID: 680-150292-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.012		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Dup-1

Lab Sample ID: 680-150292-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.15		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150292-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: WMW-2

Lab Sample ID: 680-150292-1

Date Collected: 03/20/18 10:15

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00033	J	0.0020	0.00024	mg/L			03/26/18 19:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 125					03/26/18 19:29	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: WMW-1

Lab Sample ID: 680-150292-2

Date Collected: 03/20/18 10:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00074	J	0.0020	0.00024	mg/L			03/26/18 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 125					03/26/18 19:55	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-19

Lab Sample ID: 680-150292-3

Date Collected: 03/20/18 11:50

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0082		0.0020	0.00024	mg/L			03/26/18 20:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 125					03/26/18 20:20	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-4
Date Collected: 03/20/18 14:10
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/26/18 20:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 125					03/26/18 20:45	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-1

Lab Sample ID: 680-150292-5

Date Collected: 03/20/18 14:10

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.062		0.0020	0.00024	mg/L			03/26/18 21:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 125					03/26/18 21:10	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-2

Lab Sample ID: 680-150292-6

Date Collected: 03/20/18 15:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/26/18 21:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		63 - 125					03/26/18 21:35	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-14

Lab Sample ID: 680-150292-7

Date Collected: 03/20/18 16:35

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00038	J	0.0020	0.00024	mg/L			03/27/18 13:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 125					03/27/18 13:40	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-17

Lab Sample ID: 680-150292-8

Date Collected: 03/21/18 11:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 14:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 125					03/27/18 14:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-8
Date Collected: 03/21/18 12:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 14:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 125					03/27/18 14:31	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-13

Lab Sample ID: 680-150292-10

Date Collected: 03/21/18 10:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.016		0.0020	0.00024	mg/L			03/27/18 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		63 - 125					03/27/18 14:56	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-15

Lab Sample ID: 680-150292-11

Date Collected: 03/21/18 11:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.42		0.0060	0.00072	mg/L			03/29/18 11:40	3
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		63 - 125					03/29/18 11:40	3

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-5

Lab Sample ID: 680-150292-12

Date Collected: 03/21/18 11:45

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.16		0.0020	0.00024	mg/L			03/27/18 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		63 - 125					03/27/18 15:46	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-18

Lab Sample ID: 680-150292-13

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00040	J	0.0020	0.00024	mg/L			03/27/18 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 125					03/27/18 17:01	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-9
Date Collected: 03/21/18 16:40
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 17:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		63 - 125					03/27/18 17:27	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-16

Lab Sample ID: 680-150292-15

Date Collected: 03/21/18 17:45

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.099		0.0020	0.00024	mg/L			03/27/18 17:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		63 - 125					03/27/18 17:52	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-10

Lab Sample ID: 680-150292-16

Date Collected: 03/21/18 19:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.15		0.0020	0.00024	mg/L			03/27/18 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	69		63 - 125					03/27/18 18:17	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: Dup-2

Lab Sample ID: 680-150292-17

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.017		0.0020	0.00024	mg/L			03/27/18 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		63 - 125					03/27/18 18:42	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-6

Lab Sample ID: 680-150292-18

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0019	J	0.0020	0.00024	mg/L			03/27/18 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	71		63 - 125					03/27/18 19:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-11

Lab Sample ID: 680-150292-19

Date Collected: 03/21/18 16:10

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 125					03/27/18 19:32	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-7
Date Collected: 03/21/18 17:10
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.012		0.0020	0.00024	mg/L			03/27/18 19:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		63 - 125					03/27/18 19:58	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: Dup-1

Lab Sample ID: 680-150292-21

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.15		0.0020	0.00024	mg/L			03/27/18 20:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		63 - 125					03/27/18 20:23	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: Trip Blank

Lab Sample ID: 680-150292-22

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 12:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 125					03/27/18 12:50	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (63-125)
680-150292-1	WMW-2	90
680-150292-2	WMW-1	84
680-150292-3	YMW-19	85
680-150292-4	YMW-4	91
680-150292-5	YMW-1	90
680-150292-6	YMW-2	81
680-150292-7	YMW-14	93
680-150292-8	YMW-17	85
680-150292-9	YMW-8	93
680-150292-10	YMW-13	82
680-150292-11	YMW-15	78
680-150292-12	YMW-5	83
680-150292-12 MS	YMW-5	83
680-150292-12 MSD	YMW-5	80
680-150292-13	YMW-18	87
680-150292-14	YMW-9	76
680-150292-15	YMW-16	80
680-150292-16	YMW-10	69
680-150292-17	Dup-2	78
680-150292-18	YMW-6	71
680-150292-19	YMW-11	84
680-150292-20	YMW-7	79
680-150292-21	Dup-1	79
680-150292-22	Trip Blank	85
LCS 240-320045/4	Lab Control Sample	88
LCS 240-320226/4	Lab Control Sample	77
LCS 240-320558/4	Lab Control Sample	74
MB 240-320045/5	Method Blank	90
MB 240-320226/5	Method Blank	91
MB 240-320558/5	Method Blank	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

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

Lab Sample ID: MB 240-320045/5

Matrix: Water

Analysis Batch: 320045

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/26/18 11:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 125					03/26/18 11:31	1

Lab Sample ID: LCS 240-320045/4

Matrix: Water

Analysis Batch: 320045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00801		mg/L		80	59 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	88		63 - 125				

Lab Sample ID: MB 240-320226/5

Matrix: Water

Analysis Batch: 320226

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/27/18 12:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 125					03/27/18 12:00	1

Lab Sample ID: LCS 240-320226/4

Matrix: Water

Analysis Batch: 320226

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00846		mg/L		85	59 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	77		63 - 125				

Lab Sample ID: 680-150292-12 MS

Matrix: Water

Analysis Batch: 320226

Client Sample ID: YMW-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.16		0.0100	0.155	4	mg/L		-62	52 - 129
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	83		63 - 125						

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

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

Lab Sample ID: 680-150292-12 MSD

Matrix: Water

Analysis Batch: 320226

Client Sample ID: YMW-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.16		0.0100	0.153	4	mg/L		-77	52 - 129	1	13
Surrogate	%Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	80		63 - 125								

Lab Sample ID: MB 240-320558/5

Matrix: Water

Analysis Batch: 320558

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/29/18 10:50	1
Surrogate	%Recovery	MB Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	81		63 - 125						

Lab Sample ID: LCS 240-320558/4

Matrix: Water

Analysis Batch: 320558

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00861		mg/L		86	59 - 131
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	74		63 - 125				

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

GC/MS VOA

Analysis Batch: 320045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-1	WMW-2	Total/NA	Water	8260B SIM	
680-150292-2	WMW-1	Total/NA	Water	8260B SIM	
680-150292-3	YMW-19	Total/NA	Water	8260B SIM	
680-150292-4	YMW-4	Total/NA	Water	8260B SIM	
680-150292-5	YMW-1	Total/NA	Water	8260B SIM	
680-150292-6	YMW-2	Total/NA	Water	8260B SIM	
MB 240-320045/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320045/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Analysis Batch: 320226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-7	YMW-14	Total/NA	Water	8260B SIM	
680-150292-8	YMW-17	Total/NA	Water	8260B SIM	
680-150292-9	YMW-8	Total/NA	Water	8260B SIM	
680-150292-10	YMW-13	Total/NA	Water	8260B SIM	
680-150292-12	YMW-5	Total/NA	Water	8260B SIM	
680-150292-13	YMW-18	Total/NA	Water	8260B SIM	
680-150292-14	YMW-9	Total/NA	Water	8260B SIM	
680-150292-15	YMW-16	Total/NA	Water	8260B SIM	
680-150292-16	YMW-10	Total/NA	Water	8260B SIM	
680-150292-17	Dup-2	Total/NA	Water	8260B SIM	
680-150292-18	YMW-6	Total/NA	Water	8260B SIM	
680-150292-19	YMW-11	Total/NA	Water	8260B SIM	
680-150292-20	YMW-7	Total/NA	Water	8260B SIM	
680-150292-21	Dup-1	Total/NA	Water	8260B SIM	
680-150292-22	Trip Blank	Total/NA	Water	8260B SIM	
MB 240-320226/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320226/4	Lab Control Sample	Total/NA	Water	8260B SIM	
680-150292-12 MS	YMW-5	Total/NA	Water	8260B SIM	
680-150292-12 MSD	YMW-5	Total/NA	Water	8260B SIM	

Analysis Batch: 320558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150292-11	YMW-15	Total/NA	Water	8260B SIM	
MB 240-320558/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320558/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: WMW-2

Date Collected: 03/20/18 10:15

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320045	03/26/18 19:29	SAM	TAL CAN

Client Sample ID: WMW-1

Date Collected: 03/20/18 10:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320045	03/26/18 19:55	SAM	TAL CAN

Client Sample ID: YMW-19

Date Collected: 03/20/18 11:50

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320045	03/26/18 20:20	SAM	TAL CAN

Client Sample ID: YMW-4

Date Collected: 03/20/18 14:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320045	03/26/18 20:45	SAM	TAL CAN

Client Sample ID: YMW-1

Date Collected: 03/20/18 14:10

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320045	03/26/18 21:10	SAM	TAL CAN

Client Sample ID: YMW-2

Date Collected: 03/20/18 15:40

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320045	03/26/18 21:35	SAM	TAL CAN

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-14

Date Collected: 03/20/18 16:35
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 13:40	SAM	TAL CAN

Client Sample ID: YMW-17

Date Collected: 03/21/18 11:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 14:05	SAM	TAL CAN

Client Sample ID: YMW-8

Date Collected: 03/21/18 12:20
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 14:31	SAM	TAL CAN

Client Sample ID: YMW-13

Date Collected: 03/21/18 10:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 14:56	SAM	TAL CAN

Client Sample ID: YMW-15

Date Collected: 03/21/18 11:00
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		3	320558	03/29/18 11:40	SAM	TAL CAN

Client Sample ID: YMW-5

Date Collected: 03/21/18 11:45
Date Received: 03/23/18 07:30

Lab Sample ID: 680-150292-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 15:46	SAM	TAL CAN

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-18

Lab Sample ID: 680-150292-13

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 17:01	SAM	TAL CAN

Client Sample ID: YMW-9

Lab Sample ID: 680-150292-14

Date Collected: 03/21/18 16:40

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 17:27	SAM	TAL CAN

Client Sample ID: YMW-16

Lab Sample ID: 680-150292-15

Date Collected: 03/21/18 17:45

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 17:52	SAM	TAL CAN

Client Sample ID: YMW-10

Lab Sample ID: 680-150292-16

Date Collected: 03/21/18 19:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 18:17	SAM	TAL CAN

Client Sample ID: Dup-2

Lab Sample ID: 680-150292-17

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 18:42	SAM	TAL CAN

Client Sample ID: YMW-6

Lab Sample ID: 680-150292-18

Date Collected: 03/21/18 14:55

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 19:07	SAM	TAL CAN

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Client Sample ID: YMW-11

Lab Sample ID: 680-150292-19

Date Collected: 03/21/18 16:10

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 19:32	SAM	TAL CAN

Client Sample ID: YMW-7

Lab Sample ID: 680-150292-20

Date Collected: 03/21/18 17:10

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 19:58	SAM	TAL CAN

Client Sample ID: Dup-1

Lab Sample ID: 680-150292-21

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 20:23	SAM	TAL CAN

Client Sample ID: Trip Blank

Lab Sample ID: 680-150292-22

Date Collected: 03/21/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320226	03/27/18 12:50	SAM	TAL CAN

Laboratory References:

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

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: DW NPDES RCRA Other:

Company Name: <i>Carroll's Consulting, Inc.</i> Address: <i>1880 West Oak Alley Blvd. Bldg 9E106</i> City/State/Zip: <i>MARIETTA, GA 30062</i> Phone: <i>770-973-2100</i> Fax: <i>770-973-7395</i> Project Name: <i>Sechewin</i> Site: P.O.#		Client Contact Project Manager: <i>Jeffrey Madden</i> Tel/Fax: <i>(770) 328-5232</i> Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: <i>Jeffrey Madden</i> Date: <i>3/22/18</i> Lab Contact: Carrier: <i>TA</i> COC No.: <i>2</i> of <i>2</i> COCS Sampler: <i>TA</i> For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Sample Identification		Perform MS / MSD (Y / N)	Filtered Sample (Y / N)	Sample Specific Notes:	
<i>YMW-2</i>	<i>3/20/18 1015</i>	<i>33</i>	<i>33</i>	<i>1/4 - Deviate</i>	
<i>YMW-1</i>	<i>3/20/18 1050</i>	<i>33</i>	<i>33</i>		
<i>YMW-19</i>	<i>3/20/18 1150</i>	<i>33</i>	<i>33</i>		
<i>YMW-4</i>	<i>3/20/18 1410</i>	<i>33</i>	<i>33</i>		
<i>YMW-1</i>	<i>3/20/18 1410</i>	<i>33</i>	<i>33</i>		
<i>YMW-2</i>	<i>3/20/18 1540</i>	<i>33</i>	<i>33</i>		
<i>YMW-14</i>	<i>3/20/18 1635</i>	<i>33</i>	<i>33</i>		
<i>YMW-17</i>	<i>3/21/18 1100</i>	<i>33</i>	<i>33</i>		
<i>YMW-8</i>	<i>3/21/18 1220</i>	<i>33</i>	<i>33</i>		
<i>YMW-13</i>	<i>3/21/18 1000</i>	<i>33</i>	<i>33</i>		
<i>YMW-15</i>	<i>3/21/18 11:00</i>	<i>33</i>	<i>33</i>		
<i>YMW-5</i>	<i>3/21/18 11:45</i>	<i>33</i>	<i>33</i>		
Preservation Used: 1 = Ice, 2 = HCI, 3 = H2SO4, 4 = HNO3, 5 = NaOH, 6 = Other					
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					
Special Instructions/QC Requirements & Comments: <i>If questions, call Jeffrey Madden (770) 328-5232</i>					
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temp. (°C): Obs'd: <i>TA</i> Corrd: <i>TA</i>		Therm ID No.:	
Relinquished by: <i>Jeffrey Madden</i>		Received by: <i>JEK</i>		Date/Time: <i>3/22/18 1450</i>	
Relinquished by: <i>JEK</i>		Received by: <i>JEK</i>		Date/Time: <i>3/22/18 1450</i>	
Relinquished by:		Received by: <i>JEK</i>		Date/Time: <i>3-23-18 1730</i>	



1.1 ± 0.1 °C (RF) 1.2 °C (1.1 °C)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

681-Atlanta

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: DW NPDES RCRA Other:

Client Contact
Company Name: Environ Cow Consultants, Inc
Address: 880 West Oak Pkwy Bldg 100 S15166
City/State/Zip: MANASSA, GA 30062
Phone: 770-973-2100
Fax: 770-973-2395
Project Name: Sechem
Site:
P O #

Project Manager: Jeffery Maddox Site Contact:
Tel/Fax: 770-973-2100 (770) 326-5232 Lab Contact:
Date: 3/22/18 of 3 COCs
Carrier: JA

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
YMW-18	3/21/18	1455	G	GW	6			
YMW-9	3/21/18	1640	G	GW	6			
YMW-16	3/21/18	1745	G	GW	6			
YMW-10	3/21/18	1900	G	GW	6			
Dup-2	3/21/18	-	G	GW	6			
YMW-4	3/21/18	1455	G	GW	6			
YMW-11	3/21/18	1610	G	GW	6			
YMW-7	3/21/18	1710	G	GW	6			
Dup-1	3/21/18	-	G	GW	6			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments: 2 f questions call Jeffrey Maddox (770) 326-5232
 Return to Client Disposal by Lab Archive for _____ Months

Custody Seal No.:
Custody Seals Intact: Yes No
Relinquished by: Jeffery Maddox Date/Time: 3/22/18 14:50
Relinquished to: JA Date/Time: 3/22/18 16:45
Received by: JA Date/Time: 3/22/18 14:50
Received in Laboratory by: JA Date/Time: 3-23-18 17:30
Company: Environ Cow Consultants, Inc
Company: JA
Company: JA
Company: TASAV

1.1°C, 1.0°C (CF) 1.2°C, 1.1°C



Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler:	Lab PM: Lanier, Jerry A	Carrier Tracking No(s):	COC No: 680-512819.2		
Client Contact: Shipping/Receiving		Phone:	E-Mail: jerry.lanier@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 3		
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Florida		Job #: 680-150292-2			
Address: 4101 Shuffel Street NW		Due Date Requested: 4/4/2018		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 Other:			
City: North Canton		TAT Requested (days):		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)			
State, Zip: OH, 44720		PO #:		Total Number of containers			
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:		Special Instructions/Note:			
Email:		Project #: 68002623					
Site: GCHI--SEICHEM INC		SSOW#:					
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, D=wastewater, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MSM/SD (Yes or No)	8260B SIM/503B
YMW-13 (680-150292-10)	3/21/18	10:00 Eastern	Water	Water	X	X	3
YMW-15 (680-150292-11)	3/21/18	11:00 Eastern	Water	Water	X	X	3
YMW-5 (680-150292-12)	3/21/18	11:45 Eastern	Water	Water	X	X	3
YMW-18 (680-150292-13)	3/21/18	14:55 Eastern	Water	Water	X	X	3
YMW-9 (680-150292-14)	3/21/18	16:40 Eastern	Water	Water	X	X	3
YMW-16 (680-150292-15)	3/21/18	17:45 Eastern	Water	Water	X	X	3
YMW-10 (680-150292-16)	3/21/18	19:00 Eastern	Water	Water	X	X	3
Dup-2 (680-150292-17)	3/21/18	Eastern	Water	Water	X	X	3
YMW-6 (680-150292-18)	3/21/18	14:55 Eastern	Water	Water	X	X	3

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. |

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed	Deliverable Requested: I, II, III, IV, Other (specify)	Return To Client <input type="checkbox"/>	Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by:	Date:	Received by:	Date/Time:
Relinquished by:	Date:	Received by:	Date/Time:
Relinquished by:	Date:	Received by:	Date/Time:
Custody Seal Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	



Chain of Custody Record

Client Information (Sub Contract Lab)		Lab PM: Lanier, Jerry A	Carrier Tracking No(s):	COC No: 680-512819.3
Client Contact: Shipping/Receiving		E-Mail: jerry.lanier@testamericainc.com	State of Origin: Georgia	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Florida	Job #: 680-150292-2	Preservation Codes: 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 X - EDTA L - EDA Z - other (specify) Other:
Address: 4101 Shuffel Street NW, City: North Canton State, Zip: OH, 44720 Phone: 330-497-9396(Tel) 330-497-0772(Fax) Email:		Due Date Requested: 4/4/2018 TAT Requested (days):	Analysis Requested	
Project #: 68002623 Site: SSOW#		PO #: WO #:	Total Number of containers	
Sample Identification - Client ID (Lab ID)		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Special Instructions/Note:
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=Air)
YMW-11 (680-150292-19)	3/21/18	16:10 Eastern		Water
YMW-7 (680-150292-20)	3/21/18	17:10 Eastern		Water
Dup-1 (680-150292-21)	3/21/18	Eastern		Water
Trip Blank (680-150292-22)	3/21/18	Eastern		Water
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. 1				
Possible Hazard Identification				
Unconfirmed				
Deliverable Requested: I, II, III, IV, Other (specify)				
Primary Deliverable Rank: 2				
Empty Kit Relinquished by:				
Date:				
Time:				
Method of Shipment:				
Received by: <i>Gregory Burns</i>				
Date/Time: 3/24/18 09:30				
Company: TPA				
Received by:				
Date/Time:				
Company:				
Received by:				
Date/Time:				
Company:				
Cooler Temperature(s) °C and Other Remarks:				
Custody Seal No.:				
Δ Yes Δ No				

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements:



TestAmerica Canton Sample Receipt Form/Narrative

Login #: 680-150292

Canton Facility

Client TA Savannah Site Name

Cooler unpacked by:

Cooler Received on 3/24/18 Opened on 3/24/18

Derry Bura

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time

Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

- 1. Cooler temperature upon receipt
IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp 2.0 °C Corrected Cooler Temp. 2.1 °C
IR GUN #36 (CF +0.3 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
IR GUN # 627 (CF -1.3 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

- 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
-Were tamper/custody seals intact and uncompromised? Yes No NA

- 3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No

Tests that are not checked for pH by Receiving: VOAs, Oil and Grease, TOC

- 12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC732776
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150290-1
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/6/2018 10:01:30 AM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	18
QC Sample Results	19
QC Association	31
Chronicle	32
Chain of Custody	33
Receipt Checklists	34
Certification Summary	35

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150292-2

Login Number: 150292

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150292-2

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Job ID: 680-150290-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150290-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SW-1 (680-150290-1), SW-2 (680-150290-2), SW-3 (680-150290-3), SW-4 (680-150290-4) and Trip Blank (680-150290-5) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/03/2018, 04/04/2018 and 04/05/2018.

The laboratory control sample (LCS) for analytical batch 680-518488 recovered outside control limits for the following analyte(s): Chloromethane. Chloromethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Sample SW-1 (680-150290-1)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-518488, 680-518679, and 680-518864.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150290-1	SW-1	Water	03/22/18 10:55	03/23/18 07:30
680-150290-2	SW-2	Water	03/22/18 11:15	03/23/18 07:30
680-150290-3	SW-3	Water	03/22/18 11:40	03/23/18 07:30
680-150290-4	SW-4	Water	03/22/18 11:55	03/23/18 07:30
680-150290-5	Trip Blank	Water	03/22/18 00:00	03/23/18 07:30

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-1

Lab Sample ID: 680-150290-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.055		0.010		mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	0.58		0.010		mg/L	10		8260B	Total/NA
Tetrachloroethene	0.58		0.010		mg/L	10		8260B	Total/NA
Toluene	0.094		0.010		mg/L	10		8260B	Total/NA
Trichloroethene	0.50		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.028		0.010		mg/L	10		8260B	Total/NA

Client Sample ID: SW-2

Lab Sample ID: 680-150290-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0035		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0044		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.018		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.0045		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.012		0.0010		mg/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.0015		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.0014		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.10		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.056		0.0010		mg/L	1		8260B	Total/NA
Toluene	0.0019		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.066		0.0010		mg/L	1		8260B	Total/NA
Vinyl chloride	0.0050		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SW-3

Lab Sample ID: 680-150290-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0012		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.0019		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.010		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0050		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0061		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SW-4

Lab Sample ID: 680-150290-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.0019		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0010		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150290-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-1

Lab Sample ID: 680-150290-1

Date Collected: 03/22/18 10:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.055		0.010		mg/L			04/04/18 14:54	10
1,1,2,2-Tetrachloroethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,1,2-Trichloroethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,1-Dichloroethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,1-Dichloroethene	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			04/04/18 14:54	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			04/04/18 14:54	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,2-Dichlorobenzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,2-Dichloroethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,3-Dichlorobenzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
1,4-Dichlorobenzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
2-Butanone	0.10	U	0.10		mg/L			04/04/18 14:54	10
2-Hexanone	0.10	U	0.10		mg/L			04/04/18 14:54	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			04/04/18 14:54	10
Acetone	0.10	U	0.10		mg/L			04/04/18 14:54	10
Benzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Bromodichloromethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
Bromoform	0.010	U	0.010		mg/L			04/04/18 14:54	10
Bromomethane	0.050	U	0.050		mg/L			04/04/18 14:54	10
Carbon disulfide	0.020	U	0.020		mg/L			04/04/18 14:54	10
Carbon tetrachloride	0.010	U	0.010		mg/L			04/04/18 14:54	10
Chlorobenzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Chloroethane	0.050	U	0.050		mg/L			04/04/18 14:54	10
Chloroform	0.010	U	0.010		mg/L			04/04/18 14:54	10
Chloromethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
cis-1,2-Dichloroethene	0.58		0.010		mg/L			04/04/18 14:54	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Cyclohexane	0.010	U	0.010		mg/L			04/04/18 14:54	10
Dibromochloromethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
Ethylbenzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Isopropylbenzene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Methyl acetate	0.050	U	0.050		mg/L			04/04/18 14:54	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			04/04/18 14:54	10
Methylcyclohexane	0.010	U	0.010		mg/L			04/04/18 14:54	10
Methylene Chloride	0.050	U	0.050		mg/L			04/04/18 14:54	10
Naphthalene	0.050	U	0.050		mg/L			04/04/18 14:54	10
Styrene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Tetrachloroethene	0.58		0.010		mg/L			04/04/18 14:54	10
Toluene	0.094		0.010		mg/L			04/04/18 14:54	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			04/04/18 14:54	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			04/04/18 14:54	10
Trichloroethene	0.50		0.010		mg/L			04/04/18 14:54	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			04/04/18 14:54	10
Vinyl chloride	0.028		0.010		mg/L			04/04/18 14:54	10
Xylenes, Total	0.010	U	0.010		mg/L			04/04/18 14:54	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-1

Lab Sample ID: 680-150290-1

Date Collected: 03/22/18 10:55

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		73 - 131		04/04/18 14:54	10
4-Bromofluorobenzene (Surr)	96		80 - 120		04/04/18 14:54	10
Dibromofluoromethane (Surr)	97		80 - 122		04/04/18 14:54	10
Toluene-d8 (Surr)	98		80 - 120		04/04/18 14:54	10

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-2

Lab Sample ID: 680-150290-2

Date Collected: 03/22/18 11:15

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0035		0.0010		mg/L			04/05/18 13:59	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
1,1-Dichloroethane	0.0044		0.0010		mg/L			04/05/18 13:59	1
1,1-Dichloroethene	0.018		0.0010		mg/L			04/05/18 13:59	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
1,2-Dichlorobenzene	0.0045		0.0010		mg/L			04/05/18 13:59	1
1,2-Dichloroethane	0.012		0.0010		mg/L			04/05/18 13:59	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
1,3-Dichlorobenzene	0.0015		0.0010		mg/L			04/05/18 13:59	1
1,4-Dichlorobenzene	0.0014		0.0010		mg/L			04/05/18 13:59	1
2-Butanone	0.010	U	0.010		mg/L			04/05/18 13:59	1
2-Hexanone	0.010	U	0.010		mg/L			04/05/18 13:59	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/05/18 13:59	1
Acetone	0.010	U	0.010		mg/L			04/05/18 13:59	1
Benzene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Bromoform	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Bromomethane	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/05/18 13:59	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Chloroethane	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
Chloroform	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Chloromethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
cis-1,2-Dichloroethene	0.10		0.0010		mg/L			04/05/18 13:59	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/05/18 13:59	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
Naphthalene	0.0050	U	0.0050		mg/L			04/05/18 13:59	1
Styrene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Tetrachloroethene	0.056		0.0010		mg/L			04/05/18 13:59	1
Toluene	0.0019		0.0010		mg/L			04/05/18 13:59	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Trichloroethene	0.066		0.0010		mg/L			04/05/18 13:59	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/05/18 13:59	1
Vinyl chloride	0.0050		0.0010		mg/L			04/05/18 13:59	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/05/18 13:59	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-2

Lab Sample ID: 680-150290-2

Date Collected: 03/22/18 11:15

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		04/05/18 13:59	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/05/18 13:59	1
Dibromofluoromethane (Surr)	97		80 - 122		04/05/18 13:59	1
Toluene-d8 (Surr)	100		80 - 120		04/05/18 13:59	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-3

Lab Sample ID: 680-150290-3

Date Collected: 03/22/18 11:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,1-Dichloroethene	0.0012		0.0010		mg/L			04/05/18 14:24	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,2-Dichloroethane	0.0019		0.0010		mg/L			04/05/18 14:24	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
2-Butanone	0.010	U	0.010		mg/L			04/05/18 14:24	1
2-Hexanone	0.010	U	0.010		mg/L			04/05/18 14:24	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/05/18 14:24	1
Acetone	0.010	U	0.010		mg/L			04/05/18 14:24	1
Benzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Bromoform	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Bromomethane	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/05/18 14:24	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Chloroethane	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
Chloroform	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Chloromethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
cis-1,2-Dichloroethene	0.010		0.0010		mg/L			04/05/18 14:24	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/05/18 14:24	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
Naphthalene	0.0050	U	0.0050		mg/L			04/05/18 14:24	1
Styrene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Tetrachloroethene	0.0050		0.0010		mg/L			04/05/18 14:24	1
Toluene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Trichloroethene	0.0061		0.0010		mg/L			04/05/18 14:24	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/05/18 14:24	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/05/18 14:24	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-3

Lab Sample ID: 680-150290-3

Date Collected: 03/22/18 11:40

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		04/05/18 14:24	1
4-Bromofluorobenzene (Surr)	95		80 - 120		04/05/18 14:24	1
Dibromofluoromethane (Surr)	97		80 - 122		04/05/18 14:24	1
Toluene-d8 (Surr)	100		80 - 120		04/05/18 14:24	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-4

Lab Sample ID: 680-150290-4

Date Collected: 03/22/18 11:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
2-Butanone	0.010	U	0.010		mg/L			04/05/18 14:48	1
2-Hexanone	0.010	U	0.010		mg/L			04/05/18 14:48	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/05/18 14:48	1
Acetone	0.010	U	0.010		mg/L			04/05/18 14:48	1
Benzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Bromoform	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Bromomethane	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/05/18 14:48	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Chloroethane	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
Chloroform	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Chloromethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
cis-1,2-Dichloroethene	0.0019		0.0010		mg/L			04/05/18 14:48	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/05/18 14:48	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
Naphthalene	0.0050	U	0.0050		mg/L			04/05/18 14:48	1
Styrene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Toluene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Trichloroethene	0.0010		0.0010		mg/L			04/05/18 14:48	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/05/18 14:48	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/05/18 14:48	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-4

Lab Sample ID: 680-150290-4

Date Collected: 03/22/18 11:55

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		04/05/18 14:48	1
4-Bromofluorobenzene (Surr)	96		80 - 120		04/05/18 14:48	1
Dibromofluoromethane (Surr)	98		80 - 122		04/05/18 14:48	1
Toluene-d8 (Surr)	100		80 - 120		04/05/18 14:48	1

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150290-5

Date Collected: 03/22/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
2-Butanone	0.010	U	0.010		mg/L			04/03/18 18:23	1
2-Hexanone	0.010	U	0.010		mg/L			04/03/18 18:23	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/03/18 18:23	1
Acetone	0.010	U	0.010		mg/L			04/03/18 18:23	1
Benzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Bromoform	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Bromomethane	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/03/18 18:23	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Chloroethane	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
Chloroform	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Chloromethane	0.0010	U *	0.0010		mg/L			04/03/18 18:23	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/03/18 18:23	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
Naphthalene	0.0050	U	0.0050		mg/L			04/03/18 18:23	1
Styrene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Toluene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/03/18 18:23	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/03/18 18:23	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-150290-5

Date Collected: 03/22/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		04/03/18 18:23	1
4-Bromofluorobenzene (Surr)	91		80 - 120		04/03/18 18:23	1
Dibromofluoromethane (Surr)	100		80 - 122		04/03/18 18:23	1
Toluene-d8 (Surr)	97		80 - 120		04/03/18 18:23	1

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (73-131)	BFB (80-120)	DBFM (80-122)	TOL (80-120)
680-150290-1	SW-1	93	96	97	98
680-150290-2	SW-2	90	96	97	100
680-150290-3	SW-3	90	95	97	100
680-150290-4	SW-4	92	96	98	100
680-150290-5	Trip Blank	96	91	100	97
LCS 680-518488/4	Lab Control Sample	95	91	96	96
LCS 680-518679/4	Lab Control Sample	96	94	101	98
LCS 680-518864/4	Lab Control Sample	90	97	100	95
LCSD 680-518488/5	Lab Control Sample Dup	93	92	96	97
LCSD 680-518679/5	Lab Control Sample Dup	98	95	102	98
LCSD 680-518864/5	Lab Control Sample Dup	93	94	101	97
MB 680-518488/8	Method Blank	95	92	99	95
MB 680-518679/8	Method Blank	88	94	96	100
MB 680-518864/8	Method Blank	90	97	97	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: MB 680-518488/8

Matrix: Water

Analysis Batch: 518488

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
2-Butanone	0.010	U	0.010		mg/L			04/03/18 11:30	1
2-Hexanone	0.010	U	0.010		mg/L			04/03/18 11:30	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/03/18 11:30	1
Acetone	0.010	U	0.010		mg/L			04/03/18 11:30	1
Benzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Bromoform	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Bromomethane	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/03/18 11:30	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Chloroethane	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
Chloroform	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Chloromethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/03/18 11:30	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
Naphthalene	0.0050	U	0.0050		mg/L			04/03/18 11:30	1
Styrene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Toluene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/03/18 11:30	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/03/18 11:30	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: MB 680-518488/8

Matrix: Water

Analysis Batch: 518488

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.0010	U	0.0010		mg/L			04/03/18 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		04/03/18 11:30	1
4-Bromofluorobenzene (Surr)	92		80 - 120		04/03/18 11:30	1
Dibromofluoromethane (Surr)	99		80 - 122		04/03/18 11:30	1
Toluene-d8 (Surr)	95		80 - 120		04/03/18 11:30	1

Lab Sample ID: LCS 680-518488/4

Matrix: Water

Analysis Batch: 518488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0484		mg/L		97	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0469		mg/L		94	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0491		mg/L		98	75 - 128
1,1,2-Trichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1-Dichloroethane	0.0500	0.0484		mg/L		97	80 - 120
1,1-Dichloroethene	0.0500	0.0518		mg/L		104	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0514		mg/L		103	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0481		mg/L		96	74 - 120
1,2-Dibromoethane	0.0500	0.0478		mg/L		96	75 - 126
1,2-Dichlorobenzene	0.0500	0.0484		mg/L		97	80 - 120
1,2-Dichloroethane	0.0500	0.0473		mg/L		95	72 - 128
1,2-Dichloropropane	0.0500	0.0508		mg/L		102	80 - 120
1,3-Dichlorobenzene	0.0500	0.0480		mg/L		96	80 - 120
1,4-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120
2-Butanone	0.250	0.243		mg/L		97	79 - 125
2-Hexanone	0.250	0.228		mg/L		91	80 - 131
4-Methyl-2-pentanone	0.250	0.235		mg/L		94	80 - 134
Acetone	0.250	0.236		mg/L		94	68 - 132
Benzene	0.0500	0.0479		mg/L		96	80 - 120
Bromodichloromethane	0.0500	0.0491		mg/L		98	80 - 120
Bromoform	0.0500	0.0483		mg/L		97	52 - 122
Bromomethane	0.0500	0.0521		mg/L		104	43 - 146
Carbon disulfide	0.0500	0.0478		mg/L		96	77 - 129
Carbon tetrachloride	0.0500	0.0491		mg/L		98	67 - 125
Chlorobenzene	0.0500	0.0494		mg/L		99	80 - 120
Chloroethane	0.0500	0.0553		mg/L		111	48 - 145
Chloroform	0.0500	0.0483		mg/L		97	80 - 120
Chloromethane	0.0500	0.0376	*	mg/L		75	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0491		mg/L		98	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0519		mg/L		104	80 - 129
Cyclohexane	0.0500	0.0482		mg/L		96	80 - 132
Dibromochloromethane	0.0500	0.0501		mg/L		100	68 - 120
Dichlorodifluoromethane	0.0500	0.0504		mg/L		101	70 - 137
Ethylbenzene	0.0500	0.0484		mg/L		97	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCS 680-518488/4

Matrix: Water

Analysis Batch: 518488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	0.0500	0.0480		mg/L		96	79 - 126
Methyl acetate	0.100	0.101		mg/L		101	73 - 139
Methyl tert-butyl ether	0.0500	0.0487		mg/L		97	80 - 122
Methylcyclohexane	0.0500	0.0481		mg/L		96	80 - 138
Methylene Chloride	0.0500	0.0479		mg/L		96	80 - 120
Naphthalene	0.0500	0.0507		mg/L		101	61 - 136
Styrene	0.0500	0.0471		mg/L		94	80 - 126
Tetrachloroethene	0.0500	0.0494		mg/L		99	71 - 123
Toluene	0.0500	0.0487		mg/L		97	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0491		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0490		mg/L		98	80 - 128
Trichloroethene	0.0500	0.0496		mg/L		99	80 - 120
Trichlorofluoromethane	0.0500	0.0556		mg/L		111	58 - 127
Vinyl chloride	0.0500	0.0571		mg/L		114	80 - 129
Xylenes, Total	0.100	0.0972		mg/L		97	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		73 - 131
4-Bromofluorobenzene (Surr)	91		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: LCSD 680-518488/5

Matrix: Water

Analysis Batch: 518488

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0486		mg/L		97	80 - 120	0	20
1,1,1,2-Tetrachloroethane	0.0500	0.0464		mg/L		93	76 - 126	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0506		mg/L		101	75 - 128	3	20
1,1,2-Trichloroethane	0.0500	0.0484		mg/L		97	80 - 120	3	20
1,1-Dichloroethane	0.0500	0.0495		mg/L		99	80 - 120	2	20
1,1-Dichloroethene	0.0500	0.0521		mg/L		104	80 - 120	1	20
1,2,4-Trichlorobenzene	0.0500	0.0512		mg/L		102	71 - 126	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0473		mg/L		95	74 - 120	2	20
1,2-Dibromoethane	0.0500	0.0480		mg/L		96	75 - 126	0	20
1,2-Dichlorobenzene	0.0500	0.0482		mg/L		96	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0476		mg/L		95	72 - 128	1	50
1,2-Dichloropropane	0.0500	0.0498		mg/L		100	80 - 120	2	20
1,3-Dichlorobenzene	0.0500	0.0479		mg/L		96	80 - 120	0	20
1,4-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120	0	20
2-Butanone	0.250	0.236		mg/L		94	79 - 125	3	20
2-Hexanone	0.250	0.225		mg/L		90	80 - 131	2	20
4-Methyl-2-pentanone	0.250	0.232		mg/L		93	80 - 134	1	20
Acetone	0.250	0.233		mg/L		93	68 - 132	1	30
Benzene	0.0500	0.0483		mg/L		97	80 - 120	1	20
Bromodichloromethane	0.0500	0.0493		mg/L		99	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCSD 680-518488/5

Matrix: Water

Analysis Batch: 518488

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.0500	0.0487		mg/L		97	52 - 122	1	20
Bromomethane	0.0500	0.0545		mg/L		109	43 - 146	5	20
Carbon disulfide	0.0500	0.0507		mg/L		101	77 - 129	6	20
Carbon tetrachloride	0.0500	0.0497		mg/L		99	67 - 125	1	20
Chlorobenzene	0.0500	0.0494		mg/L		99	80 - 120	0	20
Chloroethane	0.0500	0.0497		mg/L		99	48 - 145	11	20
Chloroform	0.0500	0.0482		mg/L		96	80 - 120	0	20
Chloromethane	0.0500	0.0412		mg/L		82	76 - 149	9	30
cis-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0500		mg/L		100	80 - 129	4	20
Cyclohexane	0.0500	0.0488		mg/L		98	80 - 132	1	20
Dibromochloromethane	0.0500	0.0493		mg/L		99	68 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0596		mg/L		119	70 - 137	17	40
Ethylbenzene	0.0500	0.0489		mg/L		98	80 - 120	1	20
Isopropylbenzene	0.0500	0.0488		mg/L		98	79 - 126	2	20
Methyl acetate	0.100	0.0999		mg/L		100	73 - 139	1	20
Methyl tert-butyl ether	0.0500	0.0486		mg/L		97	80 - 122	0	20
Methylcyclohexane	0.0500	0.0505		mg/L		101	80 - 138	5	20
Methylene Chloride	0.0500	0.0495		mg/L		99	80 - 120	3	20
Naphthalene	0.0500	0.0501		mg/L		100	61 - 136	1	20
Styrene	0.0500	0.0492		mg/L		98	80 - 126	4	20
Tetrachloroethene	0.0500	0.0503		mg/L		101	71 - 123	2	20
Toluene	0.0500	0.0490		mg/L		98	80 - 120	1	20
trans-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120	0	20
trans-1,3-Dichloropropene	0.0500	0.0496		mg/L		99	80 - 128	1	30
Trichloroethene	0.0500	0.0500		mg/L		100	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0595		mg/L		119	58 - 127	7	20
Vinyl chloride	0.0500	0.0600		mg/L		120	80 - 129	5	20
Xylenes, Total	0.100	0.0984		mg/L		98	80 - 120	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	93		73 - 131
4-Bromofluorobenzene (Surr)	92		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: MB 680-518679/8

Matrix: Water

Analysis Batch: 518679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			04/04/18 12:50	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: MB 680-518679/8

Matrix: Water

Analysis Batch: 518679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			04/04/18 12:50	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
2-Butanone	0.010	U	0.010		mg/L			04/04/18 12:50	1
2-Hexanone	0.010	U	0.010		mg/L			04/04/18 12:50	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			04/04/18 12:50	1
Acetone	0.010	U	0.010		mg/L			04/04/18 12:50	1
Benzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Bromoform	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Bromomethane	0.0050	U	0.0050		mg/L			04/04/18 12:50	1
Carbon disulfide	0.0020	U	0.0020		mg/L			04/04/18 12:50	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Chlorobenzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Chloroethane	0.0050	U	0.0050		mg/L			04/04/18 12:50	1
Chloroform	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Chloromethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/04/18 12:50	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/04/18 12:50	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/04/18 12:50	1
Naphthalene	0.0050	U	0.0050		mg/L			04/04/18 12:50	1
Styrene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Toluene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/04/18 12:50	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/04/18 12:50	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		04/04/18 12:50	1
4-Bromofluorobenzene (Surr)	94		80 - 120		04/04/18 12:50	1
Dibromofluoromethane (Surr)	96		80 - 122		04/04/18 12:50	1
Toluene-d8 (Surr)	100		80 - 120		04/04/18 12:50	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Lab Sample ID: LCS 680-518679/4

Matrix: Water

Analysis Batch: 518679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0500	0.0475		mg/L		95	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0523		mg/L		105	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0515		mg/L		103	75 - 128
1,1,2-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120
1,1-Dichloroethane	0.0500	0.0497		mg/L		99	80 - 120
1,1-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0505		mg/L		101	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0523		mg/L		105	74 - 120
1,2-Dibromoethane	0.0500	0.0512		mg/L		102	75 - 126
1,2-Dichlorobenzene	0.0500	0.0488		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0490		mg/L		98	72 - 128
1,2-Dichloropropane	0.0500	0.0499		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0479		mg/L		96	80 - 120
1,4-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120
2-Butanone	0.250	0.269		mg/L		107	79 - 125
2-Hexanone	0.250	0.253		mg/L		101	80 - 131
4-Methyl-2-pentanone	0.250	0.249		mg/L		100	80 - 134
Acetone	0.250	0.236		mg/L		94	68 - 132
Benzene	0.0500	0.0489		mg/L		98	80 - 120
Bromodichloromethane	0.0500	0.0500		mg/L		100	80 - 120
Bromoform	0.0500	0.0532		mg/L		106	52 - 122
Bromomethane	0.0500	0.0483		mg/L		97	43 - 146
Carbon disulfide	0.0500	0.0480		mg/L		96	77 - 129
Carbon tetrachloride	0.0500	0.0497		mg/L		99	67 - 125
Chlorobenzene	0.0500	0.0503		mg/L		101	80 - 120
Chloroethane	0.0500	0.0511		mg/L		102	48 - 145
Chloroform	0.0500	0.0483		mg/L		97	80 - 120
Chloromethane	0.0500	0.0520		mg/L		104	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0500		mg/L		100	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0521		mg/L		104	80 - 129
Cyclohexane	0.0500	0.0494		mg/L		99	80 - 132
Dibromochloromethane	0.0500	0.0529		mg/L		106	68 - 120
Dichlorodifluoromethane	0.0500	0.0556		mg/L		111	70 - 137
Ethylbenzene	0.0500	0.0498		mg/L		100	80 - 120
Isopropylbenzene	0.0500	0.0493		mg/L		99	79 - 126
Methyl acetate	0.100	0.0981		mg/L		98	73 - 139
Methyl tert-butyl ether	0.0500	0.0520		mg/L		104	80 - 122
Methylcyclohexane	0.0500	0.0498		mg/L		100	80 - 138
Methylene Chloride	0.0500	0.0518		mg/L		104	80 - 120
Naphthalene	0.0500	0.0509		mg/L		102	61 - 136
Styrene	0.0500	0.0524		mg/L		105	80 - 126
Tetrachloroethene	0.0500	0.0492		mg/L		98	71 - 123
Toluene	0.0500	0.0493		mg/L		99	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0519		mg/L		104	80 - 128
Trichloroethene	0.0500	0.0494		mg/L		99	80 - 120
Trichlorofluoromethane	0.0500	0.0493		mg/L		99	58 - 127
Vinyl chloride	0.0500	0.0498		mg/L		100	80 - 129
Xylenes, Total	0.100	0.0997		mg/L		100	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCS 680-518679/4

Matrix: Water

Analysis Batch: 518679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-518679/5

Matrix: Water

Analysis Batch: 518679

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
1,1,1-Trichloroethane	0.0500	0.0483		mg/L		97	80 - 120	2	20
1,1,1,2-Tetrachloroethane	0.0500	0.0526		mg/L		105	76 - 126	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0513		mg/L		103	75 - 128	1	20
1,1,2-Trichloroethane	0.0500	0.0528		mg/L		106	80 - 120	4	20
1,1-Dichloroethane	0.0500	0.0493		mg/L		99	80 - 120	1	20
1,1-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120	0	20
1,2,4-Trichlorobenzene	0.0500	0.0521		mg/L		104	71 - 126	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0549		mg/L		110	74 - 120	5	20
1,2-Dibromoethane	0.0500	0.0520		mg/L		104	75 - 126	2	20
1,2-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	2	20
1,2-Dichloroethane	0.0500	0.0498		mg/L		100	72 - 128	2	50
1,2-Dichloropropane	0.0500	0.0505		mg/L		101	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0492		mg/L		98	80 - 120	3	20
1,4-Dichlorobenzene	0.0500	0.0482		mg/L		96	80 - 120	1	20
2-Butanone	0.250	0.280		mg/L		112	79 - 125	4	20
2-Hexanone	0.250	0.257		mg/L		103	80 - 131	2	20
4-Methyl-2-pentanone	0.250	0.253		mg/L		101	80 - 134	2	20
Acetone	0.250	0.244		mg/L		98	68 - 132	3	30
Benzene	0.0500	0.0490		mg/L		98	80 - 120	0	20
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120	2	20
Bromoform	0.0500	0.0531		mg/L		106	52 - 122	0	20
Bromomethane	0.0500	0.0514		mg/L		103	43 - 146	6	20
Carbon disulfide	0.0500	0.0477		mg/L		95	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0501		mg/L		100	67 - 125	1	20
Chlorobenzene	0.0500	0.0503		mg/L		101	80 - 120	0	20
Chloroethane	0.0500	0.0519		mg/L		104	48 - 145	2	20
Chloroform	0.0500	0.0489		mg/L		98	80 - 120	1	20
Chloromethane	0.0500	0.0536		mg/L		107	76 - 149	3	30
cis-1,2-Dichloroethene	0.0500	0.0502		mg/L		100	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0521		mg/L		104	80 - 129	0	20
Cyclohexane	0.0500	0.0491		mg/L		98	80 - 132	1	20
Dibromochloromethane	0.0500	0.0538		mg/L		108	68 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0556		mg/L		111	70 - 137	0	40
Ethylbenzene	0.0500	0.0486		mg/L		97	80 - 120	2	20
Isopropylbenzene	0.0500	0.0488		mg/L		98	79 - 126	1	20
Methyl acetate	0.100	0.101		mg/L		101	73 - 139	3	20
Methyl tert-butyl ether	0.0500	0.0522		mg/L		104	80 - 122	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCSD 680-518679/5

Matrix: Water

Analysis Batch: 518679

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Methylcyclohexane	0.0500	0.0501		mg/L		100	80 - 138	1	20	
Methylene Chloride	0.0500	0.0531		mg/L		106	80 - 120	2	20	
Naphthalene	0.0500	0.0531		mg/L		106	61 - 136	4	20	
Styrene	0.0500	0.0520		mg/L		104	80 - 126	1	20	
Tetrachloroethene	0.0500	0.0504		mg/L		101	71 - 123	2	20	
Toluene	0.0500	0.0500		mg/L		100	80 - 120	1	20	
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	0	20	
trans-1,3-Dichloropropene	0.0500	0.0531		mg/L		106	80 - 128	2	30	
Trichloroethene	0.0500	0.0505		mg/L		101	80 - 120	2	20	
Trichlorofluoromethane	0.0500	0.0495		mg/L		99	58 - 127	1	20	
Vinyl chloride	0.0500	0.0499		mg/L		100	80 - 129	0	20	
Xylenes, Total	0.100	0.0989		mg/L		99	80 - 120	1	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	98		73 - 131
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	102		80 - 122
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 680-518864/8

Matrix: Water

Analysis Batch: 518864

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,1-Dichloroethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,1-Dichloroethene	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L		04/05/18 11:56	1	
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L		04/05/18 11:56	1	
1,2-Dibromoethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,2-Dichloroethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,2-Dichloropropane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
2-Butanone	0.010	U	0.010		mg/L		04/05/18 11:56	1	
2-Hexanone	0.010	U	0.010		mg/L		04/05/18 11:56	1	
4-Methyl-2-pentanone	0.010	U	0.010		mg/L		04/05/18 11:56	1	
Acetone	0.010	U	0.010		mg/L		04/05/18 11:56	1	
Benzene	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
Bromodichloromethane	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
Bromoform	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	
Bromomethane	0.0050	U	0.0050		mg/L		04/05/18 11:56	1	
Carbon disulfide	0.0020	U	0.0020		mg/L		04/05/18 11:56	1	
Carbon tetrachloride	0.0010	U	0.0010		mg/L		04/05/18 11:56	1	

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: MB 680-518864/8

Matrix: Water

Analysis Batch: 518864

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlorobenzene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Chloroethane	0.0050	U	0.0050		mg/L			04/05/18 11:56	1
Chloroform	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Chloromethane	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Cyclohexane	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Ethylbenzene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Methyl acetate	0.0050	U	0.0050		mg/L			04/05/18 11:56	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			04/05/18 11:56	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Methylene Chloride	0.0050	U	0.0050		mg/L			04/05/18 11:56	1
Naphthalene	0.0050	U	0.0050		mg/L			04/05/18 11:56	1
Styrene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Toluene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Trichloroethene	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Vinyl chloride	0.0010	U	0.0010		mg/L			04/05/18 11:56	1
Xylenes, Total	0.0010	U	0.0010		mg/L			04/05/18 11:56	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		04/05/18 11:56	1
4-Bromofluorobenzene (Surr)	97		80 - 120		04/05/18 11:56	1
Dibromofluoromethane (Surr)	97		80 - 122		04/05/18 11:56	1
Toluene-d8 (Surr)	100		80 - 120		04/05/18 11:56	1

Lab Sample ID: LCS 680-518864/4

Matrix: Water

Analysis Batch: 518864

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	0.0500	0.0475		mg/L		95	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0484		mg/L		97	76 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0488		mg/L		98	75 - 128
1,1,2-Trichloroethane	0.0500	0.0493		mg/L		99	80 - 120
1,1-Dichloroethane	0.0500	0.0482		mg/L		96	80 - 120
1,1-Dichloroethene	0.0500	0.0487		mg/L		97	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0483		mg/L		97	71 - 126
1,2-Dibromo-3-Chloropropane	0.0500	0.0498		mg/L		100	74 - 120
1,2-Dibromoethane	0.0500	0.0483		mg/L		97	75 - 126
1,2-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCS 680-518864/4

Matrix: Water

Analysis Batch: 518864

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0500	0.0470		mg/L		94	72 - 128
1,2-Dichloropropane	0.0500	0.0483		mg/L		97	80 - 120
1,3-Dichlorobenzene	0.0500	0.0490		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0489		mg/L		98	80 - 120
2-Butanone	0.250	0.244		mg/L		97	79 - 125
2-Hexanone	0.250	0.230		mg/L		92	80 - 131
4-Methyl-2-pentanone	0.250	0.232		mg/L		93	80 - 134
Acetone	0.250	0.219		mg/L		88	68 - 132
Benzene	0.0500	0.0486		mg/L		97	80 - 120
Bromodichloromethane	0.0500	0.0499		mg/L		100	80 - 120
Bromoform	0.0500	0.0496		mg/L		99	52 - 122
Bromomethane	0.0500	0.0437		mg/L		87	43 - 146
Carbon disulfide	0.0500	0.0473		mg/L		95	77 - 129
Carbon tetrachloride	0.0500	0.0499		mg/L		100	67 - 125
Chlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
Chloroethane	0.0500	0.0497		mg/L		99	48 - 145
Chloroform	0.0500	0.0476		mg/L		95	80 - 120
Chloromethane	0.0500	0.0467		mg/L		93	76 - 149
cis-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0511		mg/L		102	80 - 129
Cyclohexane	0.0500	0.0472		mg/L		94	80 - 132
Dibromochloromethane	0.0500	0.0506		mg/L		101	68 - 120
Dichlorodifluoromethane	0.0500	0.0465		mg/L		93	70 - 137
Ethylbenzene	0.0500	0.0487		mg/L		97	80 - 120
Isopropylbenzene	0.0500	0.0487		mg/L		97	79 - 126
Methyl acetate	0.100	0.0913		mg/L		91	73 - 139
Methyl tert-butyl ether	0.0500	0.0485		mg/L		97	80 - 122
Methylcyclohexane	0.0500	0.0483		mg/L		97	80 - 138
Methylene Chloride	0.0500	0.0502		mg/L		100	80 - 120
Naphthalene	0.0500	0.0483		mg/L		97	61 - 136
Styrene	0.0500	0.0495		mg/L		99	80 - 126
Tetrachloroethene	0.0500	0.0500		mg/L		100	71 - 123
Toluene	0.0500	0.0493		mg/L		99	80 - 120
trans-1,2-Dichloroethene	0.0500	0.0498		mg/L		100	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0509		mg/L		102	80 - 128
Trichloroethene	0.0500	0.0502		mg/L		100	80 - 120
Trichlorofluoromethane	0.0500	0.0451		mg/L		90	58 - 127
Vinyl chloride	0.0500	0.0470		mg/L		94	80 - 129
Xylenes, Total	0.100	0.0977		mg/L		98	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		73 - 131
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
Toluene-d8 (Surr)	95		80 - 120

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCSD 680-518864/5

Matrix: Water

Analysis Batch: 518864

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0500	0.0482		mg/L		96	80 - 120	2	20
1,1,2,2-Tetrachloroethane	0.0500	0.0507		mg/L		101	76 - 126	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0508		mg/L		102	75 - 128	4	20
1,1,1,2-Trichloroethane	0.0500	0.0511		mg/L		102	80 - 120	4	20
1,1-Dichloroethane	0.0500	0.0491		mg/L		98	80 - 120	2	20
1,1-Dichloroethene	0.0500	0.0496		mg/L		99	80 - 120	2	20
1,2,4-Trichlorobenzene	0.0500	0.0500		mg/L		100	71 - 126	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0502		mg/L		100	74 - 120	1	20
1,2-Dibromoethane	0.0500	0.0505		mg/L		101	75 - 126	4	20
1,2-Dichlorobenzene	0.0500	0.0486		mg/L		97	80 - 120	2	20
1,2-Dichloroethane	0.0500	0.0484		mg/L		97	72 - 128	3	50
1,2-Dichloropropane	0.0500	0.0492		mg/L		98	80 - 120	2	20
1,3-Dichlorobenzene	0.0500	0.0480		mg/L		96	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0478		mg/L		96	80 - 120	2	20
2-Butanone	0.250	0.257		mg/L		103	79 - 125	5	20
2-Hexanone	0.250	0.240		mg/L		96	80 - 131	4	20
4-Methyl-2-pentanone	0.250	0.241		mg/L		96	80 - 134	4	20
Acetone	0.250	0.228		mg/L		91	68 - 132	4	30
Benzene	0.0500	0.0490		mg/L		98	80 - 120	1	20
Bromodichloromethane	0.0500	0.0497		mg/L		99	80 - 120	0	20
Bromoform	0.0500	0.0518		mg/L		104	52 - 122	4	20
Bromomethane	0.0500	0.0457		mg/L		91	43 - 146	5	20
Carbon disulfide	0.0500	0.0477		mg/L		95	77 - 129	1	20
Carbon tetrachloride	0.0500	0.0508		mg/L		102	67 - 125	2	20
Chlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0498		mg/L		100	48 - 145	0	20
Chloroform	0.0500	0.0480		mg/L		96	80 - 120	1	20
Chloromethane	0.0500	0.0478		mg/L		96	76 - 149	2	30
cis-1,2-Dichloroethene	0.0500	0.0499		mg/L		100	80 - 120	2	20
cis-1,3-Dichloropropene	0.0500	0.0519		mg/L		104	80 - 129	2	20
Cyclohexane	0.0500	0.0493		mg/L		99	80 - 132	4	20
Dibromochloromethane	0.0500	0.0522		mg/L		104	68 - 120	3	20
Dichlorodifluoromethane	0.0500	0.0485		mg/L		97	70 - 137	4	40
Ethylbenzene	0.0500	0.0488		mg/L		98	80 - 120	0	20
Isopropylbenzene	0.0500	0.0495		mg/L		99	79 - 126	2	20
Methyl acetate	0.100	0.0941		mg/L		94	73 - 139	3	20
Methyl tert-butyl ether	0.0500	0.0500		mg/L		100	80 - 122	3	20
Methylcyclohexane	0.0500	0.0505		mg/L		101	80 - 138	4	20
Methylene Chloride	0.0500	0.0507		mg/L		101	80 - 120	1	20
Naphthalene	0.0500	0.0491		mg/L		98	61 - 136	2	20
Styrene	0.0500	0.0512		mg/L		102	80 - 126	3	20
Tetrachloroethene	0.0500	0.0503		mg/L		101	71 - 123	1	20
Toluene	0.0500	0.0498		mg/L		100	80 - 120	1	20
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0522		mg/L		104	80 - 128	3	30
Trichloroethene	0.0500	0.0505		mg/L		101	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0460		mg/L		92	58 - 127	2	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

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

Lab Sample ID: LCSD 680-518864/5

Matrix: Water

Analysis Batch: 518864

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	0.0500	0.0479		mg/L		96	80 - 129	2	20
Xylenes, Total	0.100	0.0988		mg/L		99	80 - 120	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	93		73 - 131
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
Toluene-d8 (Surr)	97		80 - 120



QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

GC/MS VOA

Analysis Batch: 518488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150290-5	Trip Blank	Total/NA	Water	8260B	
MB 680-518488/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518488/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518488/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 518679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150290-1	SW-1	Total/NA	Water	8260B	
MB 680-518679/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518679/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518679/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 518864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150290-2	SW-2	Total/NA	Water	8260B	
680-150290-3	SW-3	Total/NA	Water	8260B	
680-150290-4	SW-4	Total/NA	Water	8260B	
MB 680-518864/8	Method Blank	Total/NA	Water	8260B	
LCS 680-518864/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-518864/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Client Sample ID: SW-1

Date Collected: 03/22/18 10:55

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	518679	04/04/18 14:54	Y1S	TAL SAV

Client Sample ID: SW-2

Date Collected: 03/22/18 11:15

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518864	04/05/18 13:59	JLK	TAL SAV

Client Sample ID: SW-3

Date Collected: 03/22/18 11:40

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518864	04/05/18 14:24	JLK	TAL SAV

Client Sample ID: SW-4

Date Collected: 03/22/18 11:55

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518864	04/05/18 14:48	JLK	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 03/22/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518488	04/03/18 18:23	Y1S	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: DW NPDES RCRA Other:

Client Contact: **Enery Co. Co. Suburbs Inc**
Company Name: **Enery Co. Co. Suburbs Inc**
Address: **1800 West Oak Hill Blvd Ste 100**
City/State/Zip: **MARIETTA, GA 30062**
Phone: **770-973-2100**
Fax: **770-973-2305**
Project Name: **Securum**
Site: **Securum**
P.O.#

Project Manager: **S. Maddy** Site Contact: **S. Maddy** Date: **3/22/18**
Tel/Fax: **(770) 328-5232** Carrier: **1** of **1** COCs

Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
TAT If different from Below: 2 weeks 1 week 2 days 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
SW-1	3/22/18	10:55	G	SW	6			
SW-2	3/22/18	11:15	G	SW	6			
SW-3	3/22/18	11:40	G	SW	6			
SW-4	3/22/18	11:55	G	SW	6			



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/QC Requirements & Comments:
If questions, call S. Maddy (770) 328-5732.

Cooler Temp. (°C): Obs'd: _____ Corrd: _____ Therm ID No.: _____
Received by: **RA** Company: **RA** Date/Time: **3/22/18 14:50**
Received by: **RA** Company: **RA** Date/Time: **3/22/18 16:45**
Received in Laboratory by: **RA** Company: **TASAV** Date/Time: **3-23-18 / 7:30**

1.1, 1.0°C (CF) 1.2°, 1.1°C



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150290-1

Login Number: 150290

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-150290-2
Client Project/Site: Sechem

For:
Giant Cement
654 Judge Street
PO BOX 218
Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:
4/4/2018 4:11:31 PM

Jerry Lanier, Project Manager I
(912)354-7858 e.3410
jerry.lanier@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Method Summary	5
Definitions	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	13
QC Sample Results	14
QC Association	15
Chronicle	16
Chain of Custody	17
Receipt Checklists	20
Certification Summary	21

Case Narrative

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Job ID: 680-150290-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: Sechem

Report Number: 680-150290-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 03/23/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1° C and 1.2° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SW-1 (680-150290-1), SW-2 (680-150290-2), SW-3 (680-150290-3), SW-4 (680-150290-4) and Trip Blank (680-150290-5) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 03/29/2018.

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

Sample Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-150290-1	SW-1	Water	03/22/18 10:55	03/23/18 07:30
680-150290-2	SW-2	Water	03/22/18 11:15	03/23/18 07:30
680-150290-3	SW-3	Water	03/22/18 11:40	03/23/18 07:30
680-150290-4	SW-4	Water	03/22/18 11:55	03/23/18 07:30
680-150290-5	Trip Blank	Water	03/22/18 00:00	03/23/18 07:30

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Method Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Definitions/Glossary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: SW-1

Lab Sample ID: 680-150290-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00056	J	0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SW-2

Lab Sample ID: 680-150290-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.043		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SW-3

Lab Sample ID: 680-150290-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.018		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SW-4

Lab Sample ID: 680-150290-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.012		0.0020	0.00024	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-150290-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: SW-1

Lab Sample ID: 680-150290-1

Date Collected: 03/22/18 10:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00056	J	0.0020	0.00024	mg/L			03/29/18 15:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		63 - 125					03/29/18 15:52	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: SW-2

Lab Sample ID: 680-150290-2

Date Collected: 03/22/18 11:15

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.043		0.0020	0.00024	mg/L			03/29/18 16:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		63 - 125					03/29/18 16:17	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: SW-3

Lab Sample ID: 680-150290-3

Date Collected: 03/22/18 11:40

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.018		0.0020	0.00024	mg/L			03/29/18 16:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		63 - 125					03/29/18 16:42	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: SW-4

Lab Sample ID: 680-150290-4

Date Collected: 03/22/18 11:55

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.012		0.0020	0.00024	mg/L			03/29/18 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		63 - 125					03/29/18 17:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: Trip Blank

Lab Sample ID: 680-150290-5

Date Collected: 03/22/18 00:00

Matrix: Water

Date Received: 03/23/18 07:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L			03/29/18 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		63 - 125					03/29/18 12:56	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Surrogate Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (63-125)
680-150290-1	SW-1	81
680-150290-2	SW-2	77
680-150290-3	SW-3	83
680-150290-4	SW-4	75
680-150290-5	Trip Blank	80
LCS 240-320558/4	Lab Control Sample	74
MB 240-320558/5	Method Blank	81

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Sample Results

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

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

Lab Sample ID: MB 240-320558/5

Matrix: Water

Analysis Batch: 320558

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00024	U	0.0020	0.00024	mg/L	-		03/29/18 10:50	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		63 - 125					03/29/18 10:50	1

Lab Sample ID: LCS 240-320558/4

Matrix: Water

Analysis Batch: 320558

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.0100	0.00861		mg/L	-	86	59 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	74		63 - 125				

QC Association Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

GC/MS VOA

Analysis Batch: 320558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-150290-1	SW-1	Total/NA	Water	8260B SIM	
680-150290-2	SW-2	Total/NA	Water	8260B SIM	
680-150290-3	SW-3	Total/NA	Water	8260B SIM	
680-150290-4	SW-4	Total/NA	Water	8260B SIM	
680-150290-5	Trip Blank	Total/NA	Water	8260B SIM	
MB 240-320558/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-320558/4	Lab Control Sample	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Client Sample ID: SW-1

Date Collected: 03/22/18 10:55

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 15:52	SAM	TAL CAN

Client Sample ID: SW-2

Date Collected: 03/22/18 11:15

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 16:17	SAM	TAL CAN

Client Sample ID: SW-3

Date Collected: 03/22/18 11:40

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 16:42	SAM	TAL CAN

Client Sample ID: SW-4

Date Collected: 03/22/18 11:55

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 17:07	SAM	TAL CAN

Client Sample ID: Trip Blank

Date Collected: 03/22/18 00:00

Date Received: 03/23/18 07:30

Lab Sample ID: 680-150290-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	320558	03/29/18 12:56	SAM	TAL CAN

Laboratory References:

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

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: DW NPDES RCRA Other:

Client Contact
Company Name: Enery Co. Co. Suburbs Inc
Address: 1800 West Oak Hill Blvd Ste 100
City/State/Zip: MARIETTA, GA 30062
Phone: 770-973-2100
Fax: 770-973-2305
Project Name: Seclab
Site:
P.O.#

Project Manager: S. Maddy Site Contact: S. Maddy Date: 3/22/18
Tel/Fax: (770) 328-5232 Carrier:
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS

Filtered Sample (Y/N) Perform MS/MSD (Y/N)
Lab Contact:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:
SW-1	3/22/18	10:55	G	SW	6	
SW-2	3/22/18	11:15	G	SW	6	
SW-3	3/22/18	11:40	G	SW	6	
SW-4	3/22/18	11:55	G	SW	6	



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:
If questions, call S. Maddy (770) 328-5732.

Cooler Temp. (°C): Obs'd: _____ Corrd: _____ Therm ID No.: _____
Received by: [Signature] Company: TA Date/Time: 3/22/18 14:50
Received by: [Signature] Company: TA Date/Time: 3/22/18 16:55
Received in Laboratory by: [Signature] Company: TASAV Date/Time: 3-23-18 / 7:30

Relinquished by: [Signature]

1.1, 1.0°C (CF) 1.2°, 1.1°C



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Lanier, Jerry A	Carrier Tracking No(s): 680-512819.1
Client Contact: Shipping/Receiving		E-Mail: jerry.lanier@testamericainc.com	State of Origin: Georgia
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Florida	Job #: 680-150290-2
Address: 4101 Shuffel Street NW		Due Date Requested: 4/4/2018	Page: Page 1 of 1
City: North Canton		TAT Requested (days):	
State, Zip: OH, 44720		PO #:	
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:	
Email:		Project #: 68002623	
Project Name: GCH--SECHEM INC		SSOW#:	
Site:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Preservation Code:	Analysis Requested	Total Number of Containers	Special Instructions/Note:
SW-1 (680-150290-1)	3/22/18	10:55 Eastern		Water	X	X			3	
SW-2 (680-150290-2)	3/22/18	11:15 Eastern		Water	X	X			3	
SW-3 (680-150290-3)	3/22/18	11:40 Eastern		Water	X	X			3	
SW-4 (680-150290-4)	3/22/18	11:55 Eastern		Water	X	X			3	
Trip Blank (680-150290-5)	3/22/18	Eastern		Water	X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Jerry Lanier* Date/Time: 3/23/18 17:00 Company: *BA*
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seal No.: _____
 Custody Seals Intact: Yes No
 Cooler Temperature(s) °C and Other Remarks:



TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 680-150290

Client TA Savannah Site Name _____
 Cooler Received on 3/24/18 Opened on 3/24/18
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Cooler unpacked by:
Derry Bunn

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

- See Multiple Cooler Form
- Cooler temperature upon receipt
 IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp. 2.0 °C Corrected Cooler Temp. 2.1 °C
 IR GUN #36 (CF +0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN # 627 (CF -1.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 - Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 -Were tamper/custody seals intact and uncompromised? Yes No
 - Shippers' packing slip attached to the cooler(s)? Yes No
 - Did custody papers accompany the sample(s)? Yes No
 - Were the custody papers relinquished & signed in the appropriate place? Yes No
 - Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
 - Did all bottles arrive in good condition (Unbroken)? Yes No
 - Could all bottle labels be reconciled with the COC? Yes No
 - Were correct bottle(s) used for the test(s) indicated? Yes No
 - Sufficient quantity received to perform indicated analyses? Yes No
 - Are these work share samples?
 If yes, Questions 12-16 have been checked at the originating laboratory. Yes No NA
 12. Were all preserved sample(s) at the correct pH upon receipt? Yes No
 13. Were VOAs on the COC? Yes No NA
 14. Were air bubbles >6 mm in any VOA vials? Yes No NA
 15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
 16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
 Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-150290-2

Login Number: 150290

List Source: TestAmerica Savannah

List Number: 1

Creator: Anderson, Jordan K

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Guam	State Program	9	15-005r	04-16-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-18 *
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: Sechem

TestAmerica Job ID: 680-150290-2

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-18 *
Illinois	NELAP	5	200004	07-31-18
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18
Nevada	State Program	9	OH-000482008A	07-31-18
New Jersey	NELAP	2	OH001	06-30-18 *
New York	NELAP	2	10975	03-31-18 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-18
Texas	NELAP	6	T104704517-17-9	08-31-18
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



APPENDIX E

Soil Delineation Criteria Calculations

Table E1: Type 1 Risk Reduction Standards for Soil [Rule 391-3-19-.07(6)(c)]

Constituents (mg/kg)	Appendix III Table 2 Value	Item 1 (i) Appendix I Concentration	Item 1 (ii) SSL for Migration to Groundwater	Item 2	
				Lesser of RAGS Equ 6 or Equ 7 Value	Basis
Volatile Organics:					
1,1,1-Trichloroethane	--	5.44	1.40	8.15E+03	sat
1,1,2-Trichloroethane	--	0.5	0.03	1.50E+00	nc
1,1-Dichloroethane	--	0.03	0.16	3.55E+01	c
1,2-Dichloroethane	--	0.02	0.03	4.64E+00	c
1,1-Dichloroethene	--	0.36	0.05	2.27E+02	nc
1,2-Dichlorobenzene	--	25	11.60	1.81E+03	nc
1,3-Dichlorobenzene	--	2.22	0.02	--	--
1,4-Dichlorobenzene	--	6.84	1.45	2.61E+01	c
1,4-Dioxane	--	DL/0.13	0.02	5.30E+01	c
2-Butanone (MEK)	--	0.79	23.43	2.70E+04	nc
4-Methyl-2-pentanone (MIBK)	--	3.3	28.54	3.31E+04	sat
Acetone	--	2.74	57.38	6.07E+04	nc
Benzene	--	0.02	0.05	1.16E+01	c
Carbon Disulfide	--	DL	4.78	7.69E+02	sat
Chlorobenzene	--	4.18	1.34	2.77E+02	nc
Chloroform	--	0.68	0.44	3.16E+00	c
Ethylbenzene	--	20	15.79	5.78E+01	c
Isopropylbenzene (cumene)	--	21.88	14.77	1.95E+03	sat
Methanol	--	1.37	80.81	1.24E+05	sat
Methylene Chloride	--	0.08	0.03	3.50E+02	nc
Naphthalene	--	100	0.39	3.82E+01	c
Tetrachloroethene	--	0.18	0.05	8.10E+01	nc
Toluene	--	14.40	13.67	4.89E+03	sat
Trichloroethene	--	0.13	0.04	4.12E+00	nc
Vinyl Chloride	--	0.04	0.01	5.93E-01	c
Xylenes	--	20	196.70	5.76E+02	sat
n-Butyl Acetate	--	1,000	0.005	--	--
1,2-Dichloroethene (cis)	--	0.53	0.41	1.56E+02	nc
1,2-Dichloroethene (trans)	--	0.53	0.63	1.56E+03	nc
1,2,4-Trichlorobenzene	--	10.83	4.21	5.79E+01	nc

Notes:

- 1) Dashes (--) indicate the information was not available for the referenced constituent.
 2) numbers in **bold** indicate the Type 1 RRS for the constituent

nc - non carcinogenic

c - carcinogenic

sat - concentration may exceed Csat

Prepared By: CDN 9/21/2018

Checked By: AGL 9/24/2018

Table E2: Type 1 Soil Screening Level for Migration to Groundwater

Constituents	C _L					Ow (L _{water} / L _{soil})	Oa (L _{air} / L _{soil})	Pb (kg/L)	H [*] (unitless)	Cs (mg/kg)
	Type 1 GW Criteria (mg/L)	DAF (unitless)	Kd (L/kg)	Koc [*] (L/kg)	foc (g/g)					
Volatile Organics:										
1,1,1-Trichloroethane	0.2	20	8.80E-02	4.40E+01	0.002	0.3	0.13	1.5	7.0E-01	1.40
1,1,2-Trichloroethane	0.005	20	1.22E-01	6.10E+01	0.002	0.3	0.13	1.5	3.4E-02	0.03
1,1-Dichloroethane	0.028	20	6.40E-02	3.20E+01	0.002	0.3	0.13	1.5	2.3E-01	0.16
1,2-Dichloroethane	0.005	20	8.00E-02	4.00E+01	0.002	0.3	0.13	1.5	4.8E-02	0.03
1,1-Dichloroethene	0.007	20	6.40E-02	3.20E+01	0.002	0.3	0.13	1.5	1.1E+00	0.05
1,2-Dichlorobenzene	0.6	20	7.60E-01	3.80E+02	0.002	0.3	0.13	1.5	7.8E-02	11.60
1,3-Dichlorobenzene	0.001	20	7.50E-01	3.75E+02	0.002	0.3	0.13	1.5	1.08E-01	0.02
1,4-Dichlorobenzene	0.075	20	7.60E-01	3.80E+02	0.002	0.3	0.13	1.5	9.9E-02	1.45
1,4-Dioxane	0.0046	20	5.20E-03	2.60E+00	0.002	0.3	0.13	1.5	2.0E-04	0.02
2-Butanone (MEK)	5.6	20	9.00E-03	4.50E+00	0.002	0.3	0.13	1.5	2.3E-03	23.43
4-Methyl-2-pentanone (MIBK)	6.3	20	2.60E-02	1.30E+01	0.002	0.3	0.13	1.5	5.6E-03	28.54
Acetone	14	20	4.80E-03	2.40E+00	0.002	0.3	0.13	1.5	1.4E-03	57.38
Benzene	0.005	20	3.00E-01	1.50E+02	0.002	0.3	0.13	1.5	2.3E-01	0.05
Carbon Disulfide	0.81	20	4.40E-02	2.20E+01	0.002	0.3	0.13	1.5	5.9E-01	4.78
Chlorobenzene	0.1	20	4.60E-01	2.30E+02	0.002	0.3	0.13	1.5	1.3E-01	1.34
Chloroform	0.08	20	6.40E-02	3.20E+01	0.002	0.3	0.13	1.5	1.5E-01	0.44
Ethylbenzene	0.7	20	9.00E-01	4.50E+02	0.002	0.3	0.13	1.5	3.2E-01	15.79
Isopropylbenzene (cumene)	0.45	20	1.40E+00	7.00E+02	0.002	0.3	0.13	1.5	4.7E-01	14.77
Methanol	20	20	2.00E-03	1.00E+00	0.002	0.3	0.13	1.5	1.9E-04	80.81
Methylene Chloride	0.005	20	4.40E-02	2.20E+01	0.002	0.3	0.13	1.5	1.3E-01	0.03
Naphthalene	0.0061	20	3.00E+00	1.50E+03	0.002	0.3	0.13	1.5	1.8E-02	0.39
Tetrachloroethene	0.005	20	1.90E-01	9.50E+01	0.002	0.3	0.13	1.5	7.2E-01	0.05
Toluene	1	20	4.60E-01	2.30E+02	0.002	0.3	0.13	1.5	2.7E-01	13.67
Trichloroethene	0.005	20	1.22E-01	6.10E+01	0.002	0.3	0.13	1.5	4.0E-01	0.04
Vinyl Chloride	0.002	20	4.40E-02	2.20E+01	0.002	0.3	0.13	1.5	1.1E+00	0.01
Xylenes	10	20	7.60E-01	3.80E+02	0.002	0.3	0.13	1.5	2.7E-01	196.70
n-Butyl Acetate	0.001	20	3.70E-02	1.85E+01	0.002	0.3	0.13	1.5	1.15E-02	0.005
cis-1,2-Dichloroethene	0.07	20	8.00E-02	4.00E+01	0.002	0.3	0.13	1.5	1.70E-01	0.413
trans-1,2-Dichloroethene	0.10	20	8.00E-02	4.00E+01	0.002	0.3	0.13	1.5	3.80E-01	0.626
1,2,4-Trichlorobenzene	0.07	20	2.80E+00	1.40E+03	0.002	0.3	0.13	1.5	5.80E-02	4.207

Notes:

*Physical-chemical parameters were obtained from the EPA Regional Screening Level (RSL) Chemical-specific Parameters Table (May 2018); parameters for 1,3-Dichlorobenzene and n-Butyl Acetate were obtained from the RSL calculator.

Type 1 GW Criteria for 1,3-Dichlorobenzene and n-Butyl Acetate are the Detection Limit which is set as 0.001 mg/L

$$Cs = C_L [Kd + (Ow + Oa * H') / Pb]$$

C_L=target soil leachate concentration (mg/L)

C_L = groundwater criteria * dilution attenuation factor (DAF)

Kd = soil-water partition coefficient (L/kg) = Koc x foc

Koc=soil organic carbon-water partition coefficient (L/kg)

foc = fraction organic carbon-water partition coefficient (g/g)

Ow = water-filled soil porosity (L_{water}/L_{soil})

Oa = air-filled soil porosity (L_{air}/L_{soil}) = n-Ow

Pb = dry soil bulk density (kg/L)

H' = dimensionless Henry's Law Constant

Site-specific Resident Equation Inputs for Soil

* Inputted values different from Resident defaults are highlighted.

Variable	Resident Soil Default Value	Form-input Value
A (PEF Dispersion Constant)	16.2302	16.2302
A (VF Dispersion Constant)	11.911	11.911
A (VF Dispersion Constant - Mass Limit)	11.911	11.911
B (PEF Dispersion Constant)	18.7762	18.7762
B (VF Dispersion Constant)	18.4385	18.4385
B (VF Dispersion Constant - Mass Limit)	18.4385	18.4385
City _{PEF} (Climate Zone) Selection	Default	Default
City _{VF} (Climate Zone) Selection	Default	Default
C (PEF Dispersion Constant)	216.108	216.108
C (VF Dispersion Constant)	209.7845	209.7845
C (VF Dispersion Constant - Mass Limit)	209.7845	209.7845
foc (fraction organic carbon in soil) g/g	0.006	0.006
F(x) (function dependent on U _m /U _c) unitless	0.194	0.194
n (total soil porosity) L_{pore}/L_{crit}	0.43396	0.43396
ρ_b (dry soil bulk density) g/cm ³	1.5	1.5
ρ_b (dry soil bulk density - mass limit) g/cm ³	1.5	1.5
PEF (particulate emission factor) m ³ /kg	1359344438	1359344438
ρ_s (soil particle density) g/cm ³	2.65	2.65
Q/C _{wind} (g/m ² -s per kg/m ³)	93.77	93.77
Q/C _{vol} (g/m ² -s per kg/m ³)	68.18	68.18
Q/C _{vol} (g/m ² -s per kg/m ³)	68.18	68.18
A _e (PEF acres)	0.5	0.5
A _e (VF acres)	0.5	0.5
A _e (VF mass-limit acres)	0.5	0.5
AF ₀₋₂ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
AF ₂₋₆ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
AF ₆₋₁₆ (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
AF ₁₆₋₂₆ (mutagenic skin adherence factor) mg/cm ²	0.07	0.07

Site-specific Resident Equation Inputs for Soil

* Inputted values different from Resident defaults are highlighted.

Variable	Resident Soil Default Value	Form-input Value
AF _{res-a} (skin adherence factor - adult) mg/cm ²	0.07	0.07
AF _{res-c} (skin adherence factor - child) mg/cm ²	0.2	0.2
AT _{rac} (averaging time - resident carcinogenic)	365	365
BW _{n,γ} (mutagenic body weight) kg	15	15
BW _{γ,δ} (mutagenic body weight) kg	15	15
BW _{δ,1δ} (mutagenic body weight) kg	80	80
BW _{1δ,γδ} (mutagenic body weight) kg	80	80
BW _{rac-a} (body weight - adult) kg	80	80
BW _{rac-r} (body weight - child) kg	15	15
DFS _{rac-a,dfi} (age-adjusted soil dermal factor) mg/kg	103390	103390
DFS _{rac-r,dfi} (mutagenic age-adjusted soil dermal factor) mg/kg	428260	428260
ED _{rac} (exposure duration) years	26	26
ED _{n,γ} (mutagenic exposure duration) years	2	2
ED _{γ,δ} (mutagenic exposure duration) years	4	4
ED _{δ,1δ} (mutagenic exposure duration) years	10	10
ED _{1δ,γδ} (mutagenic exposure duration) years	10	10
ED _{rac-a} (exposure duration - adult) years	20	20
ED _{rac-r} (exposure duration - child) years	6	6
EF _{rac} (exposure frequency) days/year	350	350
EF _{n,γ} (mutagenic exposure frequency) days/year	350	350
EF _{γ,δ} (mutagenic exposure frequency) days/year	350	350
EF _{δ,1δ} (mutagenic exposure frequency) days/year	350	350
EF _{1δ,γδ} (mutagenic exposure frequency) days/year	350	350
EF _{rac-a} (exposure frequency - adult) days/year	350	350
EF _{rac-r} (exposure frequency - child) days/year	350	350
ET _{rac} (exposure time) hours/day	24	24
ET _{n,γ} (mutagenic exposure time) hours/day	24	24
ET _{γ,δ} (mutagenic exposure time) hours/day	24	24
ET _{δ,1δ} (mutagenic exposure time) hours/day	24	24

Site-specific Resident Equation Inputs for Soil

* Inputted values different from Resident defaults are highlighted.

Variable	Resident Soil Default Value	Form-input Value
ET ₁₆₋₂₆ (mutagenic exposure time) hours/day	24	24
ET _{res-a} (adult exposure time) hours/day	24	24
ET _{res-c} (child exposure time) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
IFS _{res-adj} (age-adjusted soil ingestion factor) mg/kg	36750	36750
IFSM _{res-adj} (mutagenic age-adjusted soil ingestion factor) mg/kg	166833.3	166833.3
IRS ₀₋₂ (mutagenic soil intake rate) mg/day	200	200
IRS ₂₋₆ (mutagenic soil intake rate) mg/day	200	200
IRS ₆₋₁₆ (mutagenic soil intake rate) mg/day	100	100
IRS ₁₆₋₂₆ (mutagenic soil intake rate) mg/day	100	100
IRS _{res-a} (soil intake rate - adult) mg/day	100	100
IRS _{res-c} (soil intake rate - child) mg/day	200	200
LT (lifetime) years	70	70
SA ₀₋₂ (mutagenic skin surface area) cm ² /day	2373	2373
SA ₂₋₆ (mutagenic skin surface area) cm ² /day	2373	2373
SA ₆₋₁₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA _{res-a} (skin surface area - adult) cm ² /day	6032	6032
SA _{res-c} (skin surface area - child) cm ² /day	2373	2373
TR (target risk) unitless	1.0E-06	1.0E-05
T _w (groundwater temperature) Celsius	25	25
Theta _a (air-filled soil porosity) L _{air} /L _{cnil}	0.28396	0.28396
Theta _w (water-filled soil porosity) L _{water} /L _{cnil}	0.15	0.15
T (exposure interval) s	819936000	819936000
T (exposure interval) yr	26	26
U _m (mean annual wind speed) m/s	4.69	4.69
U _i (equivalent threshold value)	11.32	11.32
V (fraction of vegetative cover) unitless	0.5	0.5

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	CAS Number	Mutagen?	Volatile?	Ingestion SF (mg/kg-day) ⁻¹	SFO Ref	Inhalation Unit Risk (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA
Acetone	67-64-1	No	Yes	-		-		9.00E-01	U	3.09E+01	U	1	-	1
Benzene	71-43-2	No	Yes	5.50E-02	U	7.80E-06	U	4.00E-03	U	3.00E-02	U	1	-	1
Butylacetate	123-86-4	No	Yes	-		-		-		-		1	-	1
Carbon Disulfide	75-15-0	No	Yes	-		-		1.00E-01	U	7.00E-01	U	1	-	1
Chlorobenzene	108-90-7	No	Yes	-		-		2.00E-02	U	5.00E-02	U	1	-	1
Chloroform	67-66-3	No	Yes	3.10E-02	U	2.30E-05	U	1.00E-02	U	9.77E-02	U	1	-	1
Cumene	98-82-8	No	Yes	-		-		1.00E-01	U	4.00E-01	U	1	-	1
Dichlorobenzene, 1,2-	95-50-1	No	Yes	-		-		9.00E-02	U	2.00E-01	U	1	-	1
Dichlorobenzene, 1,3-	541-73-1	No	Yes	-		-		-		-		1	-	1
Dichlorobenzene, 1,4-	106-46-7	No	Yes	5.40E-03	U	1.10E-05	U	7.00E-02	U	8.00E-01	U	1	-	1
Dichloroethane, 1,1-	75-34-3	No	Yes	5.70E-03	U	1.60E-06	U	2.00E-01	U	-		1	-	1
Dichloroethane, 1,2-	107-06-2	No	Yes	9.10E-02	U	2.60E-05	U	6.00E-03	U	7.00E-03	U	1	-	1
Dichloroethylene, 1,1-	75-35-4	No	Yes	-		-		5.00E-02	U	2.00E-01	U	1	-	1
Dichloroethylene, 1,2-cis-	156-59-2	No	Yes	-		-		2.00E-03	U	-		1	-	1
Dichloroethylene, 1,2-trans-	156-60-5	No	Yes	-		-		2.00E-02	U	-		1	-	1
Dioxane, 1,4-	123-91-1	No	Yes	1.00E-01	U	5.00E-06	U	3.00E-02	U	3.00E-02	U	1	-	1
Ethylbenzene	100-41-4	No	Yes	1.10E-02	U	2.50E-06	U	1.00E-01	U	1.00E+00	U	1	-	1
Methanol	67-56-1	No	Yes	-		-		2.00E+00	U	2.00E+01	U	1	-	1
Methyl Ethyl Ketone (2-Butanone)	78-93-3	No	Yes	-		-		6.00E-01	U	5.00E+00	U	1	-	1
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	No	Yes	-		-		-		3.00E+00	U	1	-	1
Methylene Chloride	75-09-2	Yes	Yes	2.00E-03	U	1.00E-08	U	6.00E-03	U	6.00E-01	U	1	-	1
Naphthalene	91-20-3	No	Yes	-		3.40E-05	U	2.00E-02	U	3.00E-03	U	1	0.13	1
Tetrachloroethylene	127-18-4	No	Yes	2.10E-03	U	2.60E-07	U	6.00E-03	U	4.00E-02	U	1	-	1
Toluene	108-88-3	No	Yes	-		-		8.00E-02	U	5.00E+00	U	1	-	1

Site-specific Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	Soil Saturation Concentration (mg/kg)	S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H and HLC Ref	Normal Boiling Point T _{boil} (K)	BP Ref	Critical Temperature T _{crit} (K)	T _{crit} Ref
Acetone	1.14E+05	1.00E+06	2.36E+00	1.42E-02	3.50E-05	1.43E-03	U	329.15	U	508	U
Benzene	1.82E+03	1.79E+03	1.46E+02	8.76E-01	5.55E-03	2.27E-01	U	353.15	U	562	U
Butylacetate	1.79E+03	8.40E+03	1.85E+01	1.11E-01	2.81E-04	1.15E-02	U	399.15	U	578	U
Carbon Disulfide	7.38E+02	2.16E+03	2.17E+01	1.30E-01	1.44E-02	5.89E-01	U	319.15	U	552	U
Chlorobenzene	7.61E+02	4.98E+02	2.34E+02	1.40E+00	3.11E-03	1.27E-01	U	405.15	U	632	U
Chloroform	2.54E+03	7.95E+03	3.18E+01	1.91E-01	3.67E-03	1.50E-01	U	334.25	U	536	U
Cumene	2.68E+02	6.13E+01	6.98E+02	4.19E+00	1.15E-02	4.70E-01	U	425.15	U	631	U
Dichlorobenzene, 1,2-	3.76E+02	1.56E+02	3.83E+02	2.30E+00	1.92E-03	7.85E-02	U	453.15	U	705	U
Dichlorobenzene, 1,3-	2.96E+02	1.25E+02	3.75E+02	2.25E+00	2.63E-03	1.08E-01	U	446.15	U	686	U
Dichlorobenzene, 1,4-	-	8.13E+01	3.75E+02	2.25E+00	2.41E-03	9.85E-02	U	447.15	U	669	U
Dichloroethane, 1,1-	1.68E+03	5.04E+03	3.18E+01	1.91E-01	5.62E-03	2.30E-01	U	330.55	U	523	U
Dichloroethane, 1,2-	2.98E+03	8.60E+03	3.96E+01	2.38E-01	1.18E-03	4.82E-02	U	356.65	U	562	U
Dichloroethylene, 1,1-	1.19E+03	2.42E+03	3.18E+01	1.91E-01	2.61E-02	1.07E+00	U	304.85	U	482	U
Dichloroethylene, 1,2-cis-	2.37E+03	6.41E+03	3.96E+01	2.38E-01	4.08E-03	1.67E-01	U	333.25	U	536	U
Dichloroethylene, 1,2-trans-	1.85E+03	4.52E+03	3.96E+01	2.38E-01	9.38E-03	3.83E-01	U	321.85	U	516	U
Dioxane, 1,4-	1.16E+05	1.00E+06	2.63E+00	1.58E-02	4.80E-06	1.96E-04	U	375.15	U	587	U
Ethylbenzene	4.79E+02	1.69E+02	4.46E+02	2.68E+00	7.88E-03	3.22E-01	U	409.15	U	617	U
Methanol	1.06E+05	1.00E+06	1.00E+00	6.00E-03	4.55E-06	1.86E-04	U	337.85	U	513	U
Methyl Ethyl Ketone (2-Butanone)	2.84E+04	2.23E+05	4.51E+00	2.71E-02	5.69E-05	2.33E-03	U	352.65	U	537	U
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	3.36E+03	1.90E+04	1.26E+01	7.56E-02	1.38E-04	5.64E-03	U	389.15	U	575	U
Methylene Chloride	3.32E+03	1.30E+04	2.17E+01	1.30E-01	3.25E-03	1.33E-01	U	313.15	U	508	U
Naphthalene	-	3.10E+01	1.54E+03	9.24E+00	4.40E-04	1.80E-02	U	491.15	U	748	U
Tetrachloroethylene	1.66E+02	2.06E+02	9.49E+01	5.69E-01	1.77E-02	7.24E-01	U	394.15	U	620	U
Toluene	8.18E+02	5.26E+02	2.34E+02	1.40E+00	6.64E-03	2.71E-01	U	384.15	U	592	U

Site-specific Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	chemtype	$D_{ia} \setminus$ (cm^2/s)	$D_{iw} \setminus$ (cm^2/s)	$D_A \setminus$ (cm^2/s)	Particulate Emission Factor (m^3/kg)	Volatilization Factor (m^3/kg)	Ingestion SL TR=1E-05 (mg/kg)	Dermal SL TR=1E-05 (mg/kg)	Inhalation SL TR=1E-05 (mg/kg)	Carcinogenic SL TR=1E-05 (mg/kg)
Acetone	VOC	1.06E-01	1.15E-05	7.13E-05	1.36E+09	1.37E+04	-	-	-	-
Benzene	VOC	8.95E-02	1.03E-05	1.06E-03	1.36E+09	3.54E+03	1.26E+02	-	1.27E+01	1.16E+01
Butylacetate	VOC	6.32E-02	8.12E-06	1.82E-04	1.36E+09	8.55E+03	-	-	-	-
Carbon Disulfide	VOC	1.06E-01	1.30E-05	9.73E-03	1.36E+09	1.17E+03	-	-	-	-
Chlorobenzene	VOC	7.21E-02	9.48E-06	3.20E-04	1.36E+09	6.45E+03	-	-	-	-
Chloroform	VOC	7.69E-02	1.09E-05	1.93E-03	1.36E+09	2.63E+03	2.24E+02	-	3.21E+00	3.16E+00
Cumene	VOC	6.03E-02	7.86E-06	3.45E-04	1.36E+09	6.21E+03	-	-	-	-
Dichlorobenzene, 1,2-	VOC	5.62E-02	8.92E-06	9.74E-05	1.36E+09	1.17E+04	-	-	-	-
Dichlorobenzene, 1,3-	VOC	5.58E-02	8.85E-06	1.35E-04	1.36E+09	9.93E+03	-	-	-	-
Dichlorobenzene, 1,4-	VOC	5.50E-02	8.68E-06	1.22E-04	1.36E+09	1.04E+04	1.29E+03	-	2.67E+01	2.61E+01
Dichloroethane, 1,1-	VOC	8.36E-02	1.06E-05	3.06E-03	1.36E+09	2.08E+03	1.22E+03	-	3.66E+01	3.55E+01
Dichloroethane, 1,2-	VOC	8.57E-02	1.10E-05	6.35E-04	1.36E+09	4.57E+03	7.64E+01	-	4.94E+00	4.64E+00
Dichloroethylene, 1,1-	VOC	8.63E-02	1.10E-05	9.96E-03	1.36E+09	1.16E+03	-	-	-	-
Dichloroethylene, 1,2-cis-	VOC	8.84E-02	1.13E-05	2.13E-03	1.36E+09	2.50E+03	-	-	-	-
Dichloroethylene, 1,2-trans-	VOC	8.76E-02	1.12E-05	4.36E-03	1.36E+09	1.75E+03	-	-	-	-
Dioxane, 1,4-	VOC	8.74E-02	1.05E-05	8.47E-06	1.36E+09	3.96E+04	6.95E+01	-	2.23E+02	5.30E+01
Ethylbenzene	VOC	6.85E-02	8.46E-06	4.14E-04	1.36E+09	5.66E+03	6.32E+02	-	6.36E+01	5.78E+01
Methanol	VOC	1.58E-01	1.65E-05	1.58E-05	1.36E+09	2.91E+04	-	-	-	-
Methyl Ethyl Ketone (2-Butanone)	VOC	9.14E-02	1.02E-05	8.94E-05	1.36E+09	1.22E+04	-	-	-	-
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	VOC	6.98E-02	8.35E-06	1.19E-04	1.36E+09	1.06E+04	-	-	-	-
Methylene Chloride	VOC	9.99E-02	1.25E-05	2.77E-03	1.36E+09	2.19E+03	7.66E+02	-	2.22E+03	5.69E+02
Naphthalene	PAH	6.05E-02	8.38E-06	6.21E-06	1.36E+09	4.63E+04	-	-	3.82E+01	3.82E+01
Tetrachloroethylene	VOC	5.05E-02	9.46E-06	2.41E-03	1.36E+09	2.35E+03	3.31E+03	-	2.53E+02	2.35E+02
Toluene	VOC	7.78E-02	9.20E-06	7.23E-04	1.36E+09	4.29E+03	-	-	-	-

Site-specific Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	Ingestion SL Child THQ=1 (mg/kg)	Dermal SL Child THQ=1 (mg/kg)	Inhalation SL Child THQ=1 (mg/kg)	Noncarcinogenic SL Child THI=1 (mg/kg)	Ingestion SL Adult THQ=1 (mg/kg)	Dermal SL Adult THQ=1 (mg/kg)	Inhalation SL Adult THQ=1 (mg/kg)	Noncarcinogenic SL Adult THI=1 (mg/kg)	Screening Level (mg/kg)
Acetone	7.04E+04	-	4.40E+05	6.07E+04	7.51E+05	-	4.40E+05	2.78E+05	6.07E+04 nc
Benzene	3.13E+02	-	1.11E+02	8.18E+01	3.34E+03	-	1.11E+02	1.07E+02	1.16E+01 ca**
Butylacetate	-	-	-	-	-	-	-	-	
Carbon Disulfide	7.82E+03	-	8.53E+02	7.69E+02	8.34E+04	-	8.53E+02	8.45E+02	7.69E+02 sat
Chlorobenzene	1.56E+03	-	3.36E+02	2.77E+02	1.67E+04	-	3.36E+02	3.30E+02	2.77E+02 nc
Chloroform	7.82E+02	-	2.68E+02	1.99E+02	8.34E+03	-	2.68E+02	2.59E+02	3.16E+00 ca*
Cumene	7.82E+03	-	2.59E+03	1.95E+03	8.34E+04	-	2.59E+03	2.51E+03	1.95E+03 sat
Dichlorobenzene, 1,2-	7.04E+03	-	2.44E+03	1.81E+03	7.51E+04	-	2.44E+03	2.36E+03	1.81E+03 sat
Dichlorobenzene, 1,3-	-	-	-	-	-	-	-	-	
Dichlorobenzene, 1,4-	5.48E+03	-	8.71E+03	3.36E+03	5.84E+04	-	8.71E+03	7.58E+03	2.61E+01 ca
Dichloroethane, 1,1-	1.56E+04	-	-	1.56E+04	1.67E+05	-	-	1.67E+05	3.55E+01 ca
Dichloroethane, 1,2-	4.69E+02	-	3.34E+01	3.12E+01	5.01E+03	-	3.34E+01	3.32E+01	4.64E+00 ca**
Dichloroethylene, 1,1-	3.91E+03	-	2.41E+02	2.27E+02	4.17E+04	-	2.41E+02	2.40E+02	2.27E+02 nc
Dichloroethylene, 1,2-cis-	1.56E+02	-	-	1.56E+02	1.67E+03	-	-	1.67E+03	1.56E+02 nc
Dichloroethylene, 1,2-trans-	1.56E+03	-	-	1.56E+03	1.67E+04	-	-	1.67E+04	1.56E+03 nc
Dioxane, 1,4-	2.35E+03	-	1.24E+03	8.11E+02	2.50E+04	-	1.24E+03	1.18E+03	5.30E+01 ca*
Ethylbenzene	7.82E+03	-	5.91E+03	3.37E+03	8.34E+04	-	5.91E+03	5.52E+03	5.78E+01 ca*
Methanol	1.56E+05	-	6.06E+05	1.24E+05	1.67E+06	-	6.06E+05	4.45E+05	1.24E+05 sat
Methyl Ethyl Ketone (2-Butanone)	4.69E+04	-	6.36E+04	2.70E+04	5.01E+05	-	6.36E+04	5.64E+04	2.70E+04 nc
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	-	-	3.31E+04	3.31E+04	-	-	3.31E+04	3.31E+04	3.31E+04 sat
Methylene Chloride	4.69E+02	-	1.37E+03	3.50E+02	5.01E+03	-	1.37E+03	1.08E+03	3.50E+02 nc
Naphthalene	1.56E+03	5.07E+03	1.45E+02	1.29E+02	1.67E+04	3.04E+04	1.45E+02	1.43E+02	3.82E+01 ca**
Tetrachloroethylene	4.69E+02	-	9.79E+01	8.10E+01	5.01E+03	-	9.79E+01	9.60E+01	8.10E+01 nc
Toluene	6.26E+03	-	2.24E+04	4.89E+03	6.67E+04	-	2.24E+04	1.67E+04	4.89E+03 sat

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	CAS Number	Mutagen?	Volatile?	Ingestion SF (mg/kg-day) ⁻¹	SFO Ref	Inhalation Unit Risk (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA
Trichlorobenzene, 1,2,4-	120-82-1	No	Yes	2.90E-02	U	-		1.00E-02	U	2.00E-03	U	1	-	1
Trichloroethane, 1,1,1-	71-55-6	No	Yes	-		-		2.00E+00	U	5.00E+00	U	1	-	1
Trichloroethane, 1,1,2-	79-00-5	No	Yes	5.70E-02	U	1.60E-05	U	4.00E-03	U	2.00E-04	U	1	-	1
Trichloroethylene	79-01-6	Yes	Yes	4.60E-02	U	4.10E-06	U	5.00E-04	U	2.00E-03	U	1	-	1
Vinyl Chloride	75-01-4	Yes	Yes	7.20E-01	U	4.40E-06	U	3.00E-03	U	1.00E-01	U	1	-	1
Xylenes	1330-20-7	No	Yes	-		-		2.00E-01	U	1.00E-01	U	1	-	1

Site-specific Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	Soil Saturation Concentration (mg/kg)	S (mg/L)	K_{oc} (cm ³ /g)	K_d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H and HLC Ref	Normal Boiling Point T _{boil} (K)	BP Ref	Critical Temperature T _{crit} (K)	T _{crit} Ref
Trichlorobenzene, 1,2,4-	4.05E+02	4.90E+01	1.36E+03	8.16E+00	1.42E-03	5.81E-02	U	487.15	U	725	U
Trichloroethane, 1,1,1-	6.41E+02	1.29E+03	4.39E+01	2.63E-01	1.72E-02	7.03E-01	U	347.15	U	545	U
Trichloroethane, 1,1,2-	2.16E+03	4.59E+03	6.07E+01	3.64E-01	8.24E-04	3.37E-02	U	387.15	U	602	U
Trichloroethylene	6.92E+02	1.28E+03	6.07E+01	3.64E-01	9.85E-03	4.03E-01	U	360.35	U	571	U
Vinyl Chloride	3.92E+03	8.80E+03	2.17E+01	1.30E-01	2.78E-02	1.14E+00	U	259.85	U	425	U
Xylenes	2.60E+02	1.06E+02	3.83E+02	2.30E+00	6.63E-03	2.71E-01	U	411.15	U	620	U

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	chemtype	$D_{ia} \backslash$ (cm^2/s)	$D_{iw} \backslash$ (cm^2/s)	$D_A \backslash$ (cm^2/s)	Particulate Emission Factor (m^3/kg)	Volatilization Factor (m^3/kg)	Ingestion SL TR=1E-05 (mg/kg)	Dermal SL TR=1E-05 (mg/kg)	Inhalation SL TR=1E-05 (mg/kg)	Carcinogenic SL TR=1E-05 (mg/kg)
Trichlorobenzene, 1,2,4-	VOC	3.96E-02	8.40E-06	1.48E-05	1.36E+09	3.00E+04	2.40E+02	-	-	2.40E+02
Trichloroethane, 1,1,1-	VOC	6.48E-02	9.60E-06	4.89E-03	1.36E+09	1.65E+03	-	-	-	-
Trichloroethane, 1,1,2-	VOC	6.69E-02	1.00E-05	2.55E-04	1.36E+09	7.22E+03	1.22E+02	-	1.27E+01	1.15E+01
Trichloroethylene	VOC	6.87E-02	1.02E-05	2.73E-03	1.36E+09	2.21E+03	8.78E+01	-	1.06E+01	9.43E+00
Vinyl Chloride	VOC	1.07E-01	1.20E-05	1.45E-02	1.36E+09	9.56E+02	9.40E-01	-	1.60E+00	5.93E-01
Xylenes	VOC	6.85E-02	8.46E-06	4.04E-04	1.36E+09	5.74E+03	-	-	-	-

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #29); H = HEAST; F = See FAQ; E = see user guide Section 2.3.5; W = see user guide Section 2.3.6; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide); U = User-provided

Chemical	Ingestion SL Child THQ=1 (mg/kg)	Dermal SL Child THQ=1 (mg/kg)	Inhalation SL Child THQ=1 (mg/kg)	Noncarcinogenic SL Child THI=1 (mg/kg)	Ingestion SL Adult THQ=1 (mg/kg)	Dermal SL Adult THQ=1 (mg/kg)	Inhalation SL Adult THQ=1 (mg/kg)	Noncarcinogenic SL Adult THI=1 (mg/kg)	Screening Level (mg/kg)
Trichlorobenzene, 1,2,4-	7.82E+02	-	6.25E+01	5.79E+01	8.34E+03	-	6.25E+01	6.20E+01	5.79E+01 nc
Trichloroethane, 1,1,1-	1.56E+05	-	8.60E+03	8.15E+03	1.67E+06	-	8.60E+03	8.56E+03	8.15E+03 sat
Trichloroethane, 1,1,2-	3.13E+02	-	1.51E+00	1.50E+00	3.34E+03	-	1.51E+00	1.50E+00	1.50E+00 nc
Trichloroethylene	3.91E+01	-	4.61E+00	4.12E+00	4.17E+02	-	4.61E+00	4.56E+00	4.12E+00 nc
Vinyl Chloride	2.35E+02	-	9.97E+01	7.00E+01	2.50E+03	-	9.97E+01	9.59E+01	5.93E-01 ca
Xylenes	1.56E+04	-	5.98E+02	5.76E+02	1.67E+05	-	5.98E+02	5.96E+02	5.76E+02 sat