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Name of Document: Third VIRP Progress Report

Date of Document: April 2, 2019

Site Name: SECHEM, INC.

Site ID Number: HSI No. 10515

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I certify that the information I am submitting is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: *Carol D. Northern*

Name (Printed): Carol D. Northern

Date: 04/06/2019

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Receipt Date
(for EPD use only)



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April 2, 2019

Mr. David Hayes
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 Third VIRP Progress Report
SECHEM, INC. – HSI Site No. 10515
4580 South Berkeley Lake Road
Norcross, Georgia**

Dear Mr. Hayes:

On behalf of our client SECHEM, INC. (SECHEM), EarthCon Consultants, Inc. (EarthCon), is pleased to submit the Third Voluntary Investigation and Remediation (VIRP) Progress Report for the SECHEM Site (HSI No. 10515) located in Norcross, Gwinnett County, Georgia. If you have any questions or comments regarding the Third 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: Third VIRP Progress Report

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

THIRD 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
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EarthCon Project No. 02.20190012.00

April 2, 2019

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Appendix A	Summary of Field Procedures
Appendix B	Field Sampling Forms
Appendix C	Data Validation Memo & Laboratory Analytical Reports

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: 4/2/19



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 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 Third VIRP Progress Report provides a summary of activities conducted at the Site from September 2018 through February 2019.

On September 12, 2018, South Old Peachtree, LLC. purchased the adjacent property formerly known as the Covey Rise Farm LLC. property. This property is sub listed under HSI Site #10515 (the Site). An updated Appendix A to the VIRP Application was submitted to the EPD on March 26, 2019. The submittal reflects this recent change in property ownership and includes an updated copy of the warranty deed and tax parcel map.

2.0 SUMMARY OF SITE ACTIVITIES

During this reporting period, one semi-annual groundwater and surface water sampling event was conducted. Twenty-six groundwater monitoring wells and four surface water locations were sampled between September 10 through 13, 2018. The sample collection locations are shown on Figure 2. Monitoring well construction details are presented in Table 1 and the water level measurements are presented in Table 2.

3.0 ANALYTICAL RESULTS

A description of the September 2018 field procedures for the collection of the groundwater and surface water samples is presented in Appendix A and the field forms are provided in Appendix B. The data validation memo and laboratory analytical reports are provided in Appendix C. Results of the September 2018 sampling event are described below.

3.1 Groundwater Analytical Results

The groundwater sampling event was conducted from September 10 through 13, 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 the field parameter measurements for the September sampling event is provided in Table 3.

The September 2018 groundwater sampling event resulted in detections of 24 regulated substances at concentrations above laboratory reporting limits as shown in Table 4. Of those, 14 constituents were detected at concentrations above the delineation criteria [Type 1 Risk Reduction Standards (RRS) for groundwater] and include: 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,3-dichlorobenzene, 1,4-dichlorobenzene, benzene, cis-1,2-dichloroethene, naphthalene, tetrachloroethene, trichloroethene, vinyl chloride, and 1,4-dioxane.

3.2 Surface Water Analytical Results

On September 13, 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 location SW-1 and one VOC was detected above the GA ISWQS from SW-2. VOCs were not detected at concentrations above the GA ISWQSs in the samples collected from downstream sampling locations SW-3 and SW-4, which are 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 South Old Peachtree property. Soil contamination is 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 South Old Peachtree 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 September 10, 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 September 2018, 14 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 the South Old Peachtree property) is complete.

Horizontal delineation has not been achieved near the southwest or southeast property line of the former South Old Peachtree property. 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.

In accordance with the VIRP Projected Milestone Schedule, SECHEM is proceeding with obtaining access to the previously inaccessible property to complete the horizontal delineation for groundwater.

4.4 Extent of Surface Water Impacts

Surface water samples were collected from locations SW-1, SW-2, SW-3, and SW-4 on September 13, 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 on the South Old Peachtree property. The concentration of tetrachloroethene detected at location SW-2, located off-Site on Gwinnett County property, exceeded the GA ISWQS. COCs were not detected at concentrations above the GA ISWQS in the samples collected from SW-3 or SW-4, located downstream and off-Site, on Gwinnett County property.

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 in the process of obtaining access to the previously inaccessible property to complete the horizontal delineation for groundwater by October 2019, in accordance with the schedule set forth in the Projected Milestone Schedule presented in Table 6. This schedule is contingent upon SECHEM's ability to obtain an access agreement with Gwinnett County. If access cannot be obtained, this schedule will need to be revised accordingly.

As discussed in the second VIRP report, 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 6.

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 September 2018 through February 2019, Ms. Carol D. Northern, P.G., invoiced 6.75 hours to this project. A monthly summary of hours invoiced, and a description of services provided is shown in Table 7.

7.0 SCHEDULE

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

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

The Fourth VIRP Progress Report will be submitted by October 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 - September 10, 2018

Location	Top of Casing Elevation (feet MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
SECHEM Property			
SMW-1	1089.61	29.08	1060.53
SMW-2	1074.74	27.35	1047.39
SMW-3	1086.73	31.95	1054.78
SMW-4	1085.53	25.96	1059.57
SG-5	1087.55	31.69	1055.86
SRW-1	1073.62	26.56	1047.06
Weeks Landscaping Property			
WMW-1	1083.98	31.45	1052.53
WMW-2	1084.70	26.67	1058.03
Hand Property			
HMW-1	1070.72	18.71	1052.01
HMW-2	1075.66	20.60	1055.06
YFI Property			
YMW-1	1071.49	27.48	1044.01
YMW-2	1056.35	15.71	1040.64
YMW-4	1072.07	32.24	1039.83
YMW-5	1050.62	15.77	1034.85
YMW-6	1050.43	18.49	1031.94
YMW-7	1037.15	5.80	1031.35
YMW-8	1060.00	19.22	1040.78
YMW-9	1044.92	7.23	1037.69
YMW-10	1039.80	6.78	1033.02
YMW-11	1036.11	5.26	1030.85
YMW-13	1057.08	22.71	1034.37
YMW-14	1045.24	10.05	1035.19
YMW-15	1051.88	17.02	1034.86
YMW-16	1038.94	5.20	1033.74
YMW-17	1057.97	12.94	1045.03
YMW-18	1051.25	12.86	1038.39
YMW-19	1072.33	26.49	1045.84
YG-1	1040.89	7.85	1033.04
YG-6	1036.99	8.14	1028.85

Notes

MSL - Mean sea level
 TOC - Measured from top of casing

Prepared By: JRM 1/30/2019

Checked By: TJM 2/1/2019

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	9/11/18	23.88	5.20	2.18	115.2	298	9.88
SMW-2	9/11/18	18.72	6.04	2.71	45.9	98	3.23
SMW-3	9/11/18	20.46	5.50	0.77	-42.3	311	8.66
SMW-4	9/10/18	22.28	4.66	9.98	230.8	49	1.09
SRW-1	9/11/18	18.24	5.89	4.50	152.8	61	3.59
Weeks Landscaping Property							
WMW-1	9/10/18	22.26	3.38	2.92	38.9	77	8.77
WMW-2	9/10/18	24.66	5.68	4.45	138.9	70	4.78
Hand Property							
HMW-1	9/11/18	18.94	5.96	9.03	175.0	73	1.05
HMW-2	9/11/18	21.72	6.47	9.01	124.8	99	1.10
YFI Property							
YMW-1	9/10/18	20.12	6.06	0.63	72.1	68	0.65
YMW-2	9/12/18	19.69	4.88	0.49	59.0	116	2.09
YMW-4	9/10/18	18.35	4.31	2.93	89.1	56	8.9
YMW-5	9/12/18	17.71	5.21	0.47	164.0	298	0.33
YMW-6	9/11/18	18.26	4.45	3.57	138.0	139	1.0
YMW-7	9/12/18	18.98	5.20	4.86	220.2	109	0.22
YMW-8	9/12/18	18.03	5.88	9.45	158.4	53	8.67
YMW-9	9/12/18	18.69	5.37	6.19	70.1	113	0.86
YMW-10	9/12/18	19.44	5.01	1.80	60.9	193	9.59
YMW-11	9/11/18	20.87	4.79	3.18	226.0	184	4.99
YMW-13	9/11/18	19.18	4.56	0.96	241.0	128	2.10
YMW-14	9/12/18	19.82	4.40	0.54	258.0	113	2.38
YMW-15	9/12/18	18.39	5.26	1.05	33.5	210	1.01
YMW-16	9/12/18	18.44	6.30	2.26	5.9	140	0.31
YMW-17	9/12/18	18.65	6.07	13.01	116.7	45	0.89
YMW-18	9/12/18	18.30	6.65	6.99	140.2	93	0.69
YMW-19	9/10/18	20.14	6.67	4.50	125.1	84	4.17

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 1/31/2019
 Checked by: TJM 2/1/2019

TABLE 4
SUMMARY OF GROUNDWATER 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	2-Butanone	4-Methyl-2-pentanone	Acetone	Benzene	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene	Naphthalene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes, total	1,4-Dioxane	
Delineation Criteria (mg/L)		0.2	0.005	0.028	0.007	0.6	0.005	DL	0.075	5.6	6.3	14	0.005	0.1	0.08	0.07	0.7	0.45	0.0061	0.005	1	0.1	0.005	0.002	10	0.0046	
SECHEM Property																											
SMW-1	9/11/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0016	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	0.0044	< 0.001	< 0.001	< 0.005	0.0039	< 0.001	< 0.001	0.0059	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0003
SMW-2	9/11/2018	< 0.001	0.001	0.0024	< 0.001	0.011	0.014	0.0068	0.02	< 0.01	< 0.01	< 0.01	< 0.001	0.098	< 0.001	0.0096	0.011	0.0012	0.0057	0.016	< 0.001	0.0014	0.0067	0.0059	0.0011	0.12	
SMW-3	9/11/2018	0.0068	0.013	0.057	0.048	0.82	0.29	0.21	0.14	< 0.01	2.1	0.12	0.0074	0.0043	0.0025	0.48	0.03	0.0019	0.052	0.028	0.03	0.0021	0.022	0.15	0.68	0.51	
SMW-4	9/10/2018	< 0.001	< 0.001	< 0.001	0.0026	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	0.0049	< 0.001	< 0.001	< 0.001	< 0.005	0.16	< 0.001	< 0.001	0.025	< 0.001	< 0.001	0.0087	
SRW-1	9/11/2018	< 0.001	0.0016	0.039	0.096	0.011	0.13	0.0024	0.0017	< 0.01	< 0.01	< 0.01	< 0.001	0.0027	0.0027	0.22	< 0.001	< 0.001	< 0.005	0.28	< 0.001	< 0.001	0.24	< 0.001	0.0024	0.025	
Weeks Landscaping Property																											
WMW-1	9/10/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0003
WMW-2	9/10/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	0.0015	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0003
Hand Property																											
HMW-1	9/11/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	0.0027	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0054
HMW-2	9/11/2018	< 0.001	< 0.001	< 0.001	0.0018	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0003
YFI Property																											
YMW-1	9/10/2018	0.0038	< 0.002	< 0.002	0.0052	0.014	< 0.002	0.0043	0.0032	< 0.02	< 0.02	< 0.02	< 0.002	< 0.002	0.046	< 0.002	< 0.002	< 0.01	0.072	< 0.002	< 0.002	0.037	< 0.002	< 0.002	0.11		
YMW-2	9/12/2018	0.013	< 0.005	0.0099	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005	0.23	< 0.005	< 0.005	< 0.025	0.023	< 0.005	< 0.005	0.03	< 0.005	< 0.005	< 0.0003		
YMW-4	9/10/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.014	
YMW-5	9/12/2018	0.03	0.039	0.14	0.63	1.9	0.26	0.39	0.42	< 0.1	< 0.01	< 0.1	0.032	0.08	< 0.01	4.3	< 0.01	0.02	0.054	1.8	< 0.01	2.4	0.16	0.049	1.6		
YMW-6	9/11/2018	< 0.001	< 0.001	0.0025	0.0053	< 0.001	0.0079	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	0.0018	0.023	< 0.001	< 0.001	< 0.005	0.021	< 0.001	< 0.001	0.092	< 0.001	< 0.001	0.026	
YMW-7	9/12/2018	< 0.005	< 0.005	0.0073	0.031	< 0.005	0.058	< 0.005	< 0.005	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005	< 0.005	0.072	< 0.005	< 0.005	< 0.025	0.1	< 0.005	< 0.005	0.35	< 0.005	< 0.005	0.0093	
YMW-8	9/12/2018	< 0.001	< 0.001	< 0.001	< 0.001	0.018	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0035	
YMW-9	9/12/2018	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0003	
YMW-10	9/12/2018	0.011	0.010	0.034	0.14J	0.23	0.035	0.047	0.052	< 0.1	< 0.1	< 0.1	< 0.01	0.014	< 0.01	0.66	< 0.01	< 0.01	< 0.05	0.45	< 0.01	< 0.01	0.54	0.14J	< 0.01	0.16	
YMW-11	9/11/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	0.0012	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.069	
YMW-13	9/11/2018	0.0078	< 0.005	0.01	0.32	< 0.005	0.2	< 0.005	< 0.005	< 0.005	< 0.05	< 0.05	< 0.005	< 0.005	< 0.005	0.61	< 0.005	< 0.005	< 0.025	0.12	< 0.005	< 0.005	0.34	< 0.005	< 0.005	0.047J	
YMW-14	9/12/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	0.011	< 0.001	< 0.001	< 0.005	0.059	< 0.001	< 0.001	0.0055	< 0.001	< 0.001	0.00067J	
YMW-15	9/12/2018	< 0.02	< 0.02	0.053	0.22	0.13	0.13	0.033	0.031	< 0.2	< 0.2	< 0.2	< 0.02	< 0.02	< 0.02	1.7	< 0.02	< 0.02	< 0.1	0.7	< 0.02	< 0.02	0.64	0.032	< 0.02	0.28	
YMW-16	9/12/2018	0.006	< 0.005	0.03	0.15	< 0.005	0.049	< 0.005	< 0.005	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005	< 0.005	0.86	< 0.005	< 0.005	< 0.025	0.42	< 0.005	< 0.005	0.59	< 0.005	< 0.005	0.21	
YMW-17	9/12/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.064	
YMW-18	9/12/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0003	
YMW-19	9/10/2018	< 0.001	< 0.001	0.01	0.025	< 0.001	0.039	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	0.072	< 0.001	< 0.001	< 0.005	0.13	< 0.001	< 0.001	0.21J	< 0.001	< 0.001	0.0092	

Notes

Delineation criteria equal Type 1 Risk Reduction Standards (RRS)
 DL - Detection Limit (considered as the Practical Quantitation Limit or Reporting Limit)
Bold - Concentration exceeds detection limit
Bold and Shaded - Concentration exceeds delineation criteria

Prepared By: KMD 12/14/2018
 Checked By: JRM 2/1/2019

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	9/13/2018	0.054	< 0.01	0.012	0.017	< 0.01	< 0.01	< 0.01	< 0.01	0.6	< 0.01	< 0.01	0.26	0.060	< 0.01	0.38	0.033	< 0.01	< 0.0003
SW-2	9/13/2018	< 0.001	< 0.001	0.0025	0.0084	0.0016	0.010	< 0.001	< 0.001	0.05	< 0.001	< 0.001	0.012	< 0.001	< 0.001	0.021	0.002	< 0.001	0.037
SW-3	9/13/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.037
SW-4	9/13/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.021

Prepared by: JRM 1/31/2019

Checked by: TJM 2/1/2019

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

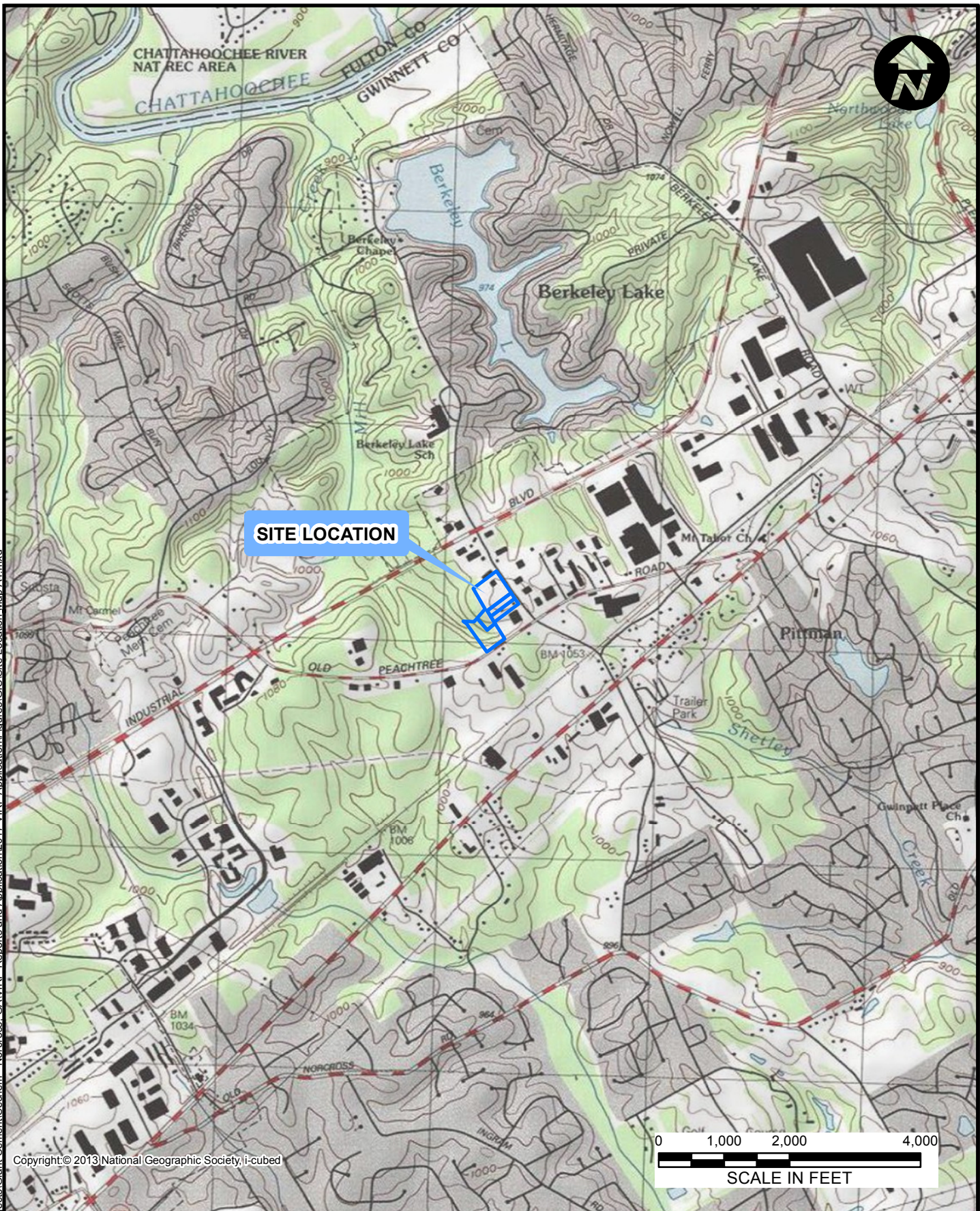
TABLE 6
PROJECTED MILESTONE SCHEDULE

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 7
SUMMARY OF MONTHLY INVOICES

Month	Hours Billed by Carol Northern, P.G.	Description of Activities
September 2018	2.75	<ul style="list-style-type: none">- Sept. 2018 field event debrief- Submission of 2nd VIRP Progress Report
October 2018	3	<ul style="list-style-type: none">- Documentation of activities on the Hand property- Coordination on the sale of the former Covey Rise Farm property
February 2019	1	<ul style="list-style-type: none">- Evaluation of remedial strategies

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

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SECHEM, INC

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

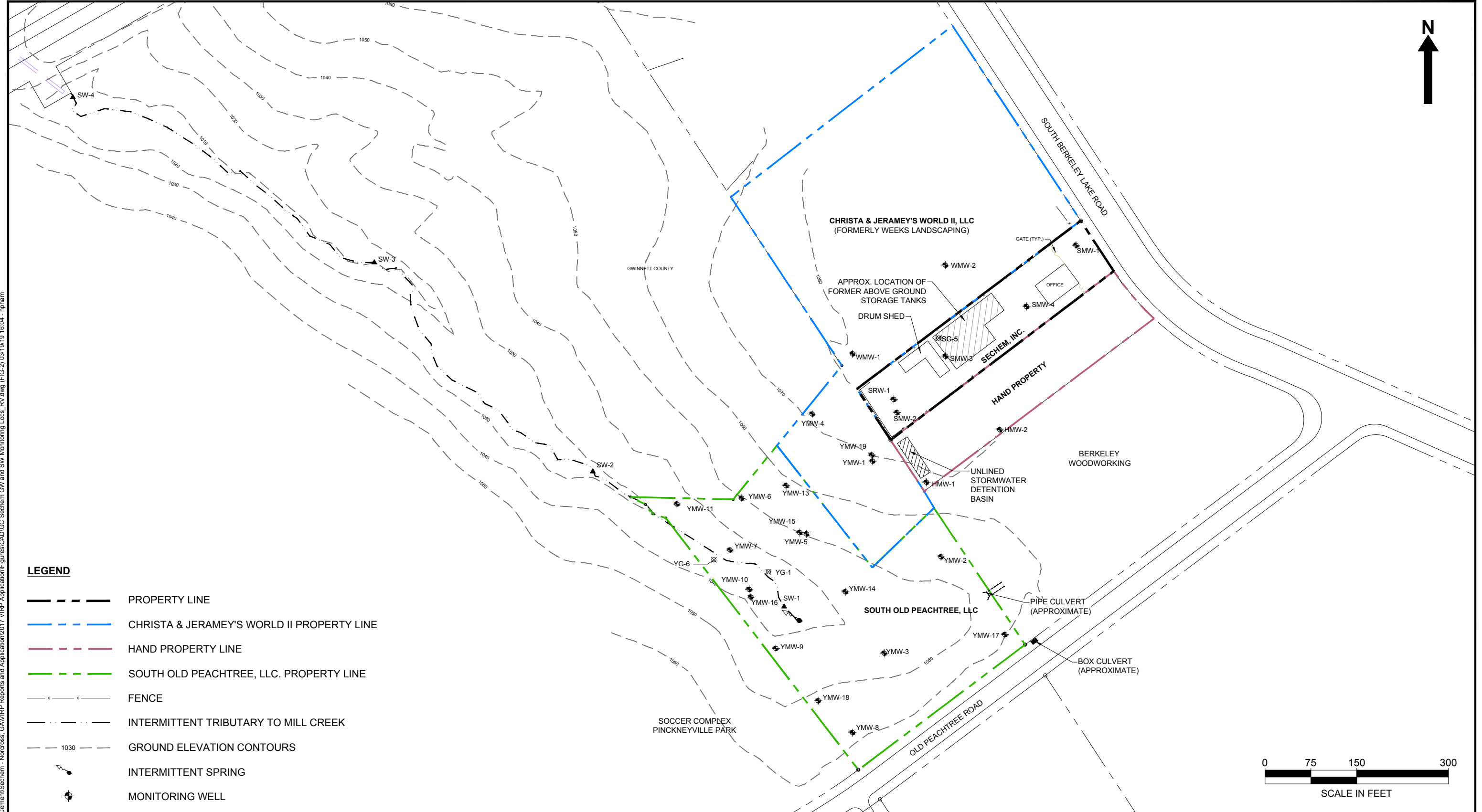
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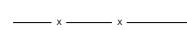
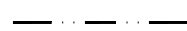





EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

PROPERTY LOCATION

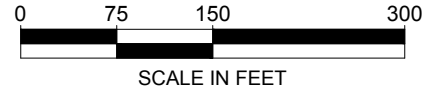
DRAWN	CHECKED	DATE	FIGURE
HVP	AGL	APR 2018	1



LEGEND

-  PROPERTY LINE
-  CHRISTA & JERAMEY'S WORLD II PROPERTY LINE
-  HAND PROPERTY LINE
-  SOUTH OLD PEACHTREE, LLC. PROPERTY LINE
-  FENCE
-  INTERMITTENT TRIBUTARY TO MILL CREEK
-  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.



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

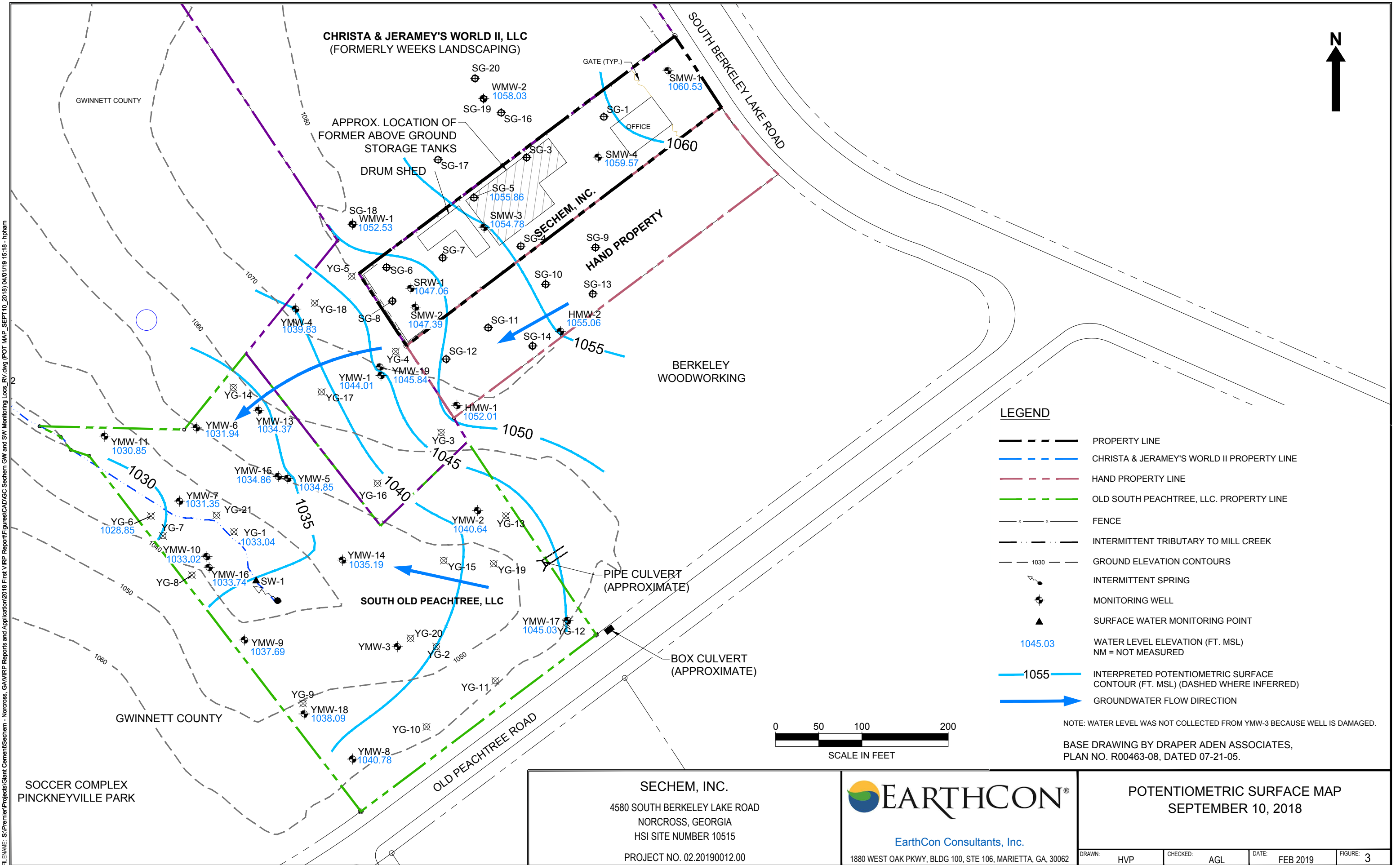


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PROPERTY LAYOUT	
DRAWN: HVP	CHECKED: AGL
DATE: OCT 2018	FIGURE: 2

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) 03/19/19 16:04 - hpbam

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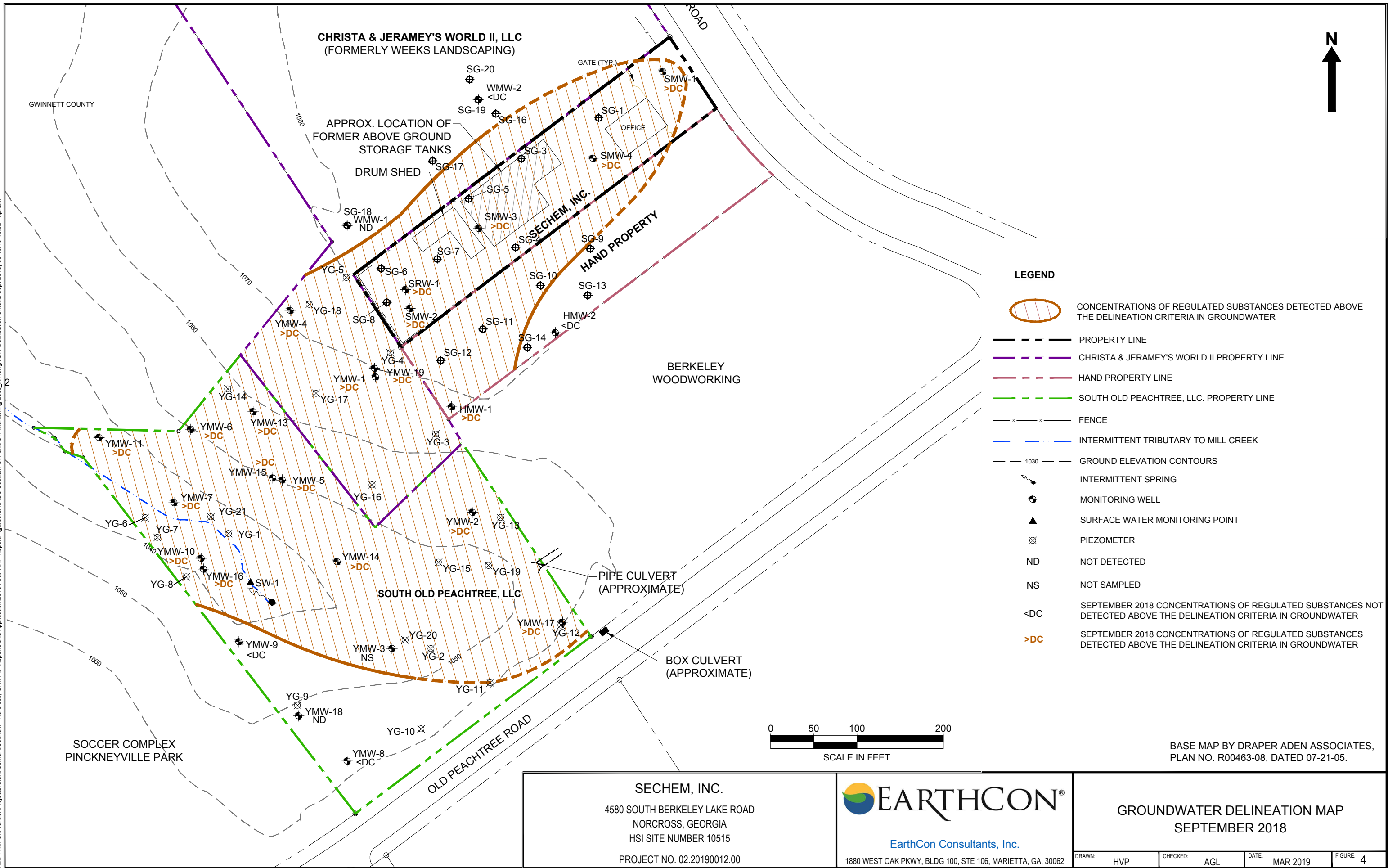
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HSI SITE NUMBER 10515
PROJECT NO. 02.20190012.00

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POTENTIOMETRIC SURFACE MAP
SEPTEMBER 10, 2018

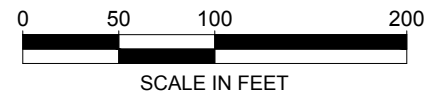
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LEGEND

- CONCENTRATIONS OF REGULATED SUBSTANCES DETECTED ABOVE THE DELINEATION CRITERIA IN GROUNDWATER
- PROPERTY LINE
- CHRISTA & JERAMEY'S WORLD II PROPERTY LINE
- HAND PROPERTY LINE
- SOUTH OLD PEACHTREE, LLC. 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 SEPTEMBER 2018 CONCENTRATIONS OF REGULATED SUBSTANCES NOT DETECTED ABOVE THE DELINEATION CRITERIA IN GROUNDWATER
- >DC SEPTEMBER 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.

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GROUNDWATER DELINEATION MAP		SEPTEMBER 2018	
DRAWN:	HVP	CHECKED:	AGL
DATE:	MAR 2019	FIGURE:	4

APPENDICES

APPENDIX A

Summary of Field Procedures

APPENDIX A: SUMMARY OF FIELD PROCEDURES

A summary of the field activities performed from September 10 to 13, 2018 is provided in the following sections. Groundwater and surface water sampling field forms are provided in Appendix B. The data validation memo and 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 all wells during

the September 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 0.42 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, Georgia 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 Hanna HI98194 multi-parameter and a LaMotte 2020 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 September 13, 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 SEDS 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 VOCs by EPA Method 8260B and 1,4 dioxane by EPA Method 8260B SIM.

APPENDIX B

Field Sampling Forms



Sechem Water Levels

Project #: 02.20180044.00

Date: 9/10/18

Equipment: Soltica water level meter

Name: T. Messier / E. Coon

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	0812	24.08	44.28	
SMW-2	29	39	10	1074.74	0805	27.35	42.22	
SMW-3	30	40	10	1086.73	0757	31.695	43.96	
SMW-4	30	40	10	1085.53	0808	25.46	40.52	
SRW-1		68			0803	20.56	69.90	
WMW-1	49	59	10	1083.98	0930	31.45	62.75	
WMW-2	40	50	10	1084.70	0913	26.67		
YMW-1	24	39	15	1071.49	0933	27.48	40.70	
YMW-2	9	19	10	1056.35	0913	26.67	22.33	
YMW-4	25	35	10	1072.07	0939	32.24	38.15	
YMW-5	24	34	10	1050.62	0954	15.77	36.34	
YMW-6	15	25	10	1050.43	0944	18.49	27.97	
YMW-7	11	21	10	1037.15	0949	5.80	22.84	
YMW-8	20	30	10	1060.00	10:05	19.22	32.72	
YMW-9	13.5	23.5	10	1044.92	10:06	7.23	24.77	
YMW-10	14	24	10	1039.80	10:07	6.78	26.41	
YMW-11	14	24	10	1036.11	0946	5.26	26.15	
YMW-13	19	29	10	1057.08	10:15	22.71	31.77	
YMW-14	9	19	10	1045.24	09:56	10.05	22.41	
YMW-15	45?	50?	5	1051.88	0952	17.02	40.20	40.20 prev TD
YMW-16	29	34	5	1038.94	10:08	5.20	37.91	
YMW-17	43	53	10	1057.97	10:00	12.94	58.39	
YMW-18	43	53	10	1051.25	10:05	12.86	51.95	
YMW-19	95	100	5	1072.33	0934	26.49	102.64	
HMW-1	54	64	10	1070.72	0840	18.71	62.80	
HMW-2	57	67	10	1075.68	0826	20.60	66.55	
YG-1	8	10	10	1037.40	10:12	7.85	14.30	
YG-6	7	12	5	1033.40	10:10	8.14	12.09	
SG-5	27.5	37.5	10.0	1085.00	0759	31.64	38.72	
Notes: <u>YMW-2 09:58 15.71</u>								

WELL No. SMW-2	PROJECT # 02.20180044.01	LOCATION 4580 South Berkely Lake Road	DATE 9/11/18
SAMPLE No. SMW-2	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Magallon	/EarthCon
SAMPLE TIME: 10:45	SITE Norcross, GA	FIELD CONDITIONS/WEATHER cloudy 70s	

Well Condition Inspection (circle one) cover: <input checked="" type="radio"/> locked not locked number: <input checked="" type="radio"/> legible not legible outer casing: good fair <input checked="" type="radio"/> poor inner casing: good fair <input checked="" type="radio"/> poor well photographed: yes <input checked="" 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	Well Screen Interval ft bgs: 29-39
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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): <u>27.36</u> Depth of Well (feet): <u>42.10</u> Water Column (feet): <u>14.74</u> Casing Volume (gallons/liters): <u>2.41</u> Calculated 3 Purge Volume (gallons/liters): <u>7.21</u> Actual Purge Volume (gallons/liters): <u>34</u> <u>1.70</u> Pump Intake Depth (feet): <u>34</u>	Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: <u>none</u> thickness: _____ DNAPL present: <u>none</u> thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____
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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
09:40	0								PURGE START
09:45	0.1	18.38	5.98	7.45	172.8	84	14.6	27.89	clear, no odor
09:50	0.35	18.20	5.88	8.09	162.8	84	11.0	28.03	"
09:55	0.45	18.47	5.93	6.54	147.1	85	8.42	27.95	"
10:00	0.70	18.59	5.95	4.66	124.9	85	8.16	27.94	"
10:05	0.80	18.81	5.96	3.99	107.4	86	7.23	27.92	"
10:10	0.95	18.77	5.97	3.34	94.0	88	5.48	27.95	"
10:15	1.10	18.60	5.98	3.14	78.2	90	4.78	27.99	"
10:20	1.25	18.78	6.01	2.91	66.9	91	4.51	28.01	"
10:25	1.35	18.79	6.03	2.77	48.1	95	3.62	28.02	"
10:30	1.50	18.75	6.04	2.74	46.1	97	3.45	28.03	"
10:35	1.65	18.73	6.04	2.72	46.6	97	3.40	28.03	"
10:40	1.70	18.72	6.04	2.71	45.9	98	3.23	28.04	"
10:45	3	A	M	P	L	E			

Measurement and Sampling Equipment

Type: <u>Multiphase</u>	Manufacturer: <u>YSI</u>	Model #: <u>554</u>	Calibration Date: <u>9/11/18</u>
<u>Turbidity</u>	<u>Lynette</u>	<u>2020ml</u>	<u>9/11/18</u>
<u>Peristaltic pump</u>	<u>Greiner</u>	<u>Acropump</u>	<u>NA</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-3	PROJECT # 02.20180044.01	LOCATION 4580 South Berkeley Lake Road	DATE 9/11/18
SAMPLE No. SMW-3	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY T. MESSIER	EarthCon
SAMPLE TIME: 11:45	SITE 11:45	Norcross, GA	FIELD CONDITIONS/WEATHER SUNNY 80°

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: <u>yes</u> no	Equipment Cleaning Procedures <input type="checkbox"/> potable water and phosphate-free soap <input type="checkbox"/> potable water rinse water rinse: <u>distilled</u> deionized solvent rinse: <u>acetone</u> hexane <input type="checkbox"/> air dry	Well Screen Interval ft bgs: 30-40
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Casing Diameter: <u>4"</u> (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
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Depth to Water (feet): <u>72.02</u> Depth of Well (feet): <u>44.06</u> Water Column (feet): <u>12.04</u> Casing Volume (gallons/liters): <u>1.98</u> Calculated 3 Purge Volume (gallons/liters): <u>5.77</u> Actual Purge Volume (gallons/liters): <u>1.2 gal</u> Pump Intake Depth (feet): <u>33.23</u>	Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: _____ thickness: _____ DNAPL present: _____ thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____
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Well Evacuation Water level recovery is: <u>very slow</u> slow moderate fast	Bailed dry: <u>yes</u> no
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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
	0								PURGE START
<u>11:10</u>	<u>—</u>	<u>20.58</u>	<u>5.83</u>	<u>2.20</u>	<u>-60.2</u>	<u>305</u>		<u>32.30</u>	<u>CLEAR</u>
	<u>TUBING OUT RESET</u>								
<u>11:18</u>	<u>—</u>	<u>20.18</u>	<u>5.71</u>	<u>0.95</u>	<u>-47.9</u>	<u>305</u>	<u>7.47</u>	<u>32.25</u>	<u>CLEAR</u>
<u>11:27</u>	<u>0.25</u>	<u>20.98</u>	<u>5.66</u>	<u>0.85</u>	<u>-45.6</u>	<u>278</u>	<u>8.96</u>	<u>32.26</u>	<u>CLEAR</u>
<u>11:25</u>	<u>0.30</u>	<u>20.71</u>	<u>5.62</u>	<u>0.83</u>	<u>-43.6</u>	<u>277</u>	<u>9.47</u>	<u>32.28</u>	<u>CLEAR</u>
<u>11:29</u>	<u>0.35</u>	<u>20.06</u>	<u>5.57</u>	<u>0.76</u>	<u>-42.3</u>	<u>309</u>	<u>9.23</u>	<u>32.25</u>	<u>CLEAR</u>
<u>11:28</u>	<u>0.40</u>	<u>20.44</u>	<u>5.54</u>	<u>0.71</u>	<u>-42.6</u>	<u>312</u>	<u>9.44</u>	<u>32.22</u>	<u>CLEAR</u>
<u>11:37</u>	<u>0.45</u>	<u>20.46</u>	<u>5.50</u>	<u>0.77</u>	<u>-42.3</u>	<u>311</u>	<u>8.66</u>	<u>32.28</u>	<u>CLEAR</u>

Measurement and Sampling Equipment			
Type	Manufacturer	Model #	Calibration Date
<u>parameter</u>	<u>HANNA</u>	<u>HI 98194</u>	<u>9/11/18</u>
<u>turbidity</u>	<u>LAMOTTE</u>	<u>LA MOTT 2020</u>	<u>9/11/18</u>
<u>bladder pump</u>	<u>QED</u>		

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
3	VOCs	40 mL VOA	HCl	<u>FIELD BLANK</u>
3	1,4 Dioxane	40 mL VOA	HCl	<u>12:15</u>



Groundwater Sampling Record

WELL No. SRW-1	PROJECT # 02.20180044.01	LOCATION 4580 South Berkeley Lake Road	DATE 9/11/18
SAMPLE No. SRW-1	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Middleton	/EarthCon
SAMPLE TIME: 09:15	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Cloudy 70s	

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: yes <input checked="" 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	Well Screen Interval ft bgs: 7-68
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Casing Diameter: (circle one) 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): 26.55 Measuring Point Elevation (feet): _____

Depth of Well (feet): 87.34 Groundwater Surface Elevation: _____

Water Column (feet): 5m 40.79 40.79 LNAPL present: none thickness: _____

Casing Volume (gallons/fters): 5m 5.07 6.05 DNAPL present: none thickness: _____

Calculated 3 Purge Volume (gallons/fters): 5m 15.07 19.45 Remarks: _____

Actual Purge Volume (gallons/fters): 1.7

Pump Intake Depth (feet): 66.5 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
08:27	0								PURGE START
08:30	18.43	18.43	4.97	9.49	172.9	62	6.83	26.80	clear, no odor
08:35	0.2	18.43	5.21	8.04	164.6	62	5.27	26.81	"
08:40	0.45	18.39	5.36	7.11	158.1	62	5.83	26.84	"
08:45	0.65	18.23	5.50	5.49	152.4	61	3.09	27.01	"
08:50	0.80	18.13	5.74	4.86	155.8	61	4.27	27.14	"
08:55	1.1	18.16	5.83	4.59	153.9	62	2.61	27.20	"
09:00	1.3	18.19	5.85	4.50	153.7	61	3.19	27.22	"
09:05	1.5	18.20	5.87	4.51	153.2	61	2.73	27.23	"
09:10	1.7	18.24	5.89	4.50	152.8	61	3.59	27.23	"
09:15	5	A	M	P	L	15			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Multimeter	YSI	556	9/11/18
Lamotte	Turbidity meter	202015	9/11/18
Peristaltic pump	Geotech	Geopump	N/A

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 20180044.01	LOCATION 4580 South Berkely Lake Road	DATE 9/11/18
SAMPLE No. HMW-1	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Maddison	/EarthCon
SAMPLE TIME: 14:50	SITE Norcross, GA	FIELD CONDITIONS/WEATHER mostly cloudy 80s	
Well Condition Inspection (circle one)		Equipment Cleaning Procedures	
cover: locked not locked	number: legible not legible	- potable water and phosphate-free soap	
outer casing: good fair poor	inner casing: good fair poor	- potable water rinse	
well photographed: yes no		- water rinse: distilled deionized	
		- solvent rinse: acetone hexane	
		- air dry	
Well Screen Interval ft bgs: 54-64			

Casing Diameter: (circle one) **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): **18.79** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **62.36** Groundwater Surface Elevation: _____
 Water Column (feet): **43.57** LNAPL present: **none** thickness: _____
 Casing Volume (gallons/liters): **7.16** DNAPL present: **none** thickness: _____
 Calculated 3 Purge Volume (gallons/liters): **21.30** Remarks: _____
 Actual Purge Volume (gallons/liters): **5.54 1.10**
 Pump Intake Depth (feet): **59** 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
13:57	0								PURGE START
14:00	0.05	19.64	6.10	9.23	157.2	76	0.48	18.91	clear, no odor
14:05	0.15	19.43	6.04	8.97	160.7	76	1.25	19.20	"
14:10	0.25	19.39	6.02	8.83	162.1	75	3.67	19.20	"
14:15	0.40	19.18	6.02	9.01	166.2	75	2.94	19.24	"
14:20	0.45	18.11	6.01	9.02	168.9	74	1.06	19.30	"
14:25	0.50	18.95	6.00	9.02	171.7	74	3.85	19.37	"
14:35	0.70	18.93	5.97	9.03	173.6	73	2.76	19.39	"
14:40	0.90	18.94	5.96	9.04	174.0	73	1.95	19.40	"
14:45	1.10	18.94	5.96	9.03	175.0	73	1.05	19.40	"
14:50	5	A	M	P	L	E			

rain [14:50

m

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Multi-meter	YSI	556	9/11/18
Turbidity meter	LaMotte	2020 ve	9/11/18
Peristaltic pump	Gratech	Gratech	N/A

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.	HMW-2	PROJECT #	02.20180044.01	LOCATION	4580 South Berkely Lake Road	DATE	9/11/18
SAMPLE No.	HMW-2	PROJECT NAME	Sechem Inc.	FIELD PERSONNEL/COMPANY	/EarthCon		
SAMPLE TIME:	13:00	SITE	Norcross, GA	FIELD CONDITIONS/WEATHER			

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: <u>yes</u> 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
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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): <u>20.12</u> Depth of Well (feet): <u>66.55</u> Water Column (feet): <u>46.43</u> Casing Volume (gallons/liters): <u>7.57</u> Calculated 3 Purge Volume (gallons/liters): <u>22.70</u> Actual Purge Volume (gallons/liters): <u>1.0</u> Pump Intake Depth (feet): <u>64</u>	Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: <u>none</u> thickness: _____ DNAPL present: <u>none</u> thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____
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Well Evacuation
 Water level recovery is: very slow slow moderate fast Bailed dry: yes no

12:22

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
12:22	0								PURGE START
12:25	0.05	21.25	6.47	13.99	109.8	96	4.09	20.82	clear, no odor ✓
12:30	0.10	21.12	6.45	11.30	112.2	96	4.65	20.93	"
12:35	0.30	21.19	6.45	10.59	116.1	96	4.62	20.99	"
12:40	0.45	21.36	6.46	10.86	114.6	97	3.67	21.07	"
12:45	0.60	21.17	6.46	9.08	121.6	98	3.69	21.05	"
12:50	0.75	21.36	6.49	9.02	121.9	99	3.25	21.06	"
12:55	0.85	21.50	6.47	8.99	123.7	99	3.71	21.06	"
13:00	1.0	21.72	6.47	9.01	124.8	99	1.10	21.09	"
13:05	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Multimeter	YSI	556	9/11/18
Turbidity meter	Limotech	7020 w/	9/11/18
Pers. Static pump	Geotech	6-top pump	NA

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

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Groundwater Sampling Record

WELL No. WMW-1 **PROJECT #** 02.20180044.01 **LOCATION** 4580 South Berkeley Lake Road
SAMPLE No. WMW-1 **PROJECT NAME** Sechem Inc. **FIELD PERSONNEL/COMPANY** P. Cook, T. Messier
SAMPLE TIME: 4:30 **SITE** Norcross, GA **FIELD CONDITIONS/WEATHER** rain 9/10/18
/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
Casing Diameter: (circle one)
 2" 4" 6" Other: _____

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: 49-59

Casing Volume Calculation ($\pi r^2 h$) (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): 33.20
Depth of Well (feet): 62.18
Water Column (feet): 28.98
Casing Volume (gallons/liters): 4.73
Calculated 3 Purge Volume (gallons/liters): 14.17
Actual Purge Volume (gallons/liters): 1.5 gal
Pump Intake Depth (feet): 54

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

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	Bailed dry:		Depth to Water (Feet)	ODOR/COLOR/ REMARKS
						yes	no		
	0								
1410A	.25	21.60	5.19	5.32	12.8				PURGE START
1400	.50	20.69	4.91	4.33	24.5	78	11.17	33.20	none
1421	.74	20.94	4.86	3.84	27.8	77	12.70	35.10	none
1427	1	21.12	4.19	2.28	30.7	79	10.38	36.00	none
1432	1.25	21.90	3.00	3.18	30.6	79	10.92	36.60	"
1438	1.35	22.25	3.33	2.96	35.6	78	9.29	36.20	"
1431	1.45	22.26	3.38	2.92	38.9	80	9.83	36.93	"
						77	8.77		

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
turbidity p. pump	VSI Lamotte geopump	556 Lamotte 2020 we geopump	9/10/18 9/10/18

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. WMW-2	PROJECT # 02.20180044.01	LOCATION 4580 South Berkeley Lake Road	DATE 9/10/18
SAMPLE No. WMW-2	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. McDaniel	EarthCon
SAMPLE TIME: 14:10	SITE Norcross, GA	FIELD CONDITIONS/WEATHER partly cloudy 80s	

Well Condition Inspection (circle one) cover: <u>locked</u> not locked number: <u>legible</u> not legible outer casing: good <u>fair</u> poor inner casing: good <u>fair</u> 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: 40-50
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Casing Diameter: (circle one) 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): 26.10 Measuring Point Elevation (feet): _____
 Depth of Well (feet): 47.71 Groundwater Surface Elevation: _____
 Water Column (feet): 21.61 LNAPL present: none thickness: _____
 Casing Volume (gallons/liters): 3.52 DNAPL present: none thickness: _____
 Calculated 3 Purge Volume (gallons/liters): 10.57 Remarks: _____
 Actual Purge Volume (gallons/liters): 11.10 ggs
 Pump Intake Depth (feet): 45 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
13:31	0								PURGE START
13:35	0.0	25.70	5.89	15.01	95.6	89	0.43	26.23	cloudy, no odor
13:40	0.4	25.02	5.72	7.61	117.3	74	0.30	26.24	clear, no odor
13:45	0.5	25.43	5.70	4.61	124.2	39	3.07	26.17	clear, no odor
13:50	0.55	25.61	5.72	4.43	122.0	76	7.19	26.18	"
13:55	0.80	24.84	5.69	4.49	129.1	70	5.49	26.21	"
14:00	0.90	24.64	5.67	4.48	137.2	70	6.01	26.21	"
14:05	1.1	24.66	5.68	4.45	138.9	70	4.78	26.21	"
14:10	5	A	M	P	L	E			

Measurement and Sampling Equipment

Type <u>YSI</u>	Manufacturer <u>SSB</u>	Model # _____	Calibration Date <u>9/10/18</u>
<u>Peri pump</u>	<u>Geo Tech</u>	_____	<u>NA</u>
<u>Lg MB4/220 we</u>	_____	_____	<u>9/10/18</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-1** PROJECT # **02.20180044.01** LOCATION **4580 South Berkeley Lake Road** DATE **9/10/18**
 SAMPLE No. **SMW-1** PROJECT NAME **Sechern Inc.** FIELD PERSONNEL/COMPANY **J. Maddox** /EarthCon
 SAMPLE TIME: **15:55** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **partly cloudy 80's**

Well Condition Inspection (circle one)
 cover: **locked** not locked
 number: **legible** not legible
 outer casing: **good** **fail** poor
 inner casing: **good** **fail** 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**
31.5 ft

Casing Diameter: **2"** (circle one) 4" 6" Other: _____
 Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$
 Casing Volume (gallons/ft) for: **2" = 0.153**, 4" = 0.653; 6" = 1.47
 Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): **27.40** Measuring Point Elevation (feet): _____
 Depth of Well (feet): **40.83** Groundwater Surface Elevation: _____
 Water Column (feet): **13.43** LNAPL present: **none** thickness: _____
 Casing Volume (gallons/liters): **2.19** DNAPL present: **none** thickness: _____
 Calculated 3 Purge Volume (gallons/liters): **6.57** Remarks: _____
 Actual Purge Volume (gallons/liters): **1.60**
 Pump Intake Depth (feet): **31.5 ft** 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
15:00	0.01								PURGE START
SM 15:05	19.88	19.88	5.90	5.21	96.4	64	2.76	27.99	clear, no odor
15:10	0.35	20.03	5.99	3.55	87.5	64	1.32	27.97	"
15:15	0.50	20.11	6.01	2.30	83.5	65	0.83	27.98	"
15:20	0.70	19.96	6.01	2.03	80.3	65	0.76	27.99	"
15:25	0.85	19.85	5.99	1.76	80.2	65	0.92	27.99	"
15:30	1.0	19.60	5.97	1.40	78.3	65	0.55	28.03	"
15:35	1.25	19.95	6.02	0.79	75.1	67	0.71	27.92	"
15:40	1.4	20.14	6.07	0.65	71.4	68	0.62	27.93	"
15:45	1.5	20.16	6.06	0.64	71.4	68	0.58	27.94	"
15:50	1.6	20.12	6.06	0.63	72.1	68	0.65	27.94	"
15:55	3	A	M	P	L	E			

Measurement and Sampling Equipment

Type YSI	Manufacturer Geo Tech	Model # 2020 w	Calibration Date 9/10/18
Peristaltic	Geo pump	Turbidity meter	NA
Lamotte			9/10/18

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 01	LOCATION 4580 South Berkely Lake Road	DATE 12/18
SAMPLE No. YMW-2	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY T. Messier, E. Cook	/EarthCon
SAMPLE TIME: 1155	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Sunny, 90°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: <u>yes</u> no	Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: <u>distilled</u> deionized - solvent rinse: <u>acetone</u> hexane - air dry	Well Screen Interval ft bgs: 9-19
--	--	---

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

Depth to Water (feet): <u>15.79</u>	Measuring Point Elevation (feet): _____
Depth of Well (feet): <u>22.33</u>	Groundwater Surface Elevation: _____
Water Column (feet): <u>6.54</u>	LNAPL present: _____ thickness: _____
Gasing Volume (gallons/liters): <u>1.07</u>	DNAPL present: _____ thickness: _____
Calculated 3 Purge Volume (gallons/liters): <u>3.21</u>	Remarks: _____
Actual Purge Volume (gallons/liters): <u>1.0</u>	
Pump Intake Depth (feet): <u>15</u>	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
1120	0								PURGE START
1125	0.25	18.44	5.21	1.04	46.5	118	5.86	16.19	clear
1130	0.50	19.28	5.11	0.82	52	113	4.02	16.30	"
1135	0.60	19.93	5.08	0.67	52	117	4.03	16.35	"
1140	0.70	19.66	5.03	0.58	54	114	3.16	16.40	"
1145	0.80	19.74	4.96	0.49	55	112	1.17	16.43	"
1150	0.90	19.69	4.88	0.44	59	116	2.09	16.45	"
1155	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type <u>HI 98194</u>	Manufacturer <u>Hanna</u>	Model # <u>pH/EC/DO Multi parameter</u>	Calibration Date <u>1/12/18</u>
<u>Turbidity Meter</u>	<u>Lamotte</u>	<u>2025 We</u>	<u>4/12/19</u>
<u>Peri Pump</u>	<u>GeoTech</u>	<u>Geo Pump</u>	<u>NA</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-5	PROJECT # 02.20180044.01	LOCATION 4580 South Berkely Lake Road	DATE 9/12/18
SAMPLE No. YMW-5	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY T. Messier, E. Cook	/EarthCon
SAMPLE TIME: 1014	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Cloudy, 90°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: <u>yes</u> no	Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: <u>distilled</u> deionized - solvent rinse: <u>acetone</u> hexane - air dry	Well Screen Interval ft bgs: 24-34
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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): <u>15.80</u>	Measuring Point Elevation (feet): _____
Depth of Well (feet): <u>36.40</u>	Groundwater Surface Elevation: _____
Water Column (feet): <u>20.6</u>	LNAPL present: _____ thickness: _____
Casing Volume (gallons/liters): <u>3.36</u>	DNAPL present: _____ thickness: _____
Calculated 3 Purge Volume (gallons/liters): <u>10.08</u>	Remarks: _____
Actual Purge Volume (gallons/liters): <u>1.25</u>	
Pump Intake Depth (feet): <u>29</u>	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
0945	0								PURGE START
0949	0.25	18.35	5.44	0.85	133.4	295	1.06	16.05	clear
0954	0.50	18.24	5.25	0.66	150.9	299	0.41	16.06	"
0959	0.75	17.87	5.20	0.56	159.8	298	0.38	16.08	"
1004	0.95	18.03	5.23	0.49	163.9	296	0.25	16.08	"
1009	1.10	17.71	5.21	0.47	164.0	298	0.33	16.11	"
1014	5	A	M	P	L	E			

Measurement and Sampling Equipment

Type <u>Hanna</u>	Manufacturer <u>HI9149</u>	Model # <u>pH/EC/DO Multiparameter</u>	Calibration Date <u>9/12/18</u>
<u>Turbidity Meter</u>	<u>LaMotte</u>	<u>2020ve</u>	<u>9/12/18</u>
<u>Peri Pump</u>	<u>Greotech</u>	<u>Calopump</u>	<u>NA</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-6** PROJECT # **02.20180044.01** LOCATION **4580 South Berkeley Lake Road** DATE **9/11/18**
 SAMPLE No. **YMW-6** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **TMESSIER**
 SAMPLE TIME: **15:30** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **RAIN** /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:
15-25

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): 18.50 **Measuring Point Elevation (feet):** _____
Depth of Well (feet): 27.94 **Groundwater Surface Elevation:** _____
Water Column (feet): 9.44 **LNAPL present:** _____ **thickness:** _____
Casing Volume (gallons/liters): 1.53 / 5.76 **DNAPL present:** _____ **thickness:** _____
Calculated 3 Purge Volume (gallons/liters): 4.61 / 17.3 **Remarks:** _____
Actual Purge Volume (gallons/liters): 1/2 gal
Pump Intake Depth (feet): 10 **Ferrous Iron (mg/L):** _____

Well Evacuation
 Water level recovery is: very slow 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
15:00	0	14.44	4.50	1.79	139	140	3.5	18.65	PURGE START
15:03	0.25	21.36	4.44	2.91	249	145	3.2	18.60	
15:09	0.30	21.36	4.47	2.54	139	142	2.2	18.41	
15:11	0.35	17.72	4.47	3.34	139	142	1.1	18.61	
15:15	0.40	18.19	4.46	3.56	138	138	1.1	18.61	
15:19	0.45	18.26	4.45	3.58	138	137	1.0	18.61	
15:21	0.55	18.26	4.45	3.57	138	139	1	18.61	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
<u>Dreamscape</u>	<u>HANNA</u>	<u>HI 98194</u>	<u>9/11/18</u>
<u>Turbidity</u>	<u>LA MOTT</u>	<u>LA MOTT 2020</u>	<u>9/11/18</u>
<u>p/pump</u>	<u>GED</u>	<u>GED</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. YMW-8	PROJECT # 02.20180044.01	LOCATION 4580 South Berkeley Lake Road	DATE 9/12/18
SAMPLE No. YMW-8	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. M. M. J. M.	/EarthCon
SAMPLE TIME 10:10	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Mostly Cloudy ~ 80	

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: <u>yes</u> no	Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: <u>distilled</u> deionized - solvent rinse: <u>acetone</u> hexane - air dry	Well Screen Interval ft bgs: 20-30
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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): <u>19.28</u> Depth of Well (feet): <u>31.79</u> Water Column (feet): <u>12.51</u> Casing Volume (gallons/liters): <u>2.04</u> Calculated 3 Purge Volume (gallons/liters): <u>6.12</u> Actual Purge Volume (gallons/liters): <u>1.70</u> Pump Intake Depth (feet): <u>27</u>	Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: <u>none</u> thickness: _____ DNAPL present: <u>none</u> thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____
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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
0930	0								
0935	0.4	17.98	5.76	10.75	180.1	54	43.3	20.51	cloudy, nodules
0940	0.6	18.12	5.83	9.94	147.5	54	20.9	19.49	"
0945	0.8	18.11	5.87	9.59	109.7	53	25.8	19.50	"
0950	1.0	17.92	5.87	9.56	121.3	53	11.5	19.51	Mostly clear, nodules
0955	1.25	17.94	5.87	9.58	118.4	53	18.6	19.52	sl cloudy
10:00	1.50	17.99	5.87	9.48	168.6	53	15.8	19.51	clear
10:05	1.70	18.03	5.88	9.45	158.4	53	8.67	19.51	clear, nodules
10:10		A	m	P	L	F			

0930
0935
Turb. ~ 11.57

mistake?
white
cloudy, nodules
Mostly clear, nodules
sl cloudy
clear, nodules

Measurement and Sampling Equipment

Type <u>Multimeter</u>	Manufacturer <u>YSI</u>	Model # <u>556</u>	Calibration Date <u>9/12/18</u>
Type <u>Turbidity meter</u>	Manufacturer <u>LaMotte</u>	Model # <u>2020wL</u>	Calibration Date <u>9/12/18</u>
Type <u>Peristaltic pump</u>	Manufacturer <u>Geotech</u>	Model # <u>61900001</u>	Calibration Date <u>NA</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. YMW-8	PROJECT # 02.20180044.01	LOCATION 4580 South Berkeley Lake Road	DATE 9/12/18
SAMPLE No. YMW-9	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Manton 10/18	/EarthCon
SAMPLE TIME: 14:30	SITE Norcross, GA	FIELD CONDITIONS/WEATHER mostly cloudy 80s	

Well Condition Inspection (circle one) cover: <input checked="" type="checkbox"/> locked <input type="checkbox"/> not locked number: <input checked="" type="checkbox"/> legible <input type="checkbox"/> not legible outer casing: <input type="checkbox"/> good <input checked="" type="checkbox"/> fair <input type="checkbox"/> poor inner casing: <input type="checkbox"/> good <input checked="" type="checkbox"/> fair <input type="checkbox"/> poor well photographed: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Equipment Cleaning Procedures - potable water and phosphate-free soap - potable water rinse - water rinse: <input type="checkbox"/> distilled <input type="checkbox"/> deionized - solvent rinse: <input type="checkbox"/> acetone <input type="checkbox"/> hexane - air dry	Well Screen Interval ft bgs: 13.5--23.5
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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): 23.32 73.2 **Measuring Point Elevation (feet):** _____

Depth of Well (feet): 24.78 **Groundwater Surface Elevation:** _____

Water Column (feet): 17.46 **LNAPL present:** none thickness: _____

Casing Volume (gallons/liters): 2.85 **DNAPL present:** none thickness: _____

Calculated 3 Purge Volume (gallons/liters): 8.54 **Remarks:** _____

Actual Purge Volume (gallons/liters): 20 1.90

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
13:40	0								PURGE START
13:45	0.05	18.67	4.95	20.80	254.0	113	1.97	7.93	Clear, no odor
13:50	0.25	18.48	4.73	178.2	10.50	110	13.2	8.18	Clear, no odor
13:55	0.60	18.49	5.22	7.39	116.5	111	2.88	8.18	"
14:00	0.90	18.45	5.28	7.35	119.7	111	3.16	8.20	"
14:05	1.1	18.55	5.31	7.82	97.1	112	0.93	8.22	"
14:10	1.3	18.66	5.35	6.88	85.5	112	1.29	8.17	"
14:15	1.5	18.69	5.36	6.18	70.0	113	0.74	8.15	"
14:20	1.7	18.70	5.37	6.18	69.3	113	1.22	8.15	"
14:25	1.9	18.69	5.37	6.19	70.1	113	0.86	8.16	"
14:30	S	A	m	P	L	F			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Multimeter	YSI	556	9/12/18
Turbidity meter	LaMotte	2020 mL	9/12/18
Peristaltic pump	Geotech	Wet pump	N/A

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-11	PROJECT # 02.20180044 01	LOCATION 4580 South Berkely Lake Road	Date 9/14/18
SAMPLE No. YMW-11	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY T. NESSIER	/EarthCon
SAMPLE TIME: 16:30	SITE Norcross, GA	FIELD CONDITIONS/WEATHER	

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: 14-24
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Casing Diameter: (circle one)
 2" 4" 6" Other: _____

Casing Volume Calculation: $(\pi^2 h)(7.48 \text{ gal/ft}^3)$
 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): 5.26 Measuring Point Elevation (feet): _____

Depth of Well (feet): 26.20 Groundwater Surface Elevation: _____

Water Column (feet): 20.94 LNAPL present: _____ thickness: _____

Casing Volume (gallons/liters): 2.41 DNAPL present: _____ thickness: _____

Calculated 3 Purge Volume (gallons/liters): 10.23 Remarks: _____

Actual Purge Volume (gallons/liters): 1/2 gal

Pump Intake Depth (feet): 18 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
	0								PURGE START
16:00	—	19.93	4.64	4.70	213	181	6.3	5.85	CLEAR
16:03	0.20	20.11	4.65	4.70	217	187	5.5	5.65	CLEAR
16:05	0.25	20.59	4.66	4.24	218	187	4.7	5.86	CLEAR
16:08	0.30	20.46	4.66	3.30	219	187	4.3	5.70	CLEAR
16:11	0.35	20.73	4.67	3.40	220	186	4.6	5.69	CLEAR
16:13	0.40	20.86	4.67	3.17	221	184	4.4	5.65	CLEAR
16:18	0.45	20.86	4.67	3.17	226	183	5.76	5.80	CLEAR
16:21	0.55	20.87	4.79	3.18	226	184	4.99	5.80	CLEAR

Measurement and Sampling Equipment

Type <u>parameters</u>	Manufacturer <u>HANNA</u>	Model # <u>HI98194</u>	Calibration Date <u>9/11/18</u>
<u>turbidity</u>	<u>LA Motec</u>	<u>LA Motec 2020</u>	<u>9/11/18</u>
<u>p/pump</u>	<u>G&D</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-14	PROJECT # 02.20180044.01	LOCATION 4580 South Berkely Lake Road	DATE 9/12/18
SAMPLE No. YMW-14	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY T. Messier, E. Cook	/EarthCon
SAMPLE TIME: 1100	SITE Norcross, GA	FIELD CONDITIONS/WEATHER Sunny, 90°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: <u>yes</u> 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) 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): <u>10.07</u>	Measuring Point Elevation (feet): _____
Depth of Well (feet): <u>22.40</u>	Groundwater Surface Elevation: _____
Water Column (feet): <u>12.33</u>	LNAPL present: _____ thickness: _____
Casing Volume (gallons/liters): <u>2.01</u>	DNAPL present: _____ thickness: _____
Calculated 3 Purge Volume (gallons/liters): <u>6.03</u>	Remarks: _____
Actual Purge Volume (gallons/liters): _____	
Pump Intake Depth (feet): <u>15</u>	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
1032	0								PURGE START
1037	0.4	18.98	4.73	1.03	222	114	3.32	10.55	clear
1041	1.005	14.46	4.63	0.74	237	114	2.49	10.50	"
1046	0.6	14.60	4.54	0.62	245	114	2.45	10.50	"
1051	0.7	14.79	4.47	0.58	252	113	2.45	10.50	"
1056	0.9	14.82	4.40	0.54	258	113	2.38	10.50	"
1100	S	A	M	P	L	IE			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Turbidity Meter	LaMotte	2020 we	9/12/18
HI 18194	Hannz	pH/EC/DO Multiparameter	9/12/18
Peri Pump	Gretech	Geo pump	NA

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 # 02.20180044.01	LOCATION 4580 South Berkely Lake Road	DATE 9/12/18
SAMPLE No. YMW-15	PROJECT NAME Sechem Inc.	FIELD PERSONNEL T. Messier, E. Cook	/EarthCon
SAMPLE TIME: 0925	SITE Norcross, GA	FIELD CONDITIONS/WEATHER cloudy, 85°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: distilled deionized - solvent rinse: acetone hexane - air dry	Well Screen Interval ft bgs: 45-50? 7-40.20?
--	--	---

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

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): 17.01 Measuring Point Elevation (feet): _____
 Depth of Well (feet): 40.20 Groundwater Surface Elevation: _____
 Water Column (feet): 23.1 LNAPL present: _____ thickness: _____
 Casing Volume (gallons/liters): 0.978 DNAPL present: _____ thickness: _____
 Calculated 3 Purge Volume (gallons/liters): 2.93 Remarks: _____
 Actual Purge Volume (gallons/liters): 1.0
 Pump Intake Depth (feet): 48 Ferrous Iron (mg/L): _____

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

TIME 2400 hrs	CUMULATIVE VOLUME (gall)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0853	0								PURGE START
0858	0.2	18.75	5.89	4.35	17.2	196	5.15	17.01	clear
0903	0.4	18.65	5.50	1.10	3.5	211	3.81	17.05	"
0909	0.5	18.34	5.36	1.63	14.3	211	1.36	17.05	"
0915	0.7	18.81	5.28	1.16	29.9	210	1.38	17.04	"
0920	0.9	18.39	5.26	1.05	33.5	210	1.01	17.04	"
0925	S	A	M	P	L	E			

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Turbidity Meter	LaMotte	2020 we	9/12/18
Peri Pump	GeoTech	Geo Pump	9/12/18
Hanna HI98194	Hanna	pH/EC/DO Multiparameter	9/12/18

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-17** PROJECT # **02 20180044 01** LOCATION **4580 South Berkely Lake Road** DATE **9/12/18**
 SAMPLE No. **YMW-17** PROJECT NAME **Sechem Inc.** FIELD PERSONNEL/COMPANY **J. Mandolin** /EarthCon
 SAMPLE TIME **08:55** SITE **Norcross, GA** FIELD CONDITIONS/WEATHER **Cloudy, 70s**

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:
43-53

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): 12.91 Measuring Point Elevation (feet): _____
Depth of Well (feet): 58.21 Groundwater Surface Elevation: _____
Water Column (feet): 45.3 LNAPL present: none thickness: _____
Casing Volume (gallons/liters): 7.34 DNAPL present: none thickness: _____
Calculated 3 Purge Volume (gallons/liters): 22.15 Remarks: _____
Actual Purge Volume (gallons/liters): 1.5
Pump Intake Depth (feet): 47 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
08:10	0								PURGE START
08:15	0.2	17.96	4.30	16.84	273.5	46	0.71	15.41	clear, no odor
08:20	0.6	18.26	5.22	13.43	159.5	45	1.25	17.18	clear, no odor
08:25	0.8	18.34	5.67	12.27	137.4	45	2.16	17.64	"
08:30	1.0	18.64	6.03	13.03	125.0	45	0.65	18.74	" 18.74
08:35	1.2	18.67	6.07	12.77	116.4	45	0.71	19.16	"
08:40	1.3	18.63	6.08	13.17	115.0	45	0.83	19.98	"
08:45	1.4	18.66	6.08	13.05	117.5	45	0.64	20.00	"
08:50	1.5	18.65	6.07	13.01	116.7	45	0.89	20.02	"
08:55	5	A	M	P	L	E			

Measurement and Sampling Equipment

Type Multimeter Manufacturer YSI Model # 556 Calibration Date 9/12/18
 Turbidity meter Lynette 2020 wt 9/12/18
 Peristaltic pump Acropump Acropump N/A

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. YMW-18	PROJECT # 02.20180044.01	LOCATION 4580 South Berkely Lake Road	DATE 9/12/18
SAMPLE No. YMW-18	PROJECT NAME Sechem Inc.	FIELD PERSONNEL/COMPANY J. Maddox /EarthCon	
SAMPLE TIME: 11:45	SITE Norcross, GA	FIELD CONDITIONS/WEATHER partly cloudy, 80s	

Well Condition Inspection (circle one) cover: <input checked="" type="checkbox"/> locked not locked number: <input checked="" type="checkbox"/> legible not legible outer casing: <input checked="" type="checkbox"/> good fair poor inner casing: <input checked="" type="checkbox"/> good fair poor well photographed: <input checked="" type="checkbox"/> yes <input checked="" type="checkbox"/> 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: 43-53
---	--	--

Casing Diameter: (circle one) <input checked="" type="checkbox"/> 4" 6" Other: _____	Casing Volume Calculation: ($\pi r^2 h$) (7.48 gal/ft³) Casing Volume (gallons/ft) for $r = 0.763$; 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>12.96</u> <u>12.96</u> Depth of Well (feet): <u>51.90</u> Water Column (feet): <u>38.94</u> Casing Volume (gallons/liters): <u>6.35</u> Calculated 3 Purge Volume (gallons/liters): <u>19.04</u> Actual Purge Volume (gallons/liters): <u>1.40</u> Pump Intake Depth (feet): <u>~48</u>	Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: <u>none</u> thickness: _____ DNAPL present: <u>none</u> thickness: _____ Remarks: _____ Ferrous Iron (mg/L): _____
--	---

Well Evacuation
 Water level recovery is: very slow slow moderate fast

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
11:00 10:40	0			10.46					PURGE START
11:05 10:45	0.203	17.88	6.53	9.19	156.4	92	1.18	15.13	(clear) no odor
11:10	0.6	17.79	6.47	8.42	131.9	93	1.49	16.78	"
11:15	0.8	18.43	6.64	7.29	174.9	94	0.94	17.52	"
11:20	1.0	18.51	6.66	7.26	181.6	94	0.79	18.25	"
11:25	1.1	18.53	6.67	7.07	168.2	94	0.70	18.81	"
11:30	1.2	18.35	6.66	7.06	130.4	93	0.82	19.04	"
11:35	1.3	18.31	6.65	7.01	137.4	93	1.57	19.13	"
11:40	1.4	18.30	6.65	6.99	140.2	93	0.69	19.20	"
11:45	S	A	M	P	L	E			

recalibrated DO on 453556
 10 mg/L after recalibration

recalibrated DO
 no odor

exp 168.2

Measurement and Sampling Equipment			
Type	Manufacturer	Model #	Calibration Date
Multiphase	YSI	556	9/12/18
Turbidity meter	Lumette	2020 ml	9/12/18
Perc. pump	Geotech	Geopump	N/A

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.	YMW-19	PROJECT #	02.20180044.01	LOCATION	4580 South Berkely Lake Road	DATE	9/10/18
SAMPLE No.	YMW-19	PROJECT NAME	Sechem Inc	FIELD PERSONNEL/COMPANY	Aging 705	EarthCon	
SAMPLE TIME:	16:55	SITE	Norcross, GA	FIELD CONDITIONS/WEATHER	S. Madden		

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	Well Screen Interval ft bgs: 95-100
--	--	---

Casing Diameter: (circle one) <input checked="" type="radio"/> 4" Other: _____ <input type="radio"/> 6"	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>26.45</u> Depth of Well (feet): <u>102.64</u> Water Column (feet): <u>76.17</u> Casing Volume (gallons/liters): <u>12.42</u> Calculated 3 Purge Volume (gallons/liters): <u>37.25</u> Actual Purge Volume (gallons/liters): <u>1.30</u> Pump Intake Depth (feet): <u>97.5 ft</u>	Measuring Point Elevation (feet): _____ Groundwater Surface Elevation: _____ LNAPL present: <u>none</u> thickness: _____ DNAPL present: <u>none</u> 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
16:15	0								PURGE START
16:20	0.05	19.60	6.68	11.07	113.0	81	5.24	26.73	clear, no odor
16:25	0.35	19.16	6.57	7.98	118.4	83	6.34	26.77	"
16:30	0.60	19.09	6.62	8.95	122.7	83	4.58	26.80	" 26.80
16:35	0.90	19.62	6.67	4.85	121.7	84	5.73	26.74	"
16:40	1.05	19.71	6.66	4.44	122.8	84	4.92	26.73	"
16:45	1.20	20.05	6.67	4.49	124.5	84	3.62	26.73	"
16:50	1.30	20.14	6.67	4.50	125.1	84	4.17	26.72	"
16:55	S	A	M	P	L	E			

Measurement and Sampling Equipment			
Type	Manufacturer	Model #	Calibration Date
Piv pump	Geotech	Geopump	NA
YSI	YSI	556	9/10/18
Turbidity	Lamotte	2020 ml	9/10/18

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

9/13/18 09:25

Site : SEICHEM, INC.

Sample Date and Time: _____

Sample Location: SW-1

Weather: cloudy, 80s

Sample ID: SW-1

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: 0.20 ft

Depth of Sample: surface

Rate of flow: low

Sample Appearance/Odor: clear, no odor

TEMP (°C) 22.32

pH: 5.53

Conductivity (µs/cm): 96

Dissolved Oxygen (mg/L): 14.11

ORP/EH (mv): 36.8

Turbidity (NTU): 7.83

Notes:

Instruments Calibrated (date): 9/13/18

Hannagh HI 98194

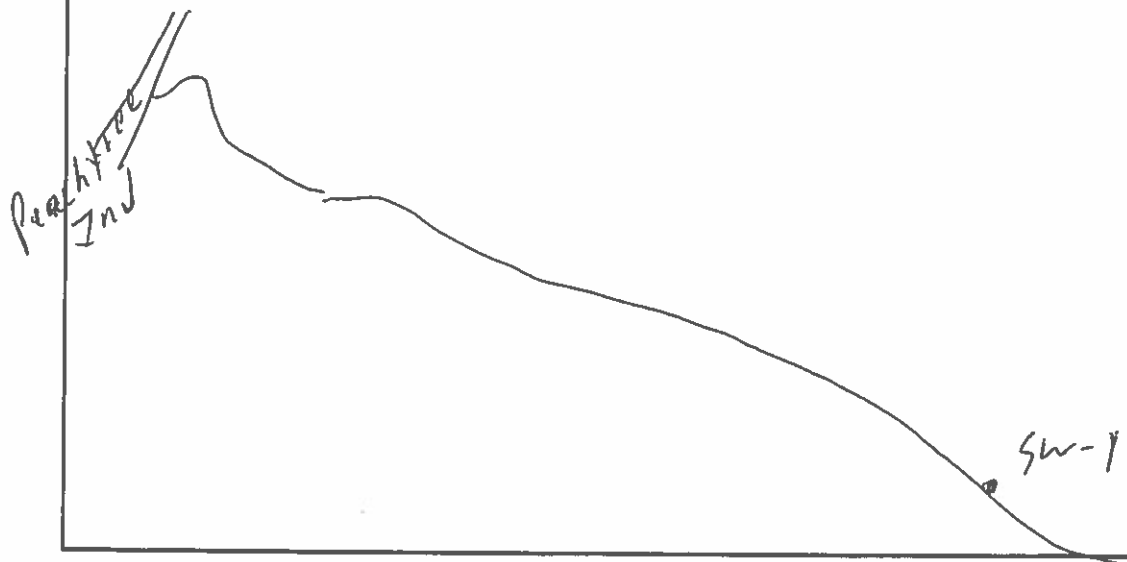
Duplicate Sample Collection (Y/N) N

Lanotte 2020we
If Yes, Sample ID: _____

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

NOTES:

LOCATION SKETCH:



Surface Water Sample Form

9/13/18 09:05

Site : SECHEM, INC.

Sample Date and Time: _____

Sample Location: SW-2

Weather: cloudy 70s

Sample ID: SW-2
SW-2

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: 0.3 ft

Depth of Sample: surface

Rate of flow: low

Sample Appearance/Odor: clear, no odor

TEMP (°C) 21.89

pH: 5.71

Conductivity (µs/cm): 120

Dissolved Oxygen (mg/L): 14.20

ORP/EH (mv): 122

Turbidity (NTU): 4.80

Notes:

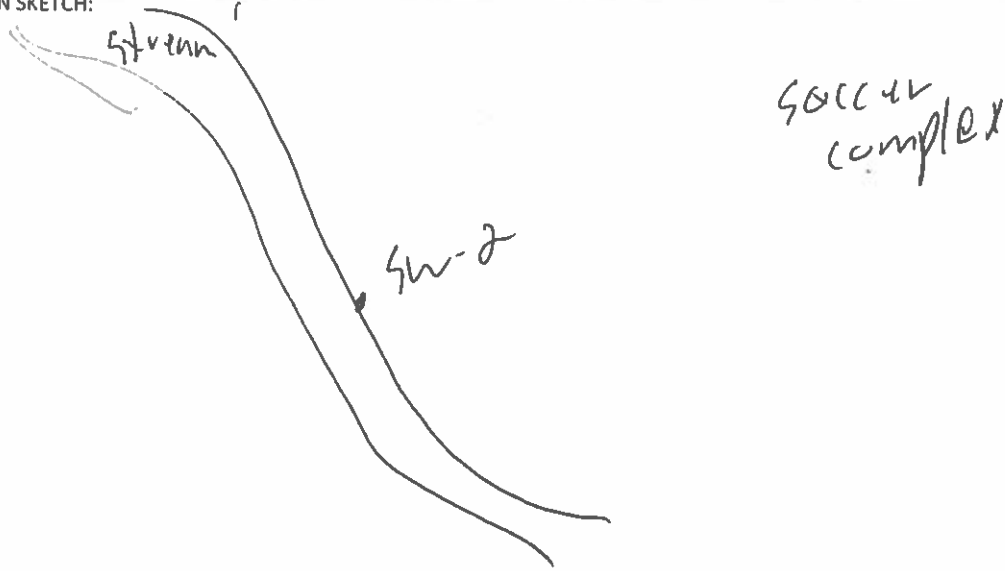
Instruments Calibrated (date): 9/13/18

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 9/13/18 07:55

Site: SECHEM, INC.

Sample Date and Time: 9/13/18 07:55

Sample Location: ^{SW}~~SW-4~~ SW-3

Weather: partly cloudy 70s

Sample ID: ^{SW}~~SW-4~~ SW-3

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): 22.47

pH: 6.36

Conductivity (µs/cm): 167

Dissolved Oxygen (mg/L): 14.58

ORP/EH (mv): -15.3

Turbidity (NTU): 8.25

Notes:

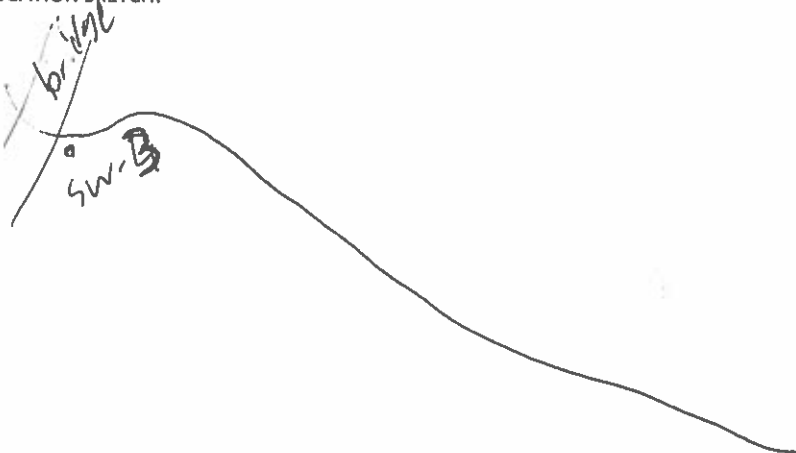
Instruments Calibrated (date): 9/13/18

Duplicate Sample Collection (Y/N): No If Yes, Sample ID: _____

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

NOTES:

LOCATION SKETCH:



Surface Water Sample Form

9/13/18 08:10

Site : SEICHEM, INC.

Sample Date and Time: _____

Sample Location: ~~SW-3~~ ^{JN} SW-4

Weather: partly cloudy

Sample ID: SW-4

Water Body Sampled: Intermittent Tributary to Mill Creek

Sample Collection Method: Grab

Depth @ Sample Site: 0.4 ft

Depth of Sample: Surface

Rate of flow: low

Sample Appearance/Odor: clear, no odor

TEMP (°C) JN ~~22.04~~ 21.74

pH: JN ~~6.04~~ 5.95

Conductivity (µs/cm): 144

Dissolved Oxygen (mg/L): ~~5.39~~ 15.21

ORP/EH (mv): JN ~~79.0~~ 76.5

Turbidity (NTU): 4.69

Notes:

Instruments Calibrated (date): 9/13/18

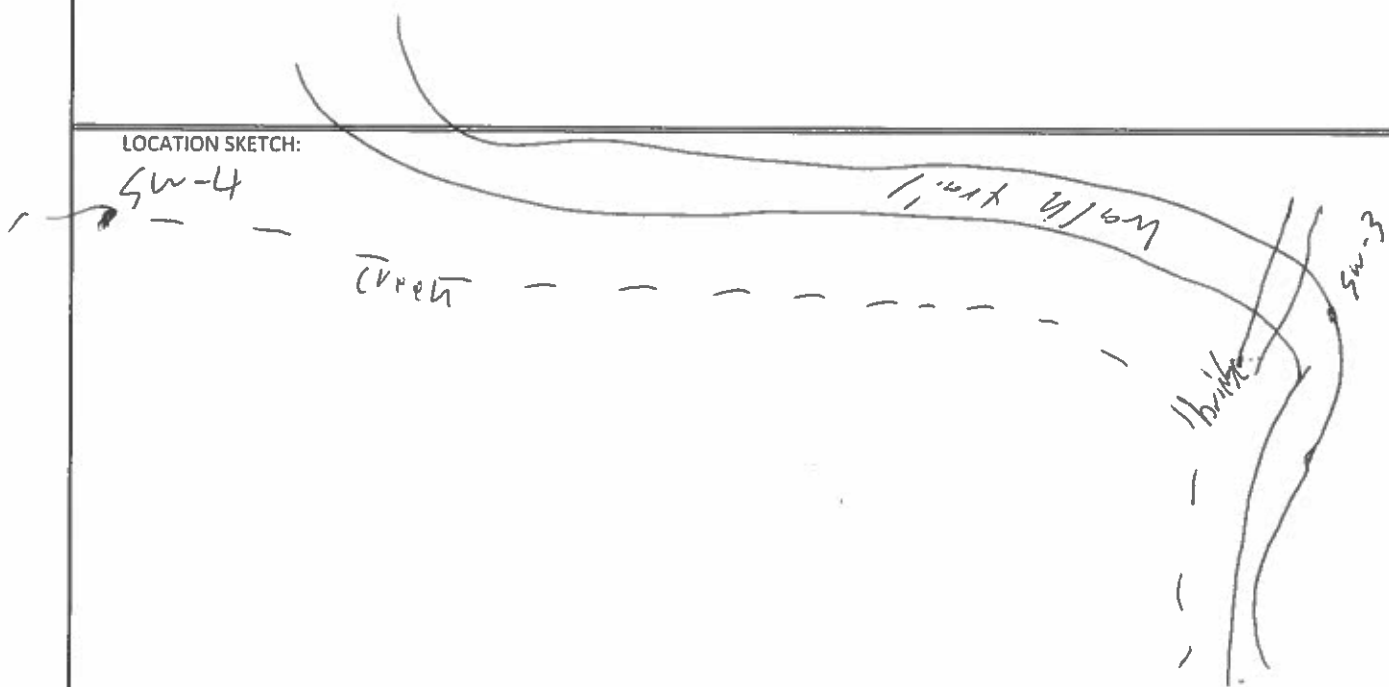
Duplicate Sample Collection (Y/N): N

If Yes, Sample ID: _____

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

NOTES:

LOCATION SKETCH:



APPENDIX C

**Data Validation Memo
&
Laboratory Analytical Reports**

Memorandum

Date: November 21, 2018
To: Alison Levinson, EarthCon Consultants
From: Carol Cummins, Project Scientist
Subject: Quality Assurance Review
Project: Giant Cement - SECHEM
Sampling Dates: Groundwater Sampling March and September, 2018
Project Number: 02.20180044.01

1.0 Introduction

This memorandum presents the cursory validation of the water sample analyses listed in Table 1. Thirty groundwater samples, two field duplicate sample, one equipment blank sample, and four trip blank samples were collected on March 20-22, 2018 and again on September 10-12, 2018. The sample analyses were performed by Test America in Savannah, Georgia.

The criteria used to qualify data are from the *Contract Laboratory Program National Functional Guidelines for Organic Data Review* (USEPA 2008), the analytical methods, or the professional judgment of the validation chemist. The following laboratory deliverables were reviewed during the validation process:

- Chain-of-custody (COC) documentation to assess holding times and verify report completeness
- Laboratory quality control (QC) sample results, including method blanks, surrogate spikes, laboratory control sample (LCS), and matrix spike/matrix spike duplicates (MS/MSD)
- Analytical results to verify reporting limits
- Field QC samples for field blank contamination and field duplicate precision

Field duplicate precision is presented in Table 2. The qualified data are summarized in Table 3. Tables are located at the end of this memorandum.

2.0 Data Validation Findings

2.1 Custody, Preservation, and Completeness – Acceptable with Discussion

Sample custody was maintained as required from sample collection to receipt at the laboratory. The samples were received intact and were properly preserved. The reports are complete and contain results for the samples and tests requested on the COC forms.

- The trip blank samples were not listed on the COCs associated with the lab reports listed below. The laboratory added the trip blank to the COCs and analyzed the samples for VOCs and 1,4-dioxane.

680-150288-1	680-150292-1
680-150288-2	680-150292-2
680-150290-1	680-157969-5
680-150290-2	680-157969-6
680-150291-1	
680-150291-2	

2.2 Volatile Organic Analyses by Method 5030B/8260

The field samples were analyzed for volatile organic compounds by Method 5030B/8260.

2.2.1 Holding Times- Acceptable with Qualification

The samples were analyzed within the method-required holding time of 14 days for preserved water samples, except as noted below.

- Sample YMW-19 collected 9/10/18 was reanalyzed outside the 14 day holding time because during the initial analysis, the concentration of trichloroethene exceeded the calibration range of the instrument. The reanalysis results for all analytes except trichloroethene are qualified as rejected (R) and the initial analysis for these compounds does not require qualification. The initial trichloroethene result is rejected (R) because the initial result exceeded the calibration range of the instrument and the trichloroethene reanalysis result is qualified as estimated (J).

Sample ID	Analyte	Qualifier	Quality Control Exceedance
YMW-19 (9/10/18) Initial analysis	Trichloroethene	R	Result exceeded calibration range of instrument
YMW-19 (9/10/18) Reanalysis	Trichloroethene	J	Sample analyzed outside holding time
YMW-19 (9/10/18) Reanalysis	All VOCs except Trichloroethene	R	Sample analyzed outside holding time and initial results acceptable

2.2.2 Blank Analyses – Acceptable

2.2.2.1 Method Blanks

Method blanks were analyzed at the required frequency of one per analytical batch. Target VOCs were not detected above the method detection limits (MDLs).

2.2.2.2 Trip Blanks

Four trip blanks were reported with the field samples during each sampling event, for a total of eight trip blanks. Target VOCs were not detected above the MDLs.

2.2.3 Surrogate Analyses – Acceptable

Surrogate compounds were added to the samples, blanks, and QC samples as required. The recovery values are within the laboratory QC criteria.

2.2.4 Matrix Spike/Matrix Spike Duplicate Analyses (MS/MSDs)

MS/MSD samples were not reported with the analytical batches due to insufficient sample volume. Data qualifiers are not required due to the lack of QC results.

2.2.5 Laboratory Control Sample Analyses – Acceptable with Discussion

LCS/LCSDs were analyzed at the required frequency. The recovery and relative percent difference (RPD) values are within the laboratory QC criteria, with two exceptions.

- The chloromethane recovery value of the LCS associated with batch 518488 (March 2018) is below the laboratory QC criteria of 76 to 149 percent with a value of 75 percent. Data qualifiers are not required because the LCSD recovery value is acceptable at 82 percent.
- The methylcyclohexane recovery value of the LCS associated with batch 540656 (September 2018) is above the laboratory QC criteria of 85 to 122 percent with a value of 124 percent. Data qualifiers are not required because the LCSD recovery value is acceptable at 120 percent.

2.2.6 Laboratory Reporting Limits – Acceptable

The project specific analytes were reported as required. Project-required quantitation limits were not specified. The reporting limits used by the laboratory are reasonable for the analytical method.

2.2.7 Field Duplicates – Acceptable with Qualification

Two field duplicate pairs were collected during each of the sampling events. For the March 2018 sampling event, the field notes were not clear as to which samples were identified as the duplicates. Therefore, RPD values were not calculated for the March 2018 field duplicate analyses. For the September 2018 sampling event, Dup-1 and Dup-2 are field duplicates of sample YMW-10 and YMW-13, respectively. The RPD values are within the criterion of less than 35 percent for water samples, except as noted below. RPD values are provided in Table 2.

- The RPD values for 1,1-dichloroethene and vinyl chloride for field duplicate pair YMW-10/Dup-1 collected September 12, 2018 are above the QC criteria of 35. These analytes are qualified as estimated (J) for both YMW-10 and Dup-1.

Sample ID	Analyte	Qualifier	Quality Control Exceedance
YMW-10 (9/12/18)	1,1-dichloroethene vinyl chloride	J	Field Duplicate RPD > QC criterion
Dup-1 (9/12/18)	1,1-dichloroethene vinyl chloride	J	Field Duplicate RPD > QC criterion

2.2.8 Overall Assessment of Data Usability

The usability of the data is based on the EPA guidance documents noted previously. Upon consideration of the information presented here, the data, as qualified, are acceptable for their intended use. Rejected values are not useable for any purpose.

2.3 1,4-Dioxane Analyses by Selective Ion Monitoring (SIM)

The field samples and collected QC samples were analyzed for 1,4-dioxane by Method 5030B/8260 SIM.

2.3.1 Holding Times – Acceptable with Qualification

The samples were analyzed within the method-required holding time of 14 days for preserved water samples, except as noted below.

- The Trip Blank collected September 10, 2018 was reanalyzed outside holding time to confirm the presence of 1,4-dioxane. The re-analysis result is rejected (R) because 1,4-dioxane was not detected in the reanalysis and the original sample result is qualified as not detected due to method blank contamination.

Sample ID	Analyte	Qualifier	Quality Control Exceedance
Trip Blank (9/10/18)	1,4-Dioxane (reanalysis)	R	Analysis exceeded holding time

2.3.2 Blank Analyses

2.3.2.1 Method Blanks – Acceptable with Qualification

Method blanks were analyzed at the required frequency of one per batch. Except as noted below, 1,4-dioxane was not detected above the MDLs in the method blanks.

- 1,4-dioxane was detected in the Method Blanks associate with batches 216453 and 216626 at 0.00041 and 0000499 µg/L, respectively. Functional Guidelines prescribes three qualification schemes for blank contamination: (1) associated sample concentrations greater than the action level (five times the blank concentration) are not qualified, (2)

associated sample concentrations less than the action level and greater than the reported detection limit (RDL) are qualified as undetected (U) at the reported value, and (3) associated sample concentrations less than the action level and less than the RDL are qualified as undetected (U) at the RDL. The associated samples are qualified as shown below and in Table 3.

Sample ID	Analyte	Qualifier	Quality Control Exceedance
YMW-2 (9/12/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
Trip Blank (9/10/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
Equipment Blank (9/11/18)	1,4-Dioxane	U @ RDL	Result < RDL and < 5 X blank concentration
WMW-1 (9/10/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
HMW-2 (9/11/18)	1,4-Dioxane	U @ RDL	Result < RDL and < 5 X blank concentration
SMW-1 (9/11/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration

2.3.2.2 Field Blanks

One equipment rinseate blank was collected during each sampling event and analyzed for 1,4-dioxane. After method blank qualifying, 1,4-dioxane was not detected above the RDL in either rinseate blank.

2.3.2.3 Trip Blanks

Four trip blanks were reported with the field samples during each sampling event, for a total of eight trip blanks. With one exception, 1,4-dioxane was not detected above the MDL.

- 1,4-dioxane was detected in the Trip Blank collected on 9/13/18 at 0.00058 µg/L. Data qualifiers are not required because the concentrations of 1,4-dioxane in the samples associated with this trip blank are greater than five times the blank concentration.

2.3.3 Surrogate Analyses – Acceptable

Surrogate compounds were added to the samples, blanks, and QC samples as required. The recovery values are within the laboratory QC criteria.

2.3.4 Matrix Spike/Matrix Spike Duplicate Sample Analyses – Acceptable with Discussion

Samples SMW-2 and YMW-5 were analyzed as the MS/MSDs during the March sampling event. MS/MSDs were not analyzed during the September sampling event. Data qualifiers are not required due to lack of QC results. The recovery and RPD values for the MS/MSDs analyzed in March 2018 are within the laboratory QC criteria, except as noted below.

- The YMW-5 MS/MSD recovery values of 1,4-dioxane are below the laboratory QC criteria at -62 and -77 percent, respectively. Data qualifiers are not required because the concentration of 1,4-dioxane in the sample was greater than four times the amount of the spike.

2.3.5 Laboratory Control Sample Analyses – Acceptable

LCS/LCSDs were analyzed at the required frequency of one per extraction batch. The recovery and RPD values for 1,4-dioxane are within the laboratory QC criteria of 49 to 150 percent and 35.

2.3.6 Laboratory Reporting Limits – Acceptable

The project specific analyte was reported as required. Project-required quantitation limits were not specified. The reporting limits used by the laboratory are reasonable for the analytical methods.

2.3.7 Field Duplicate Analyses – Acceptable with Qualification

Two field duplicate pairs were collected during each of the sampling events. For the March 2018 sampling event, the field notes were not clear as to which samples were identified as the duplicates. Therefore, RPD values were not calculated for the March 2018 field duplicate analyses. For the September 2018 sampling event, Dup-1 and Dup-2 are field duplicates of sample YMW-10 and YMW-13, respectively. The RPD values are within the criterion of less than 35 percent for water samples, except as noted below. RPD values are provided in Table 2.

- The 1,4-dioxane RPD value for field duplicate pair YMW-13/Dup-2 collected September 11, 2018 is above the QC criteria of 35 with a value of 162. The 1,4-dioxane result is qualified as estimated (J) for YMW-13 and Dup-2.

Sample ID	Analyte	Qualifier	Quality Control Exceedance
YMW-13 (9/11/18)	1,4-dioxane	J	Field Duplicate RPD > QC criterion
Dup-2 (9/11/18)	1,4-dioxane	J	Field Duplicate RPD > QC criterion

2.3.8 Overall Assessment of Data Usability

The usability of the data is based on the EPA guidance documents noted previously. Upon consideration of the information presented here, the data are acceptable, as qualified, for their intended use. Rejected values are not useable for any purpose.

3.0 Data Qualifier Definitions

The following data validation qualifiers were used in the review of this data set. These qualifiers are from the *Contract Laboratory Program National Functional Guidelines for Organic Data Review*.

- U The analyte was analyzed for but not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.
- NJ The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the samples and meet quality control criteria. The presence or absence of the analyte cannot be verified.

4.0 References

USEPA. 1996. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) Third Edition, Updates I, II, IIA, IIB, and III. United States Environmental Protection Agency. Office of Solid Waste. December 1996.

USEPA. 2008. Contract Laboratory Program National Functional Guidelines for Organic Data Review. U.S. Environmental Protection Agency Office of Emergency and Remedial Response. EPA540/R-99/008. June 2008.

Table 1—Sample Data Reviewed

Sample ID	Sample Collection Date	Laboratory ID	VOC ^a	1,4-Dioxane ^b
HMW-1	3/22/18	680-150288-1	X	X
	9/11/18	680-157969-23		
HMW-2	3/22/18	680-150288-2	X	X
	9/11/18	680-157969-24		
Trip Blank	3/22/18	680-150288-3	X	X
SW-1	3/22/18	680-150290-1	X	X
	9/13/18	680-157969-18		
SW-2	3/22/18	680-150290-2	X	X
	9/13/18	680-157969-19		
SW-3	3/22/18	680-150290-3	X	X
	9/13/18	680-157969-20		
SW-4	3/22/18	680-150290-4	X	X
	9/13/18	680-157969-21		
Trip Blank	3/22/18	680-150290-5	X	X
SMW-1	3/20/18	680-150291-1	X	X
	9/11/18	680-157969-25		
Equipment Blank	3/20/18	680-150291-2	X	X
SRW-1	3/20/18	680-150291-3	X	X
	9/11/18	680-157969-26		
SMW-3	3/20/18	680-150291-4	X	X
	9/11/18	680-157969-28		
SMW-4	3/21/18	680-150291-5	X	X
	9/10/18	680-157969-29		
SMW-2	3/21/18	680-150291-6	X	X
	9/11/18	680-157969-27		
Trip Blank	3/21/18	680-150291-7	X	X
WMW-2	3/20/18	680-150292-1	X	X
	9/10/18	680-157969-33		
WMW-1	3/20/18	680-150292-1	X	X
	9/10/18	680-157969-32		
YMW-19	3/20/18	680-150292-3	X	X
	9/10/18	680-157969-36		
YMW-4	3/20/18	680-150292-4	X	X
	9/10/18	680-157969-35		
YMW-1	3/20/18	680-150292-5	X	X
	9/10/18	680-157969-34		
YMW-2	3/20/18	680-150292-6	X	X
	9/12/18	680-157969-1		
YMW-14	3/20/18	680-150292-7	X	X
	9/12/18	680-157969-10		
YMW-17	3/21/18	680-150292-8	X	X
	9/12/18	680-157969-13		
YMW-8	3/21/18	680-150292-9	X	X
	9/12/18	680-157969-5		
YMW-13	3/21/18	680-150292-10	X	X
	9/11/18	680-157969-9		

Sample ID	Sample Collection Date	Laboratory ID	VOC ^a	1,4-Dioxane ^b
YMW-15	3/21/18	680-150292-11	X	X
	9/12/18	680-157969-11		
YMW-5	3/21/18	680-150292-12	X	X
	9/12/18	680-157969-2		
YMW-18	3/21/18	680-150292-13	X	X
	9/12/18	680-157969-14		
YMW-9	3/21/18	680-150292-14	X	X
	9/12/18	680-157969-6		
YMW-16	3/21/18	680-150292-15	X	X
	9/12/18	680-157969-12		
YMW-10	3/21/18	680-150292-16	X	X
	9/12/18	680-157969-7		
Dup-2	3/21/18	680-150292-17	X	X
YMW-6	3/21/18	680-150292-18	X	X
	9/11/18	680-157969-3		
YMW-11	3/21/18	680-150292-19	X	X
	9/11/18	680-157969-8		
YMW-7	3/21/18	680-150292-20	X	X
	9/12/18	680-157969-4		
Dup-1	3/21/18	680-150292-21	X	X
Trip Blank	3/21/18	680-150292-22	X	X
Dup-1	9/12/18	680-157969-15	X	X
Dup-2	9/11/18	680-157969-16	X	X
Trip Blank	9/12/18	680-157969-17	X	X
Trip Blank	9/13/18	680-157969-22	X	X
Trip Blank	9/10/18	680-157969-37	X	X
Equipment Blank	9/11/18	680-157969-30	X	X
Trip Blank	9/10/18	680-157969-31	X	X

^a Volatile Organic Compounds by Method 5030B/8260B (USEPA 1996).

^b 1,4-dioxane by Method 8260B by selective ion monitoring (SIM) (USEPA 1996)

Table 2—Field Duplicate Precision

Analyte	YMW-10 (9/12/18) Sample Value	Dup-1 (9/12/18) Duplicate Value	RPD
Carbon disulfide	0.028	<0.02	NC
Chlorobenzene	0.014	0.013	7.41
Cis-1,2-dichloroethene	0.66	0.56	16.4
1,2-dichlorobenzene	0.23	0.22	0.44
1,3-dichlorobenzene	0.047	0.046	2.15
1,4-dichlorobenzene	0.052	0.051	1.94
1,1-dichloroethane	0.034	0.027	23.0
1,2-dichloroethane	0.035	0.033	5.88
1,1-dichloroethene	0.14	0.079	55.7

Analyte	YMW-10 (9/12/18) Sample Value	Dup-1 (9/12/18) Duplicate Value	RPD
Tetrachloroethene	0.45	0.44	2.25
1,1,1-trichloroethane	0.011	<0.010	NC
Trichloroethene	0.54	0.53	1.87
Vinyl Chloride	0.14	0.084	50
1,4-dioxane	0.16	0.14	13.3

Analyte	YMW-13 (9/11/18) Sample Value	Dup-2 (9/11/18) Duplicate Value	RPD
Carbon disulfide	0.010	<0.01	NC
Cis-1,2-dichloroethene	0.61	0.53	14.0
1,1-dichloroethane	0.010	0.0078	24.7
1,2-dichloroethane	0.20	0.19	5.13
1,1-dichloroethene	0.32	0.23	32.7
Tetrachloroethene	0.12	0.13	8.00
1,1,1-trichloroethane	0.0078	0.0068	13.70
Trichloroethene	0.34	0.33	2.99
1,4-dioxane	0.047	0.45	162

RPD – Relative percent difference

NC – not calculatable

Units are µg/L

Bold RPD values exceed the QC criterion of 35

Table 3—Summary of Qualified Data

Sample ID	Analyte	Qualifier	Quality Control Exceedance
YMW-19 (9/10/18) Initial analysis	Trichloroethene	R	Result exceeded calibration range of instrument
YMW-19 (9/10/18) Reanalysis	Trichloroethene	J	Sample analyzed outside holding time
YMW-19 (1/10/18) Reanalysis	All VOCs except Trichloroethene	R	Sample analyzed outside holding time and initial results acceptable
YMW-10 (9/12/18)	1,1-dichloroethene vinyl chloride	J	Field Duplicate RPD > QC criterion
Dup-1 (9/12/18)	1,1-dichloroethene vinyl chloride	J	Field Duplicate RPD > QC criterion
Trip Blank (9/10/18)	1,4-Dioxane (reanalysis)	R	Analysis exceeded holding time
YMW-2 (9/12/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
Trip Blank (9/10/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
Equipment Blank (9/11/18)	1,4-Dioxane	U @ RDL	Result < RDL and < 5 X blank concentration

Sample ID	Analyte	Qualifier	Quality Control Exceedance
WMW-1 (9/10/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
HMW-2 (9/11/18)	1,4-Dioxane	U @ RDL	Result < RDL and < 5 X blank concentration
SMW-1 (9/11/18)	1,4-Dioxane	U	Result > RDL and < 5 X blank concentration
YMW-13 (9/11/18)	1,4-dioxane	J	Field Duplicate RPD > QC criterion
Dup-2 (9/11/18)	1,4-dioxane	J	Field Duplicate RPD > QC criterion

Text and tables reviewed by: KJG 11/20/18

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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Tel: (912)354-7858

TestAmerica Job ID: 680-157969-1
Client Project/Site: EarthCon - SECHEM

For:
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Attn: Rachel Odzer



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



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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Job ID: 680-157969-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-1

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples YMW-2 (680-157969-1), YMW-5 (680-157969-2), YMW-6 (680-157969-3), YMW-7 (680-157969-4), YMW-8 (680-157969-5), YMW-9 (680-157969-6), YMW-10 (680-157969-7), YMW-11 (680-157969-8), YMW-13 (680-157969-9), YMW-14 (680-157969-10), YMW-15 (680-157969-11), YMW-16 (680-157969-12), YMW-17 (680-157969-13), YMW-18 (680-157969-14), Dup-1 (680-157969-15), Dup-2 (680-157969-16) and Trip Blank (680-157969-17) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/21/2018, 09/22/2018, 09/24/2018 and 09/25/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540258.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540261.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540411.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540418.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540519.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540656.

The laboratory control sample (LCS) for analytical batch 680-540656 recovered outside control limits for the following analytes: Methylcyclohexane. This analytes was biased high in the LCS and as not detected in the associated samples; therefore, the data have been reported.

Samples YMW-2 (680-157969-1)[5X], YMW-5 (680-157969-2)[10X], YMW-5 (680-157969-2)[50X], YMW-7 (680-157969-4)[5X], YMW-10 (680-157969-7)[10X], YMW-13 (680-157969-9)[5X], YMW-15 (680-157969-11)[20X], YMW-16 (680-157969-12)[5X], Dup-1 (680-157969-15) [10X] and Dup-2 (680-157969-16)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Job ID: 680-157969-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

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

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Sample Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-1	YMW-2	Water	09/12/18 11:55	09/14/18 07:00
680-157969-2	YMW-5	Water	09/12/18 10:14	09/14/18 07:00
680-157969-3	YMW-6	Water	09/11/18 15:30	09/14/18 07:00
680-157969-4	YMW-7	Water	09/12/18 14:30	09/14/18 07:00
680-157969-5	YMW-8	Water	09/12/18 10:10	09/14/18 07:00
680-157969-6	YMW-9	Water	09/12/18 14:30	09/14/18 07:00
680-157969-7	YMW-10	Water	09/12/18 15:30	09/14/18 07:00
680-157969-8	YMW-11	Water	09/11/18 16:30	09/14/18 07:00
680-157969-9	YMW-13	Water	09/11/18 14:20	09/14/18 07:00
680-157969-10	YMW-14	Water	09/12/18 11:00	09/14/18 07:00
680-157969-11	YMW-15	Water	09/12/18 09:25	09/14/18 07:00
680-157969-12	YMW-16	Water	09/12/18 15:40	09/14/18 07:00
680-157969-13	YMW-17	Water	09/12/18 08:55	09/14/18 07:00
680-157969-14	YMW-18	Water	09/12/18 11:45	09/14/18 07:00
680-157969-15	Dup-1	Water	09/12/18 00:00	09/14/18 07:00
680-157969-16	Dup-2	Water	09/11/18 00:00	09/14/18 07:00
680-157969-17	Trip Blank	Water	09/12/18 00:00	09/14/18 07:00

Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
5030B	Purge and Trap	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-2

Lab Sample ID: 680-157969-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.23		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethene	0.0099		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.023		0.0050		mg/L	5		8260B	Total/NA
1,1,1-Trichloroethene	0.013		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.030		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-5

Lab Sample ID: 680-157969-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.032		0.010		mg/L	10		8260B	Total/NA
Chlorobenzene	0.080		0.010		mg/L	10		8260B	Total/NA
1,2-Dichlorobenzene	1.9		0.010		mg/L	10		8260B	Total/NA
1,3-Dichlorobenzene	0.39		0.010		mg/L	10		8260B	Total/NA
1,4-Dichlorobenzene	0.42		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.14		0.010		mg/L	10		8260B	Total/NA
1,2-Dichloroethane	0.26		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.63		0.010		mg/L	10		8260B	Total/NA
Isopropylbenzene	0.020		0.010		mg/L	10		8260B	Total/NA
Naphthalene	0.054		0.050		mg/L	10		8260B	Total/NA
Tetrachloroethene	1.8		0.010		mg/L	10		8260B	Total/NA
1,1,1-Trichloroethane	0.030		0.010		mg/L	10		8260B	Total/NA
1,1,2-Trichloroethane	0.039		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.16		0.010		mg/L	10		8260B	Total/NA
Xylenes, Total	0.049		0.010		mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene - DL	4.3		0.050		mg/L	50		8260B	Total/NA
Trichloroethene - DL	2.4		0.050		mg/L	50		8260B	Total/NA

Client Sample ID: YMW-6

Lab Sample ID: 680-157969-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.0018		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.023		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0025		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.0079		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0053		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.021		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.092		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-7

Lab Sample ID: 680-157969-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.072		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethane	0.0073		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.058		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethene	0.031		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.10		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.35		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-8

Lab Sample ID: 680-157969-5

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-8 (Continued)

Lab Sample ID: 680-157969-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.0018		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-9

Lab Sample ID: 680-157969-6

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

Client Sample ID: YMW-10

Lab Sample ID: 680-157969-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.028		0.020		mg/L	10		8260B	Total/NA
Chlorobenzene	0.014		0.010		mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	0.66		0.010		mg/L	10		8260B	Total/NA
1,2-Dichlorobenzene	0.23		0.010		mg/L	10		8260B	Total/NA
1,3-Dichlorobenzene	0.047		0.010		mg/L	10		8260B	Total/NA
1,4-Dichlorobenzene	0.052		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.034		0.010		mg/L	10		8260B	Total/NA
1,2-Dichloroethane	0.035		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.14		0.010		mg/L	10		8260B	Total/NA
Tetrachloroethene	0.45		0.010		mg/L	10		8260B	Total/NA
1,1,1-Trichloroethane	0.011		0.010		mg/L	10		8260B	Total/NA
Trichloroethene	0.54		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.14		0.010		mg/L	10		8260B	Total/NA

Client Sample ID: YMW-11

Lab Sample ID: 680-157969-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.0012		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-13

Lab Sample ID: 680-157969-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.010		0.010		mg/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	0.61		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethane	0.010		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.20		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethene	0.32		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.12		0.0050		mg/L	5		8260B	Total/NA
1,1,1-Trichloroethane	0.0078		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.34		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-14

Lab Sample ID: 680-157969-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.011		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.059		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0055		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: YMW-15

Lab Sample ID: 680-157969-11

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-15 (Continued)

Lab Sample ID: 680-157969-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.7		0.020		mg/L	20		8260B	Total/NA
1,2-Dichlorobenzene	0.13		0.020		mg/L	20		8260B	Total/NA
1,3-Dichlorobenzene	0.033		0.020		mg/L	20		8260B	Total/NA
1,4-Dichlorobenzene	0.031		0.020		mg/L	20		8260B	Total/NA
1,1-Dichloroethane	0.053		0.020		mg/L	20		8260B	Total/NA
1,2-Dichloroethane	0.13		0.020		mg/L	20		8260B	Total/NA
1,1-Dichloroethene	0.22		0.020		mg/L	20		8260B	Total/NA
Tetrachloroethene	0.70		0.020		mg/L	20		8260B	Total/NA
Trichloroethene	0.64		0.020		mg/L	20		8260B	Total/NA
Vinyl chloride	0.032		0.020		mg/L	20		8260B	Total/NA

Client Sample ID: YMW-16

Lab Sample ID: 680-157969-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.86		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethane	0.030		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.049		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethene	0.15		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.42		0.0050		mg/L	5		8260B	Total/NA
1,1,1-Trichloroethane	0.0060		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.59		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: YMW-17

Lab Sample ID: 680-157969-13

No Detections.

Client Sample ID: YMW-18

Lab Sample ID: 680-157969-14

No Detections.

Client Sample ID: Dup-1

Lab Sample ID: 680-157969-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	0.013		0.010		mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	0.56		0.010		mg/L	10		8260B	Total/NA
1,2-Dichlorobenzene	0.22		0.010		mg/L	10		8260B	Total/NA
1,3-Dichlorobenzene	0.046		0.010		mg/L	10		8260B	Total/NA
1,4-Dichlorobenzene	0.051		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.027		0.010		mg/L	10		8260B	Total/NA
1,2-Dichloroethane	0.033		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.079		0.010		mg/L	10		8260B	Total/NA
Tetrachloroethene	0.44		0.010		mg/L	10		8260B	Total/NA
Trichloroethene	0.53		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.084		0.010		mg/L	10		8260B	Total/NA

Client Sample ID: Dup-2

Lab Sample ID: 680-157969-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.53		0.0050		mg/L	5		8260B	Total/NA
1,1-Dichloroethane	0.0078		0.0050		mg/L	5		8260B	Total/NA
1,2-Dichloroethane	0.19		0.0050		mg/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Dup-2 (Continued)

Lab Sample ID: 680-157969-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.23		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene	0.13		0.0050		mg/L	5		8260B	Total/NA
1,1,1-Trichloroethane	0.0068		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene	0.33		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-17

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah



Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-2

Lab Sample ID: 680-157969-1

Date Collected: 09/12/18 11:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.050	U	0.050		mg/L			09/22/18 20:06	5
Benzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Bromoform	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Bromomethane	0.025	U	0.025		mg/L			09/22/18 20:06	5
2-Butanone	0.050	U	0.050		mg/L			09/22/18 20:06	5
Carbon disulfide	0.010	U	0.010		mg/L			09/22/18 20:06	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Chlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Chloroethane	0.025	U	0.025		mg/L			09/22/18 20:06	5
Chloroform	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Chloromethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
cis-1,2-Dichloroethene	0.23		0.0050		mg/L			09/22/18 20:06	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Cyclohexane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			09/22/18 20:06	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,1-Dichloroethane	0.0099		0.0050		mg/L			09/22/18 20:06	5
1,2-Dichloroethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,1-Dichloroethene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Ethylbenzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
2-Hexanone	0.050	U	0.050		mg/L			09/22/18 20:06	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Methyl acetate	0.025	U	0.025		mg/L			09/22/18 20:06	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Methylene Chloride	0.025	U	0.025		mg/L			09/22/18 20:06	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			09/22/18 20:06	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			09/22/18 20:06	5
Naphthalene	0.025	U	0.025		mg/L			09/22/18 20:06	5
Styrene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Tetrachloroethene	0.023		0.0050		mg/L			09/22/18 20:06	5
Toluene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			09/22/18 20:06	5
1,1,1-Trichloroethane	0.013		0.0050		mg/L			09/22/18 20:06	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Trichloroethene	0.030		0.0050		mg/L			09/22/18 20:06	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Vinyl chloride	0.0050	U	0.0050		mg/L			09/22/18 20:06	5
Xylenes, Total	0.0050	U	0.0050		mg/L			09/22/18 20:06	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-2
Date Collected: 09/12/18 11:55
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-1
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	100		80 - 120		09/22/18 20:06	5
Dibromofluoromethane (Surr)	107		80 - 122		09/22/18 20:06	5
1,2-Dichloroethane-d4 (Surr)	106		73 - 131		09/22/18 20:06	5
Toluene-d8 (Surr)	95		80 - 120		09/22/18 20:06	5

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-5

Lab Sample ID: 680-157969-2

Date Collected: 09/12/18 10:14

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.10	U	0.10		mg/L			09/22/18 20:30	10
Benzene	0.032		0.010		mg/L			09/22/18 20:30	10
Bromodichloromethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
Bromoform	0.010	U	0.010		mg/L			09/22/18 20:30	10
Bromomethane	0.050	U	0.050		mg/L			09/22/18 20:30	10
2-Butanone	0.10	U	0.10		mg/L			09/22/18 20:30	10
Carbon disulfide	0.020	U	0.020		mg/L			09/22/18 20:30	10
Carbon tetrachloride	0.010	U	0.010		mg/L			09/22/18 20:30	10
Chlorobenzene	0.080		0.010		mg/L			09/22/18 20:30	10
Chloroethane	0.050	U	0.050		mg/L			09/22/18 20:30	10
Chloroform	0.010	U	0.010		mg/L			09/22/18 20:30	10
Chloromethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/22/18 20:30	10
Cyclohexane	0.010	U	0.010		mg/L			09/22/18 20:30	10
Dibromochloromethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			09/22/18 20:30	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
1,2-Dichlorobenzene	1.9		0.010		mg/L			09/22/18 20:30	10
1,3-Dichlorobenzene	0.39		0.010		mg/L			09/22/18 20:30	10
1,4-Dichlorobenzene	0.42		0.010		mg/L			09/22/18 20:30	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
1,1-Dichloroethane	0.14		0.010		mg/L			09/22/18 20:30	10
1,2-Dichloroethane	0.26		0.010		mg/L			09/22/18 20:30	10
1,1-Dichloroethene	0.63		0.010		mg/L			09/22/18 20:30	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			09/22/18 20:30	10
Ethylbenzene	0.010	U	0.010		mg/L			09/22/18 20:30	10
2-Hexanone	0.10	U	0.10		mg/L			09/22/18 20:30	10
Isopropylbenzene	0.020		0.010		mg/L			09/22/18 20:30	10
Methyl acetate	0.050	U	0.050		mg/L			09/22/18 20:30	10
Methylcyclohexane	0.010	U	0.010		mg/L			09/22/18 20:30	10
Methylene Chloride	0.050	U	0.050		mg/L			09/22/18 20:30	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			09/22/18 20:30	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			09/22/18 20:30	10
Naphthalene	0.054		0.050		mg/L			09/22/18 20:30	10
Styrene	0.010	U	0.010		mg/L			09/22/18 20:30	10
1,1,2,2-Tetrachloroethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
Tetrachloroethene	1.8		0.010		mg/L			09/22/18 20:30	10
Toluene	0.010	U	0.010		mg/L			09/22/18 20:30	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			09/22/18 20:30	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/22/18 20:30	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			09/22/18 20:30	10
1,1,1-Trichloroethane	0.030		0.010		mg/L			09/22/18 20:30	10
1,1,2-Trichloroethane	0.039		0.010		mg/L			09/22/18 20:30	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			09/22/18 20:30	10
Vinyl chloride	0.16		0.010		mg/L			09/22/18 20:30	10
Xylenes, Total	0.049		0.010		mg/L			09/22/18 20:30	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-5
Date Collected: 09/12/18 10:14
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		80 - 120		09/22/18 20:30	10
Dibromofluoromethane (Surr)	101		80 - 122		09/22/18 20:30	10
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/22/18 20:30	10
Toluene-d8 (Surr)	98		80 - 120		09/22/18 20:30	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	4.3		0.050		mg/L			09/25/18 16:42	50
Trichloroethene	2.4		0.050		mg/L			09/25/18 16:42	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/25/18 16:42	50
Dibromofluoromethane (Surr)	97		80 - 122		09/25/18 16:42	50
1,2-Dichloroethane-d4 (Surr)	93		73 - 131		09/25/18 16:42	50
Toluene-d8 (Surr)	100		80 - 120		09/25/18 16:42	50

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-6

Lab Sample ID: 680-157969-3

Date Collected: 09/11/18 15:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/25/18 17:57	1
Benzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Bromoform	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Bromomethane	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
2-Butanone	0.010	U	0.010		mg/L			09/25/18 17:57	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/25/18 17:57	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Chloroethane	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
Chloroform	0.0018		0.0010		mg/L			09/25/18 17:57	1
Chloromethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
cis-1,2-Dichloroethene	0.023		0.0010		mg/L			09/25/18 17:57	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,1-Dichloroethane	0.0025		0.0010		mg/L			09/25/18 17:57	1
1,2-Dichloroethane	0.0079		0.0010		mg/L			09/25/18 17:57	1
1,1-Dichloroethene	0.0053		0.0010		mg/L			09/25/18 17:57	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
2-Hexanone	0.010	U	0.010		mg/L			09/25/18 17:57	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
Methylcyclohexane	0.0010	U *	0.0010		mg/L			09/25/18 17:57	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/25/18 17:57	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/25/18 17:57	1
Naphthalene	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
Styrene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Tetrachloroethene	0.021		0.0010		mg/L			09/25/18 17:57	1
Toluene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/25/18 17:57	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Trichloroethene	0.092		0.0010		mg/L			09/25/18 17:57	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/25/18 17:57	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/25/18 17:57	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-6
Date Collected: 09/11/18 15:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-3
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/25/18 17:57	1
Dibromofluoromethane (Surr)	96		80 - 122		09/25/18 17:57	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/25/18 17:57	1
Toluene-d8 (Surr)	104		80 - 120		09/25/18 17:57	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-7

Lab Sample ID: 680-157969-4

Date Collected: 09/12/18 14:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.050	U	0.050		mg/L			09/22/18 19:17	5
Benzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Bromoform	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Bromomethane	0.025	U	0.025		mg/L			09/22/18 19:17	5
2-Butanone	0.050	U	0.050		mg/L			09/22/18 19:17	5
Carbon disulfide	0.010	U	0.010		mg/L			09/22/18 19:17	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Chlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Chloroethane	0.025	U	0.025		mg/L			09/22/18 19:17	5
Chloroform	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Chloromethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
cis-1,2-Dichloroethene	0.072		0.0050		mg/L			09/22/18 19:17	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Cyclohexane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			09/22/18 19:17	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,1-Dichloroethane	0.0073		0.0050		mg/L			09/22/18 19:17	5
1,2-Dichloroethane	0.058		0.0050		mg/L			09/22/18 19:17	5
1,1-Dichloroethene	0.031		0.0050		mg/L			09/22/18 19:17	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Ethylbenzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
2-Hexanone	0.050	U	0.050		mg/L			09/22/18 19:17	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Methyl acetate	0.025	U	0.025		mg/L			09/22/18 19:17	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Methylene Chloride	0.025	U	0.025		mg/L			09/22/18 19:17	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			09/22/18 19:17	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			09/22/18 19:17	5
Naphthalene	0.025	U	0.025		mg/L			09/22/18 19:17	5
Styrene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Tetrachloroethene	0.10		0.0050		mg/L			09/22/18 19:17	5
Toluene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			09/22/18 19:17	5
1,1,1-Trichloroethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Trichloroethene	0.35		0.0050		mg/L			09/22/18 19:17	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Vinyl chloride	0.0050	U	0.0050		mg/L			09/22/18 19:17	5
Xylenes, Total	0.0050	U	0.0050		mg/L			09/22/18 19:17	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-7
Date Collected: 09/12/18 14:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-4
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 19:17	5
Dibromofluoromethane (Surr)	105		80 - 122		09/22/18 19:17	5
1,2-Dichloroethane-d4 (Surr)	105		73 - 131		09/22/18 19:17	5
Toluene-d8 (Surr)	98		80 - 120		09/22/18 19:17	5

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-8

Lab Sample ID: 680-157969-5

Date Collected: 09/12/18 10:10

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 17:14	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 17:14	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 17:14	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,2-Dichlorobenzene	0.0018		0.0010		mg/L			09/22/18 17:14	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 17:14	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 17:14	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 17:14	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 17:14	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 17:14	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 17:14	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-8
Date Collected: 09/12/18 10:10
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-5
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	101		80 - 120		09/22/18 17:14	1
Dibromofluoromethane (Surr)	96		80 - 122		09/22/18 17:14	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/22/18 17:14	1
Toluene-d8 (Surr)	102		80 - 120		09/22/18 17:14	1

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-9

Lab Sample ID: 680-157969-6

Date Collected: 09/12/18 14:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 17:39	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 17:39	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 17:39	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,2-Dichlorobenzene	0.0010		0.0010		mg/L			09/22/18 17:39	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 17:39	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 17:39	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 17:39	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 17:39	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 17:39	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 17:39	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-9
Date Collected: 09/12/18 14:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-6
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 17:39	1
Dibromofluoromethane (Surr)	96		80 - 122		09/22/18 17:39	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/22/18 17:39	1
Toluene-d8 (Surr)	103		80 - 120		09/22/18 17:39	1

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-10

Lab Sample ID: 680-157969-7

Date Collected: 09/12/18 15:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.10	U	0.10		mg/L			09/22/18 18:25	10
Benzene	0.010	U	0.010		mg/L			09/22/18 18:25	10
Bromodichloromethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Bromoform	0.010	U	0.010		mg/L			09/22/18 18:25	10
Bromomethane	0.050	U	0.050		mg/L			09/22/18 18:25	10
2-Butanone	0.10	U	0.10		mg/L			09/22/18 18:25	10
Carbon disulfide	0.028		0.020		mg/L			09/22/18 18:25	10
Carbon tetrachloride	0.010	U	0.010		mg/L			09/22/18 18:25	10
Chlorobenzene	0.014		0.010		mg/L			09/22/18 18:25	10
Chloroethane	0.050	U	0.050		mg/L			09/22/18 18:25	10
Chloroform	0.010	U	0.010		mg/L			09/22/18 18:25	10
Chloromethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
cis-1,2-Dichloroethene	0.66		0.010		mg/L			09/22/18 18:25	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/22/18 18:25	10
Cyclohexane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Dibromochloromethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			09/22/18 18:25	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
1,2-Dichlorobenzene	0.23		0.010		mg/L			09/22/18 18:25	10
1,3-Dichlorobenzene	0.047		0.010		mg/L			09/22/18 18:25	10
1,4-Dichlorobenzene	0.052		0.010		mg/L			09/22/18 18:25	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
1,1-Dichloroethane	0.034		0.010		mg/L			09/22/18 18:25	10
1,2-Dichloroethane	0.035		0.010		mg/L			09/22/18 18:25	10
1,1-Dichloroethene	0.14		0.010		mg/L			09/22/18 18:25	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Ethylbenzene	0.010	U	0.010		mg/L			09/22/18 18:25	10
2-Hexanone	0.10	U	0.10		mg/L			09/22/18 18:25	10
Isopropylbenzene	0.010	U	0.010		mg/L			09/22/18 18:25	10
Methyl acetate	0.050	U	0.050		mg/L			09/22/18 18:25	10
Methylcyclohexane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Methylene Chloride	0.050	U	0.050		mg/L			09/22/18 18:25	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			09/22/18 18:25	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			09/22/18 18:25	10
Naphthalene	0.050	U	0.050		mg/L			09/22/18 18:25	10
Styrene	0.010	U	0.010		mg/L			09/22/18 18:25	10
1,1,1,2-Tetrachloroethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Tetrachloroethene	0.45		0.010		mg/L			09/22/18 18:25	10
Toluene	0.010	U	0.010		mg/L			09/22/18 18:25	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			09/22/18 18:25	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/22/18 18:25	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			09/22/18 18:25	10
1,1,1-Trichloroethane	0.011		0.010		mg/L			09/22/18 18:25	10
1,1,2-Trichloroethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Trichloroethene	0.54		0.010		mg/L			09/22/18 18:25	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			09/22/18 18:25	10
Vinyl chloride	0.14		0.010		mg/L			09/22/18 18:25	10
Xylenes, Total	0.010	U	0.010		mg/L			09/22/18 18:25	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-10

Lab Sample ID: 680-157969-7

Date Collected: 09/12/18 15:30

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	95		80 - 120		09/22/18 18:25	10
Dibromofluoromethane (Surr)	102		80 - 122		09/22/18 18:25	10
1,2-Dichloroethane-d4 (Surr)	114		73 - 131		09/22/18 18:25	10
Toluene-d8 (Surr)	96		80 - 120		09/22/18 18:25	10

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-11

Lab Sample ID: 680-157969-8

Date Collected: 09/11/18 16:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 18:03	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 18:03	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 18:03	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
Chloroform	0.0012		0.0010		mg/L			09/22/18 18:03	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 18:03	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 18:03	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 18:03	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:03	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 18:03	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 18:03	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-11

Lab Sample ID: 680-157969-8

Date Collected: 09/11/18 16:30

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	97		80 - 120		09/22/18 18:03	1
Dibromofluoromethane (Surr)	95		80 - 122		09/22/18 18:03	1
1,2-Dichloroethane-d4 (Surr)	87		73 - 131		09/22/18 18:03	1
Toluene-d8 (Surr)	103		80 - 120		09/22/18 18:03	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-13

Lab Sample ID: 680-157969-9

Date Collected: 09/11/18 14:20

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.050	U	0.050		mg/L			09/22/18 18:48	5
Benzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Bromoform	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Bromomethane	0.025	U	0.025		mg/L			09/22/18 18:48	5
2-Butanone	0.050	U	0.050		mg/L			09/22/18 18:48	5
Carbon disulfide	0.010		0.010		mg/L			09/22/18 18:48	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Chlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Chloroethane	0.025	U	0.025		mg/L			09/22/18 18:48	5
Chloroform	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Chloromethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
cis-1,2-Dichloroethene	0.61		0.0050		mg/L			09/22/18 18:48	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Cyclohexane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			09/22/18 18:48	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,1-Dichloroethane	0.010		0.0050		mg/L			09/22/18 18:48	5
1,2-Dichloroethane	0.20		0.0050		mg/L			09/22/18 18:48	5
1,1-Dichloroethene	0.32		0.0050		mg/L			09/22/18 18:48	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Ethylbenzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
2-Hexanone	0.050	U	0.050		mg/L			09/22/18 18:48	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Methyl acetate	0.025	U	0.025		mg/L			09/22/18 18:48	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Methylene Chloride	0.025	U	0.025		mg/L			09/22/18 18:48	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			09/22/18 18:48	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			09/22/18 18:48	5
Naphthalene	0.025	U	0.025		mg/L			09/22/18 18:48	5
Styrene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Tetrachloroethene	0.12		0.0050		mg/L			09/22/18 18:48	5
Toluene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			09/22/18 18:48	5
1,1,1-Trichloroethane	0.0078		0.0050		mg/L			09/22/18 18:48	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Trichloroethene	0.34		0.0050		mg/L			09/22/18 18:48	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Vinyl chloride	0.0050	U	0.0050		mg/L			09/22/18 18:48	5
Xylenes, Total	0.0050	U	0.0050		mg/L			09/22/18 18:48	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-13
Date Collected: 09/11/18 14:20
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-9
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	102		80 - 120		09/22/18 18:48	5
Dibromofluoromethane (Surr)	106		80 - 122		09/22/18 18:48	5
1,2-Dichloroethane-d4 (Surr)	116		73 - 131		09/22/18 18:48	5
Toluene-d8 (Surr)	92		80 - 120		09/22/18 18:48	5

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-14

Lab Sample ID: 680-157969-10

Date Collected: 09/12/18 11:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 18:28	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 18:28	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 18:28	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
cis-1,2-Dichloroethene	0.011		0.0010		mg/L			09/22/18 18:28	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 18:28	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 18:28	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 18:28	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Tetrachloroethene	0.059		0.0010		mg/L			09/22/18 18:28	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:28	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Trichloroethene	0.0055		0.0010		mg/L			09/22/18 18:28	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 18:28	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 18:28	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-14
Date Collected: 09/12/18 11:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-10
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	102		80 - 120		09/22/18 18:28	1
Dibromofluoromethane (Surr)	98		80 - 122		09/22/18 18:28	1
1,2-Dichloroethane-d4 (Surr)	92		73 - 131		09/22/18 18:28	1
Toluene-d8 (Surr)	104		80 - 120		09/22/18 18:28	1

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-15

Lab Sample ID: 680-157969-11

Date Collected: 09/12/18 09:25

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.20	U	0.20		mg/L			09/22/18 19:41	20
Benzene	0.020	U	0.020		mg/L			09/22/18 19:41	20
Bromodichloromethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Bromoform	0.020	U	0.020		mg/L			09/22/18 19:41	20
Bromomethane	0.10	U	0.10		mg/L			09/22/18 19:41	20
2-Butanone	0.20	U	0.20		mg/L			09/22/18 19:41	20
Carbon disulfide	0.040	U	0.040		mg/L			09/22/18 19:41	20
Carbon tetrachloride	0.020	U	0.020		mg/L			09/22/18 19:41	20
Chlorobenzene	0.020	U	0.020		mg/L			09/22/18 19:41	20
Chloroethane	0.10	U	0.10		mg/L			09/22/18 19:41	20
Chloroform	0.020	U	0.020		mg/L			09/22/18 19:41	20
Chloromethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
cis-1,2-Dichloroethene	1.7		0.020		mg/L			09/22/18 19:41	20
cis-1,3-Dichloropropene	0.020	U	0.020		mg/L			09/22/18 19:41	20
Cyclohexane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Dibromochloromethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,2-Dibromo-3-Chloropropane	0.10	U	0.10		mg/L			09/22/18 19:41	20
1,2-Dibromoethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,2-Dichlorobenzene	0.13		0.020		mg/L			09/22/18 19:41	20
1,3-Dichlorobenzene	0.033		0.020		mg/L			09/22/18 19:41	20
1,4-Dichlorobenzene	0.031		0.020		mg/L			09/22/18 19:41	20
Dichlorodifluoromethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,1-Dichloroethane	0.053		0.020		mg/L			09/22/18 19:41	20
1,2-Dichloroethane	0.13		0.020		mg/L			09/22/18 19:41	20
1,1-Dichloroethene	0.22		0.020		mg/L			09/22/18 19:41	20
1,2-Dichloropropane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Ethylbenzene	0.020	U	0.020		mg/L			09/22/18 19:41	20
2-Hexanone	0.20	U	0.20		mg/L			09/22/18 19:41	20
Isopropylbenzene	0.020	U	0.020		mg/L			09/22/18 19:41	20
Methyl acetate	0.10	U	0.10		mg/L			09/22/18 19:41	20
Methylcyclohexane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Methylene Chloride	0.10	U	0.10		mg/L			09/22/18 19:41	20
4-Methyl-2-pentanone	0.20	U	0.20		mg/L			09/22/18 19:41	20
Methyl tert-butyl ether	0.20	U	0.20		mg/L			09/22/18 19:41	20
Naphthalene	0.10	U	0.10		mg/L			09/22/18 19:41	20
Styrene	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,1,1,2-Tetrachloroethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Tetrachloroethene	0.70		0.020		mg/L			09/22/18 19:41	20
Toluene	0.020	U	0.020		mg/L			09/22/18 19:41	20
trans-1,2-Dichloroethene	0.020	U	0.020		mg/L			09/22/18 19:41	20
trans-1,3-Dichloropropene	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,2,4-Trichlorobenzene	0.10	U	0.10		mg/L			09/22/18 19:41	20
1,1,1-Trichloroethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,1,2-Trichloroethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Trichloroethene	0.64		0.020		mg/L			09/22/18 19:41	20
Trichlorofluoromethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.020	U	0.020		mg/L			09/22/18 19:41	20
Vinyl chloride	0.032		0.020		mg/L			09/22/18 19:41	20
Xylenes, Total	0.020	U	0.020		mg/L			09/22/18 19:41	20

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-15
Date Collected: 09/12/18 09:25
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-11
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	100		80 - 120		09/22/18 19:41	20
Dibromofluoromethane (Surr)	99		80 - 122		09/22/18 19:41	20
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/22/18 19:41	20
Toluene-d8 (Surr)	102		80 - 120		09/22/18 19:41	20

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-16

Lab Sample ID: 680-157969-12

Date Collected: 09/12/18 15:40

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.050	U	0.050		mg/L			09/22/18 19:11	5
Benzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Bromoform	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Bromomethane	0.025	U	0.025		mg/L			09/22/18 19:11	5
2-Butanone	0.050	U	0.050		mg/L			09/22/18 19:11	5
Carbon disulfide	0.010	U	0.010		mg/L			09/22/18 19:11	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Chlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Chloroethane	0.025	U	0.025		mg/L			09/22/18 19:11	5
Chloroform	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Chloromethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
cis-1,2-Dichloroethene	0.86		0.0050		mg/L			09/22/18 19:11	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Cyclohexane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			09/22/18 19:11	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,1-Dichloroethane	0.030		0.0050		mg/L			09/22/18 19:11	5
1,2-Dichloroethane	0.049		0.0050		mg/L			09/22/18 19:11	5
1,1-Dichloroethene	0.15		0.0050		mg/L			09/22/18 19:11	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Ethylbenzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
2-Hexanone	0.050	U	0.050		mg/L			09/22/18 19:11	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Methyl acetate	0.025	U	0.025		mg/L			09/22/18 19:11	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Methylene Chloride	0.025	U	0.025		mg/L			09/22/18 19:11	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			09/22/18 19:11	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			09/22/18 19:11	5
Naphthalene	0.025	U	0.025		mg/L			09/22/18 19:11	5
Styrene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Tetrachloroethene	0.42		0.0050		mg/L			09/22/18 19:11	5
Toluene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			09/22/18 19:11	5
1,1,1-Trichloroethane	0.0060		0.0050		mg/L			09/22/18 19:11	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Trichloroethene	0.59		0.0050		mg/L			09/22/18 19:11	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Vinyl chloride	0.0050	U	0.0050		mg/L			09/22/18 19:11	5
Xylenes, Total	0.0050	U	0.0050		mg/L			09/22/18 19:11	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-16
Date Collected: 09/12/18 15:40
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-12
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	103		80 - 120		09/22/18 19:11	5
Dibromofluoromethane (Surr)	107		80 - 122		09/22/18 19:11	5
1,2-Dichloroethane-d4 (Surr)	105		73 - 131		09/22/18 19:11	5
Toluene-d8 (Surr)	89		80 - 120		09/22/18 19:11	5

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-17

Lab Sample ID: 680-157969-13

Date Collected: 09/12/18 08:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 18:52	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 18:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 18:52	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 18:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 18:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 18:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 18:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 18:52	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 18:52	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-17

Lab Sample ID: 680-157969-13

Date Collected: 09/12/18 08:55

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	102		80 - 120		09/22/18 18:52	1
Dibromofluoromethane (Surr)	95		80 - 122		09/22/18 18:52	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/22/18 18:52	1
Toluene-d8 (Surr)	102		80 - 120		09/22/18 18:52	1

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-18

Lab Sample ID: 680-157969-14

Date Collected: 09/12/18 11:45

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 18:14	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 18:14	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 18:14	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 18:14	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 18:14	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 18:14	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 18:14	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 18:14	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 18:14	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-18
Date Collected: 09/12/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-14
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/21/18 18:14	1
Dibromofluoromethane (Surr)	96		80 - 122		09/21/18 18:14	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/21/18 18:14	1
Toluene-d8 (Surr)	103		80 - 120		09/21/18 18:14	1

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Dup-1

Lab Sample ID: 680-157969-15

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.10	U	0.10		mg/L			09/24/18 17:21	10
Benzene	0.010	U	0.010		mg/L			09/24/18 17:21	10
Bromodichloromethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Bromoform	0.010	U	0.010		mg/L			09/24/18 17:21	10
Bromomethane	0.050	U	0.050		mg/L			09/24/18 17:21	10
2-Butanone	0.10	U	0.10		mg/L			09/24/18 17:21	10
Carbon disulfide	0.020	U	0.020		mg/L			09/24/18 17:21	10
Carbon tetrachloride	0.010	U	0.010		mg/L			09/24/18 17:21	10
Chlorobenzene	0.013		0.010		mg/L			09/24/18 17:21	10
Chloroethane	0.050	U	0.050		mg/L			09/24/18 17:21	10
Chloroform	0.010	U	0.010		mg/L			09/24/18 17:21	10
Chloromethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
cis-1,2-Dichloroethene	0.56		0.010		mg/L			09/24/18 17:21	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/24/18 17:21	10
Cyclohexane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Dibromochloromethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			09/24/18 17:21	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,2-Dichlorobenzene	0.22		0.010		mg/L			09/24/18 17:21	10
1,3-Dichlorobenzene	0.046		0.010		mg/L			09/24/18 17:21	10
1,4-Dichlorobenzene	0.051		0.010		mg/L			09/24/18 17:21	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,1-Dichloroethane	0.027		0.010		mg/L			09/24/18 17:21	10
1,2-Dichloroethane	0.033		0.010		mg/L			09/24/18 17:21	10
1,1-Dichloroethene	0.079		0.010		mg/L			09/24/18 17:21	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Ethylbenzene	0.010	U	0.010		mg/L			09/24/18 17:21	10
2-Hexanone	0.10	U	0.10		mg/L			09/24/18 17:21	10
Isopropylbenzene	0.010	U	0.010		mg/L			09/24/18 17:21	10
Methyl acetate	0.050	U	0.050		mg/L			09/24/18 17:21	10
Methylcyclohexane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Methylene Chloride	0.050	U	0.050		mg/L			09/24/18 17:21	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			09/24/18 17:21	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			09/24/18 17:21	10
Naphthalene	0.050	U	0.050		mg/L			09/24/18 17:21	10
Styrene	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,1,2,2-Tetrachloroethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Tetrachloroethene	0.44		0.010		mg/L			09/24/18 17:21	10
Toluene	0.010	U	0.010		mg/L			09/24/18 17:21	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			09/24/18 17:21	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			09/24/18 17:21	10
1,1,1-Trichloroethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,1,2-Trichloroethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Trichloroethene	0.53		0.010		mg/L			09/24/18 17:21	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			09/24/18 17:21	10
Vinyl chloride	0.084		0.010		mg/L			09/24/18 17:21	10
Xylenes, Total	0.010	U	0.010		mg/L			09/24/18 17:21	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Dup-1

Date Collected: 09/12/18 00:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-15

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/24/18 17:21	10
Dibromofluoromethane (Surr)	102		80 - 122		09/24/18 17:21	10
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/24/18 17:21	10
Toluene-d8 (Surr)	98		80 - 120		09/24/18 17:21	10

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Dup-2

Lab Sample ID: 680-157969-16

Date Collected: 09/11/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.050	U	0.050		mg/L			09/24/18 17:46	5
Benzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Bromodichloromethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Bromoform	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Bromomethane	0.025	U	0.025		mg/L			09/24/18 17:46	5
2-Butanone	0.050	U	0.050		mg/L			09/24/18 17:46	5
Carbon disulfide	0.010	U	0.010		mg/L			09/24/18 17:46	5
Carbon tetrachloride	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Chlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Chloroethane	0.025	U	0.025		mg/L			09/24/18 17:46	5
Chloroform	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Chloromethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
cis-1,2-Dichloroethene	0.53		0.0050		mg/L			09/24/18 17:46	5
cis-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Cyclohexane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Dibromochloromethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,2-Dibromo-3-Chloropropane	0.025	U	0.025		mg/L			09/24/18 17:46	5
1,2-Dibromoethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,2-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,3-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,4-Dichlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Dichlorodifluoromethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,1-Dichloroethane	0.0078		0.0050		mg/L			09/24/18 17:46	5
1,2-Dichloroethane	0.19		0.0050		mg/L			09/24/18 17:46	5
1,1-Dichloroethene	0.23		0.0050		mg/L			09/24/18 17:46	5
1,2-Dichloropropane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Ethylbenzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
2-Hexanone	0.050	U	0.050		mg/L			09/24/18 17:46	5
Isopropylbenzene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Methyl acetate	0.025	U	0.025		mg/L			09/24/18 17:46	5
Methylcyclohexane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Methylene Chloride	0.025	U	0.025		mg/L			09/24/18 17:46	5
4-Methyl-2-pentanone	0.050	U	0.050		mg/L			09/24/18 17:46	5
Methyl tert-butyl ether	0.050	U	0.050		mg/L			09/24/18 17:46	5
Naphthalene	0.025	U	0.025		mg/L			09/24/18 17:46	5
Styrene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,1,2,2-Tetrachloroethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Tetrachloroethene	0.13		0.0050		mg/L			09/24/18 17:46	5
Toluene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
trans-1,2-Dichloroethene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
trans-1,3-Dichloropropene	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,2,4-Trichlorobenzene	0.025	U	0.025		mg/L			09/24/18 17:46	5
1,1,1-Trichloroethane	0.0068		0.0050		mg/L			09/24/18 17:46	5
1,1,2-Trichloroethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Trichloroethene	0.33		0.0050		mg/L			09/24/18 17:46	5
Trichlorofluoromethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Vinyl chloride	0.0050	U	0.0050		mg/L			09/24/18 17:46	5
Xylenes, Total	0.0050	U	0.0050		mg/L			09/24/18 17:46	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Dup-2

Date Collected: 09/11/18 00:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-16

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/24/18 17:46	5
Dibromofluoromethane (Surr)	100		80 - 122		09/24/18 17:46	5
1,2-Dichloroethane-d4 (Surr)	99		73 - 131		09/24/18 17:46	5
Toluene-d8 (Surr)	98		80 - 120		09/24/18 17:46	5

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-17

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 11:34	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 11:34	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 11:34	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 11:34	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 11:34	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 11:34	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 11:34	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 11:34	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 11:34	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-17

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	94		80 - 120		09/21/18 11:34	1
Dibromofluoromethane (Surr)	110		80 - 122		09/21/18 11:34	1
1,2-Dichloroethane-d4 (Surr)	99		73 - 131		09/21/18 11:34	1
Toluene-d8 (Surr)	103		80 - 120		09/21/18 11:34	1

Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (80-120)	DBFM (80-122)	DCA (73-131)	TOL (80-120)
680-157969-1	YMW-2	100	107	106	95
680-157969-2	YMW-5	95	101	101	98
680-157969-2 - DL	YMW-5	97	97	93	100
680-157969-3	YMW-6	99	96	90	104
680-157969-4	YMW-7	99	105	105	98
680-157969-5	YMW-8	101	96	89	102
680-157969-6	YMW-9	99	96	89	103
680-157969-7	YMW-10	95	102	114	96
680-157969-8	YMW-11	97	95	87	103
680-157969-9	YMW-13	102	106	116	92
680-157969-10	YMW-14	102	98	92	104
680-157969-11	YMW-15	100	99	97	102
680-157969-12	YMW-16	103	107	105	89
680-157969-13	YMW-17	102	95	88	102
680-157969-14	YMW-18	98	96	88	103
680-157969-15	Dup-1	99	102	101	98
680-157969-16	Dup-2	98	100	99	98
680-157969-17	Trip Blank	94	110	99	103
LCS 680-540258/3	Lab Control Sample	97	103	97	104
LCS 680-540261/4	Lab Control Sample	96	96	89	97
LCS 680-540411/4	Lab Control Sample	99	101	93	100
LCS 680-540418/4	Lab Control Sample	99	105	100	100
LCS 680-540519/4	Lab Control Sample	97	102	96	99
LCS 680-540656/5	Lab Control Sample	97	98	90	98
LCSD 680-540258/4	Lab Control Sample Dup	97	103	97	105
LCSD 680-540261/5	Lab Control Sample Dup	97	96	88	98
LCSD 680-540411/5	Lab Control Sample Dup	99	100	92	102
LCSD 680-540418/5	Lab Control Sample Dup	98	103	96	101
LCSD 680-540519/5	Lab Control Sample Dup	98	101	95	97
LCSD 680-540656/6	Lab Control Sample Dup	98	100	94	98
MB 680-540258/10	Method Blank	97	112	101	106
MB 680-540261/9	Method Blank	98	95	88	102
MB 680-540411/10	Method Blank	99	96	89	102
MB 680-540418/9	Method Blank	101	99	94	103
MB 680-540519/8	Method Blank	97	96	90	103
MB 680-540656/9	Method Blank	99	96	89	103

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 09:52	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 09:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

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			09/21/18 09:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/18 09:52	1
Dibromofluoromethane (Surr)	112		80 - 122		09/21/18 09:52	1
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/21/18 09:52	1
Toluene-d8 (Surr)	106		80 - 120		09/21/18 09:52	1

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.228		mg/L		91	70 - 135
Benzene	0.0500	0.0492		mg/L		98	80 - 120
Bromodichloromethane	0.0500	0.0501		mg/L		100	80 - 120
Bromoform	0.0500	0.0467		mg/L		93	74 - 126
Bromomethane	0.0500	0.0401		mg/L		80	62 - 130
2-Butanone	0.250	0.214		mg/L		85	80 - 131
Carbon disulfide	0.0500	0.0519		mg/L		104	80 - 120
Carbon tetrachloride	0.0500	0.0534		mg/L		107	76 - 123
Chlorobenzene	0.0500	0.0486		mg/L		97	80 - 120
Chloroethane	0.0500	0.0456		mg/L		91	66 - 135
Chloroform	0.0500	0.0496		mg/L		99	80 - 120
Chloromethane	0.0500	0.0481		mg/L		96	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0501		mg/L		100	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0515		mg/L		103	80 - 120
Cyclohexane	0.0500	0.0503		mg/L		101	80 - 120
Dibromochloromethane	0.0500	0.0502		mg/L		100	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0447		mg/L		89	71 - 134
1,2-Dibromoethane	0.0500	0.0471		mg/L		94	80 - 120
1,2-Dichlorobenzene	0.0500	0.0521		mg/L		104	80 - 120
1,3-Dichlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0559		mg/L		112	47 - 155
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0512		mg/L		102	80 - 120
1,1-Dichloroethene	0.0500	0.0549		mg/L		110	76 - 120
1,2-Dichloropropane	0.0500	0.0474		mg/L		95	80 - 120
Ethylbenzene	0.0500	0.0469		mg/L		94	80 - 120
2-Hexanone	0.250	0.212		mg/L		85	74 - 127
Isopropylbenzene	0.0500	0.0457		mg/L		91	80 - 120
Methyl acetate	0.100	0.0881		mg/L		88	45 - 158
Methylcyclohexane	0.0500	0.0517		mg/L		103	85 - 122
Methylene Chloride	0.0500	0.0501		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124
Methyl tert-butyl ether	0.0500	0.0527		mg/L		105	80 - 120
Naphthalene	0.0500	0.0489		mg/L		98	59 - 140

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.0500	0.0454		mg/L		91	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0439		mg/L		88	80 - 120
Tetrachloroethene	0.0500	0.0529		mg/L		106	80 - 121
Toluene	0.0500	0.0503		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0534		mg/L		107	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0528		mg/L		106	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0545		mg/L		109	68 - 128
1,1,1-Trichloroethane	0.0500	0.0530		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0538		mg/L		108	80 - 120
Trichloroethene	0.0500	0.0520		mg/L		104	80 - 120
Trichlorofluoromethane	0.0500	0.0606		mg/L		121	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0566		mg/L		113	79 - 124
Vinyl chloride	0.0500	0.0527		mg/L		105	71 - 128
Xylenes, Total	0.100	0.0910		mg/L		91	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.218		mg/L		87	70 - 135	5	30
Benzene	0.0500	0.0484		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0494		mg/L		99	80 - 120	2	20
Bromoform	0.0500	0.0467		mg/L		93	74 - 126	0	20
Bromomethane	0.0500	0.0396		mg/L		79	62 - 130	1	20
2-Butanone	0.250	0.206		mg/L		82	80 - 131	4	20
Carbon disulfide	0.0500	0.0516		mg/L		103	80 - 120	1	20
Carbon tetrachloride	0.0500	0.0542		mg/L		108	76 - 123	1	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0447		mg/L		89	66 - 135	2	20
Chloroform	0.0500	0.0497		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0397		mg/L		79	69 - 131	19	30
cis-1,2-Dichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	0	20
Cyclohexane	0.0500	0.0505		mg/L		101	80 - 120	0	20
Dibromochloromethane	0.0500	0.0498		mg/L		100	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0423		mg/L		85	71 - 134	5	20
1,2-Dibromoethane	0.0500	0.0472		mg/L		94	80 - 120	0	20
1,2-Dichlorobenzene	0.0500	0.0514		mg/L		103	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

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
Dichlorodifluoromethane	0.0500	0.0551		mg/L		110	47 - 155	1	40	
1,1-Dichloroethane	0.0500	0.0520		mg/L		104	80 - 120	3	20	
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	0	50	
1,1-Dichloroethene	0.0500	0.0572		mg/L		114	76 - 120	4	20	
1,2-Dichloropropane	0.0500	0.0481		mg/L		96	80 - 120	1	20	
Ethylbenzene	0.0500	0.0487		mg/L		97	80 - 120	4	20	
2-Hexanone	0.250	0.205		mg/L		82	74 - 127	3	20	
Isopropylbenzene	0.0500	0.0465		mg/L		93	80 - 120	2	20	
Methyl acetate	0.100	0.0847		mg/L		85	45 - 158	4	20	
Methylcyclohexane	0.0500	0.0523		mg/L		105	85 - 122	1	20	
Methylene Chloride	0.0500	0.0491		mg/L		98	80 - 120	2	20	
4-Methyl-2-pentanone	0.250	0.214		mg/L		86	76 - 124	4	20	
Methyl tert-butyl ether	0.0500	0.0517		mg/L		103	80 - 120	2	20	
Naphthalene	0.0500	0.0475		mg/L		95	59 - 140	3	20	
Styrene	0.0500	0.0468		mg/L		94	80 - 120	3	20	
1,1,2,2-Tetrachloroethane	0.0500	0.0422		mg/L		84	80 - 120	4	20	
Tetrachloroethene	0.0500	0.0536		mg/L		107	80 - 121	1	20	
Toluene	0.0500	0.0514		mg/L		103	80 - 113	2	20	
trans-1,2-Dichloroethene	0.0500	0.0544		mg/L		109	80 - 120	2	20	
trans-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	2	30	
1,2,4-Trichlorobenzene	0.0500	0.0537		mg/L		107	68 - 128	2	20	
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20	
1,1,2-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	3	20	
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20	
Trichlorofluoromethane	0.0500	0.0616		mg/L		123	60 - 141	2	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0588		mg/L		118	79 - 124	4	20	
Vinyl chloride	0.0500	0.0486		mg/L		97	71 - 128	8	20	
Xylenes, Total	0.100	0.0946		mg/L		95	80 - 120	4	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 12:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 12:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		80 - 120		09/21/18 12:52	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 12:52	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/21/18 12:52	1
Toluene-d8 (Surr)	102		80 - 120		09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.223		mg/L		89	70 - 135
Benzene	0.0500	0.0481		mg/L		96	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0508		mg/L		102	74 - 126
Bromomethane	0.0500	0.0484		mg/L		97	62 - 130
2-Butanone	0.250	0.208		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123
Chlorobenzene	0.0500	0.0494		mg/L		99	80 - 120
Chloroethane	0.0500	0.0497		mg/L		99	66 - 135
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0486		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0495		mg/L		99	80 - 120
Cyclohexane	0.0500	0.0534		mg/L		107	80 - 120
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0461		mg/L		92	71 - 134
1,2-Dibromoethane	0.0500	0.0460		mg/L		92	80 - 120
1,2-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0493		mg/L		99	80 - 120
Dichlorodifluoromethane	0.0500	0.0602		mg/L		120	47 - 155
1,1-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1,1-Dichloroethene	0.0500	0.0509		mg/L		102	76 - 120
1,2-Dichloropropane	0.0500	0.0511		mg/L		102	80 - 120
Ethylbenzene	0.0500	0.0512		mg/L		102	80 - 120
2-Hexanone	0.250	0.204		mg/L		81	74 - 127
Isopropylbenzene	0.0500	0.0516		mg/L		103	80 - 120
Methyl acetate	0.100	0.0809		mg/L		81	45 - 158
Methylcyclohexane	0.0500	0.0584		mg/L		117	85 - 122
Methylene Chloride	0.0500	0.0498		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0460		mg/L		92	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0542		mg/L		108	80 - 120
1,1,1,2-Tetrachloroethane	0.0500	0.0453		mg/L		91	80 - 120
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121
Toluene	0.0500	0.0495		mg/L		99	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0485		mg/L		97	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0480		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120
1,1,2-Trichloroethane	0.0500	0.0461		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0551		mg/L		110	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0556		mg/L		111	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	89		73 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
Acetone	0.250	0.230		mg/L		92	70 - 135	3	30
Benzene	0.0500	0.0479		mg/L		96	80 - 120	0	20
Bromodichloromethane	0.0500	0.0513		mg/L		103	80 - 120	1	20
Bromoform	0.0500	0.0518		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0489		mg/L		98	62 - 130	1	20
2-Butanone	0.250	0.214		mg/L		86	80 - 131	3	20
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123	0	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135	2	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0465		mg/L		93	69 - 131	4	30
cis-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0554		mg/L		111	80 - 120	4	20
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0473		mg/L		95	71 - 134	3	20
1,2-Dibromoethane	0.0500	0.0464		mg/L		93	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120	1	20
Dichlorodifluoromethane	0.0500	0.0582		mg/L		116	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0501		mg/L		100	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0494		mg/L		99	80 - 120	1	50
1,1-Dichloroethene	0.0500	0.0516		mg/L		103	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0518		mg/L		104	80 - 120	1	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.207		mg/L		83	74 - 127	2	20
Isopropylbenzene	0.0500	0.0515		mg/L		103	80 - 120	0	20
Methyl acetate	0.100	0.0825		mg/L		82	45 - 158	2	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0504		mg/L		101	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.222		mg/L		89	76 - 124	3	20
Methyl tert-butyl ether	0.0500	0.0465		mg/L		93	80 - 120	1	20
Naphthalene	0.0500	0.0446		mg/L		89	59 - 140	2	20
Styrene	0.0500	0.0548		mg/L		110	80 - 120	1	20
1,1,1,2-Tetrachloroethane	0.0500	0.0460		mg/L		92	80 - 120	2	20
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

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		
Toluene	0.0500	0.0496		mg/L		99	80 - 113	0	20	
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20	
trans-1,3-Dichloropropene	0.0500	0.0477		mg/L		95	80 - 120	2	30	
1,2,4-Trichlorobenzene	0.0500	0.0488		mg/L		98	68 - 128	2	20	
1,1,1-Trichloroethane	0.0500	0.0506		mg/L		101	80 - 120	0	20	
1,1,1,2-Trichloroethane	0.0500	0.0459		mg/L		92	80 - 120	0	20	
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20	
Trichlorofluoromethane	0.0500	0.0554		mg/L		111	60 - 141	0	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0567		mg/L		113	79 - 124	2	20	
Vinyl chloride	0.0500	0.0521		mg/L		104	71 - 128	1	20	
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120	0	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	88		73 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 680-540411/10

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 12:44	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540411/10

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 12:44	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 12:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 12:44	1
Dibromofluoromethane (Surr)	96		80 - 122		09/22/18 12:44	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/22/18 12:44	1
Toluene-d8 (Surr)	102		80 - 120		09/22/18 12:44	1

Lab Sample ID: LCS 680-540411/4

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.230		mg/L		92	70 - 135
Benzene	0.0500	0.0496		mg/L		99	80 - 120
Bromodichloromethane	0.0500	0.0526		mg/L		105	80 - 120
Bromoform	0.0500	0.0530		mg/L		106	74 - 126
Bromomethane	0.0500	0.0493		mg/L		99	62 - 130
2-Butanone	0.250	0.216		mg/L		87	80 - 131
Carbon disulfide	0.0500	0.0513		mg/L		103	80 - 120
Carbon tetrachloride	0.0500	0.0551		mg/L		110	76 - 123
Chlorobenzene	0.0500	0.0517		mg/L		103	80 - 120
Chloroethane	0.0500	0.0496		mg/L		99	66 - 135
Chloroform	0.0500	0.0520		mg/L		104	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCS 680-540411/4

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	0.0500	0.0487		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0513		mg/L		103	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0504		mg/L		101	80 - 120
Cyclohexane	0.0500	0.0569		mg/L		114	80 - 120
Dibromochloromethane	0.0500	0.0493		mg/L		99	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0489		mg/L		98	71 - 134
1,2-Dibromoethane	0.0500	0.0463		mg/L		93	80 - 120
1,2-Dichlorobenzene	0.0500	0.0516		mg/L		103	80 - 120
1,3-Dichlorobenzene	0.0500	0.0518		mg/L		104	80 - 120
1,4-Dichlorobenzene	0.0500	0.0509		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0635		mg/L		127	47 - 155
1,1-Dichloroethane	0.0500	0.0521		mg/L		104	80 - 120
1,2-Dichloroethane	0.0500	0.0521		mg/L		104	80 - 120
1,1-Dichloroethene	0.0500	0.0530		mg/L		106	76 - 120
1,2-Dichloropropane	0.0500	0.0529		mg/L		106	80 - 120
Ethylbenzene	0.0500	0.0530		mg/L		106	80 - 120
2-Hexanone	0.250	0.205		mg/L		82	74 - 127
Isopropylbenzene	0.0500	0.0534		mg/L		107	80 - 120
Methyl acetate	0.100	0.0843		mg/L		84	45 - 158
Methylcyclohexane	0.0500	0.0609		mg/L		122	85 - 122
Methylene Chloride	0.0500	0.0520		mg/L		104	80 - 120
4-Methyl-2-pentanone	0.250	0.220		mg/L		88	76 - 124
Methyl tert-butyl ether	0.0500	0.0480		mg/L		96	80 - 120
Naphthalene	0.0500	0.0443		mg/L		89	59 - 140
Styrene	0.0500	0.0566		mg/L		113	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0473		mg/L		95	80 - 120
Tetrachloroethene	0.0500	0.0510		mg/L		102	80 - 121
Toluene	0.0500	0.0506		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0506		mg/L		101	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0491		mg/L		98	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0481		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120
1,1,2-Trichloroethane	0.0500	0.0465		mg/L		93	80 - 120
Trichloroethene	0.0500	0.0530		mg/L		106	80 - 120
Trichlorofluoromethane	0.0500	0.0583		mg/L		117	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0599		mg/L		120	79 - 124
Vinyl chloride	0.0500	0.0529		mg/L		106	71 - 128
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
1,2-Dichloroethane-d4 (Surr)	93		73 - 131
Toluene-d8 (Surr)	100		80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540411/5

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.231		mg/L		92	70 - 135	0	30
Benzene	0.0500	0.0486		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0522		mg/L		104	80 - 120	1	20
Bromoform	0.0500	0.0521		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0500		mg/L		100	62 - 130	1	20
2-Butanone	0.250	0.216		mg/L		87	80 - 131	0	20
Carbon disulfide	0.0500	0.0512		mg/L		102	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0538		mg/L		108	76 - 123	2	20
Chlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
Chloroethane	0.0500	0.0503		mg/L		101	66 - 135	1	20
Chloroform	0.0500	0.0513		mg/L		103	80 - 120	1	20
Chloromethane	0.0500	0.0485		mg/L		97	69 - 131	0	30
cis-1,2-Dichloroethene	0.0500	0.0505		mg/L		101	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0561		mg/L		112	80 - 120	1	20
Dibromochloromethane	0.0500	0.0488		mg/L		98	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134	2	20
1,2-Dibromoethane	0.0500	0.0459		mg/L		92	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0623		mg/L		125	47 - 155	2	40
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120	3	20
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	2	50
1,1-Dichloroethene	0.0500	0.0527		mg/L		105	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0529		mg/L		106	80 - 120	0	20
Ethylbenzene	0.0500	0.0529		mg/L		106	80 - 120	0	20
2-Hexanone	0.250	0.209		mg/L		84	74 - 127	2	20
Isopropylbenzene	0.0500	0.0529		mg/L		106	80 - 120	1	20
Methyl acetate	0.100	0.0843		mg/L		84	45 - 158	0	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	1	20
Methylene Chloride	0.0500	0.0521		mg/L		104	80 - 120	0	20
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124	2	20
Methyl tert-butyl ether	0.0500	0.0476		mg/L		95	80 - 120	1	20
Naphthalene	0.0500	0.0442		mg/L		88	59 - 140	0	20
Styrene	0.0500	0.0567		mg/L		113	80 - 120	0	20
1,1,2,2-Tetrachloroethane	0.0500	0.0478		mg/L		96	80 - 120	1	20
Tetrachloroethene	0.0500	0.0516		mg/L		103	80 - 121	1	20
Toluene	0.0500	0.0505		mg/L		101	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0509		mg/L		102	80 - 120	0	20
trans-1,3-Dichloropropene	0.0500	0.0492		mg/L		98	80 - 120	0	30
1,2,4-Trichlorobenzene	0.0500	0.0485		mg/L		97	68 - 128	1	20
1,1,1-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	0	20
1,1,2-Trichloroethane	0.0500	0.0458		mg/L		92	80 - 120	2	20
Trichloroethene	0.0500	0.0532		mg/L		106	80 - 120	0	20
Trichlorofluoromethane	0.0500	0.0582		mg/L		116	60 - 141	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0587		mg/L		117	79 - 124	2	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540411/5

Matrix: Water

Analysis Batch: 540411

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	0.0530		mg/L		106	71 - 128	0	20
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
1,2-Dichloroethane-d4 (Surr)	92		73 - 131
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: MB 680-540418/9

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 12:21	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 12:21	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 12:21	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 12:21	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 12:21	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 12:21	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540418/9

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 12:21	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 12:21	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 12:21	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	101		80 - 120		09/22/18 12:21	1
Dibromofluoromethane (Surr)	99		80 - 122		09/22/18 12:21	1
1,2-Dichloroethane-d4 (Surr)	94		73 - 131		09/22/18 12:21	1
Toluene-d8 (Surr)	103		80 - 120		09/22/18 12:21	1

Lab Sample ID: LCS 680-540418/4

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.260		mg/L		104	70 - 135
Benzene	0.0500	0.0508		mg/L		102	80 - 120
Bromodichloromethane	0.0500	0.0519		mg/L		104	80 - 120
Bromoform	0.0500	0.0533		mg/L		107	74 - 126
Bromomethane	0.0500	0.0578		mg/L		116	62 - 130
2-Butanone	0.250	0.256		mg/L		103	80 - 131
Carbon disulfide	0.0500	0.0518		mg/L		104	80 - 120
Carbon tetrachloride	0.0500	0.0539		mg/L		108	76 - 123
Chlorobenzene	0.0500	0.0511		mg/L		102	80 - 120
Chloroethane	0.0500	0.0412		mg/L		82	66 - 135
Chloroform	0.0500	0.0514		mg/L		103	80 - 120
Chloromethane	0.0500	0.0504		mg/L		101	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0512		mg/L		102	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0495		mg/L		99	80 - 120
Cyclohexane	0.0500	0.0512		mg/L		102	80 - 120
Dibromochloromethane	0.0500	0.0504		mg/L		101	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0516		mg/L		103	71 - 134
1,2-Dibromoethane	0.0500	0.0511		mg/L		102	80 - 120
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0507		mg/L		101	80 - 120
1,4-Dichlorobenzene	0.0500	0.0495		mg/L		99	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCS 680-540418/4

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0606		mg/L		121	47 - 155
1,1-Dichloroethane	0.0500	0.0515		mg/L		103	80 - 120
1,2-Dichloroethane	0.0500	0.0517		mg/L		103	80 - 120
1,1-Dichloroethene	0.0500	0.0489		mg/L		98	76 - 120
1,2-Dichloropropane	0.0500	0.0503		mg/L		101	80 - 120
Ethylbenzene	0.0500	0.0502		mg/L		100	80 - 120
2-Hexanone	0.250	0.241		mg/L		96	74 - 127
Isopropylbenzene	0.0500	0.0499		mg/L		100	80 - 120
Methyl acetate	0.100	0.123		mg/L		123	45 - 158
Methylcyclohexane	0.0500	0.0526		mg/L		105	85 - 122
Methylene Chloride	0.0500	0.0543		mg/L		109	80 - 120
4-Methyl-2-pentanone	0.250	0.253		mg/L		101	76 - 124
Methyl tert-butyl ether	0.0500	0.0526		mg/L		105	80 - 120
Naphthalene	0.0500	0.0508		mg/L		102	59 - 140
Styrene	0.0500	0.0556		mg/L		111	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0502		mg/L		100	80 - 120
Tetrachloroethene	0.0500	0.0488		mg/L		98	80 - 121
Toluene	0.0500	0.0500		mg/L		100	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0485		mg/L		97	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0484		mg/L		97	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0514		mg/L		103	68 - 128
1,1,1-Trichloroethane	0.0500	0.0501		mg/L		100	80 - 120
1,1,2-Trichloroethane	0.0500	0.0496		mg/L		99	80 - 120
Trichloroethene	0.0500	0.0519		mg/L		104	80 - 120
Trichlorofluoromethane	0.0500	0.0491		mg/L		98	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0523		mg/L		105	79 - 124
Vinyl chloride	0.0500	0.0504		mg/L		101	71 - 128
Xylenes, Total	0.100	0.101		mg/L		101	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	105		80 - 122
1,2-Dichloroethane-d4 (Surr)	100		73 - 131
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 680-540418/5

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.253		mg/L		101	70 - 135	3	30
Benzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
Bromodichloromethane	0.0500	0.0517		mg/L		103	80 - 120	0	20
Bromoform	0.0500	0.0528		mg/L		106	74 - 126	1	20
Bromomethane	0.0500	0.0581		mg/L		116	62 - 130	1	20
2-Butanone	0.250	0.251		mg/L		100	80 - 131	2	20
Carbon disulfide	0.0500	0.0529		mg/L		106	80 - 120	2	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540418/5

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		
Carbon tetrachloride	0.0500	0.0550		mg/L		110	76 - 123	2	20
Chlorobenzene	0.0500	0.0513		mg/L		103	80 - 120	0	20
Chloroethane	0.0500	0.0416		mg/L		83	66 - 135	1	20
Chloroform	0.0500	0.0506		mg/L		101	80 - 120	2	20
Chloromethane	0.0500	0.0522		mg/L		104	69 - 131	3	30
cis-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0492		mg/L		98	80 - 120	1	20
Cyclohexane	0.0500	0.0547		mg/L		109	80 - 120	6	20
Dibromochloromethane	0.0500	0.0504		mg/L		101	80 - 121	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0516		mg/L		103	71 - 134	0	20
1,2-Dibromoethane	0.0500	0.0511		mg/L		102	80 - 120	0	20
1,2-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0511		mg/L		102	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0503		mg/L		101	80 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0651		mg/L		130	47 - 155	7	40
1,1-Dichloroethane	0.0500	0.0509		mg/L		102	80 - 120	1	20
1,2-Dichloroethane	0.0500	0.0502		mg/L		100	80 - 120	3	50
1,1-Dichloroethene	0.0500	0.0500		mg/L		100	76 - 120	2	20
1,2-Dichloropropane	0.0500	0.0495		mg/L		99	80 - 120	1	20
Ethylbenzene	0.0500	0.0511		mg/L		102	80 - 120	2	20
2-Hexanone	0.250	0.239		mg/L		96	74 - 127	1	20
Isopropylbenzene	0.0500	0.0514		mg/L		103	80 - 120	3	20
Methyl acetate	0.100	0.120		mg/L		120	45 - 158	3	20
Methylcyclohexane	0.0500	0.0557		mg/L		111	85 - 122	6	20
Methylene Chloride	0.0500	0.0541		mg/L		108	80 - 120	0	20
4-Methyl-2-pentanone	0.250	0.252		mg/L		101	76 - 124	1	20
Methyl tert-butyl ether	0.0500	0.0515		mg/L		103	80 - 120	2	20
Naphthalene	0.0500	0.0499		mg/L		100	59 - 140	2	20
Styrene	0.0500	0.0557		mg/L		111	80 - 120	0	20
1,1,1,2-Tetrachloroethane	0.0500	0.0501		mg/L		100	80 - 120	0	20
Tetrachloroethene	0.0500	0.0512		mg/L		102	80 - 121	5	20
Toluene	0.0500	0.0502		mg/L		100	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120	2	20
trans-1,3-Dichloropropene	0.0500	0.0466		mg/L		93	80 - 120	4	30
1,2,4-Trichlorobenzene	0.0500	0.0508		mg/L		102	68 - 128	1	20
1,1,1-Trichloroethane	0.0500	0.0513		mg/L		103	80 - 120	2	20
1,1,2-Trichloroethane	0.0500	0.0492		mg/L		98	80 - 120	1	20
Trichloroethene	0.0500	0.0530		mg/L		106	80 - 120	2	20
Trichlorofluoromethane	0.0500	0.0516		mg/L		103	60 - 141	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0560		mg/L		112	79 - 124	7	20
Vinyl chloride	0.0500	0.0520		mg/L		104	71 - 128	3	20
Xylenes, Total	0.100	0.102		mg/L		102	80 - 120	1	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	96		73 - 131

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540418/5

Matrix: Water

Analysis Batch: 540418

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

<i>Surrogate</i>	<i>LCSD</i> <i>%Recovery</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Limits</i>
<i>Toluene-d8 (Surr)</i>	101		80 - 120

Lab Sample ID: MB 680-540519/8

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Method Blank

Prep Type: Total/NA

<i>Analyte</i>	<i>MB</i> <i>Result</i>	<i>MB</i> <i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Acetone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Benzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Bromoform	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Bromomethane	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
2-Butanone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/24/18 12:01	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Chloroethane	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
Chloroform	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Chloromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
2-Hexanone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/24/18 12:01	1
Naphthalene	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
Styrene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Toluene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540519/8

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/24/18 12:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/24/18 12:01	1
Dibromofluoromethane (Surr)	96		80 - 122		09/24/18 12:01	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/24/18 12:01	1
Toluene-d8 (Surr)	103		80 - 120		09/24/18 12:01	1

Lab Sample ID: LCS 680-540519/4

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.242		mg/L		97	70 - 135
Benzene	0.0500	0.0487		mg/L		97	80 - 120
Bromodichloromethane	0.0500	0.0536		mg/L		107	80 - 120
Bromoform	0.0500	0.0546		mg/L		109	74 - 126
Bromomethane	0.0500	0.0487		mg/L		97	62 - 130
2-Butanone	0.250	0.224		mg/L		90	80 - 131
Carbon disulfide	0.0500	0.0505		mg/L		101	80 - 120
Carbon tetrachloride	0.0500	0.0566		mg/L		113	76 - 123
Chlorobenzene	0.0500	0.0510		mg/L		102	80 - 120
Chloroethane	0.0500	0.0492		mg/L		98	66 - 135
Chloroform	0.0500	0.0523		mg/L		105	80 - 120
Chloromethane	0.0500	0.0475		mg/L		95	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0504		mg/L		101	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0511		mg/L		102	80 - 120
Cyclohexane	0.0500	0.0543		mg/L		109	80 - 120
Dibromochloromethane	0.0500	0.0507		mg/L		101	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134
1,2-Dibromoethane	0.0500	0.0486		mg/L		97	80 - 120
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120
Dichlorodifluoromethane	0.0500	0.0574		mg/L		115	47 - 155
1,1-Dichloroethane	0.0500	0.0506		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0540		mg/L		108	80 - 120
1,1-Dichloroethene	0.0500	0.0524		mg/L		105	76 - 120
1,2-Dichloropropane	0.0500	0.0530		mg/L		106	80 - 120
Ethylbenzene	0.0500	0.0528		mg/L		106	80 - 120
2-Hexanone	0.250	0.217		mg/L		87	74 - 127

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCS 680-540519/4

Matrix: Water

Analysis Batch: 540519

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	0.0536		mg/L		107	80 - 120
Methyl acetate	0.100	0.0882		mg/L		88	45 - 158
Methylcyclohexane	0.0500	0.0576		mg/L		115	85 - 122
Methylene Chloride	0.0500	0.0519		mg/L		104	80 - 120
4-Methyl-2-pentanone	0.250	0.233		mg/L		93	76 - 124
Methyl tert-butyl ether	0.0500	0.0499		mg/L		100	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0560		mg/L		112	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0476		mg/L		95	80 - 120
Tetrachloroethene	0.0500	0.0526		mg/L		105	80 - 121
Toluene	0.0500	0.0507		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0514		mg/L		103	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0479		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0543		mg/L		109	80 - 120
1,1,2-Trichloroethane	0.0500	0.0478		mg/L		96	80 - 120
Trichloroethene	0.0500	0.0537		mg/L		107	80 - 120
Trichlorofluoromethane	0.0500	0.0583		mg/L		117	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0573		mg/L		115	79 - 124
Vinyl chloride	0.0500	0.0511		mg/L		102	71 - 128
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	102		80 - 122
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 680-540519/5

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.229		mg/L		92	70 - 135	5	30
Benzene	0.0500	0.0482		mg/L		96	80 - 120	1	20
Bromodichloromethane	0.0500	0.0525		mg/L		105	80 - 120	2	20
Bromoform	0.0500	0.0522		mg/L		104	74 - 126	5	20
Bromomethane	0.0500	0.0491		mg/L		98	62 - 130	1	20
2-Butanone	0.250	0.217		mg/L		87	80 - 131	3	20
Carbon disulfide	0.0500	0.0502		mg/L		100	80 - 120	1	20
Carbon tetrachloride	0.0500	0.0560		mg/L		112	76 - 123	1	20
Chlorobenzene	0.0500	0.0499		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0485		mg/L		97	66 - 135	1	20
Chloroform	0.0500	0.0517		mg/L		103	80 - 120	1	20
Chloromethane	0.0500	0.0475		mg/L		95	69 - 131	0	30
cis-1,2-Dichloroethene	0.0500	0.0503		mg/L		101	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0497		mg/L		99	80 - 120	3	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540519/5

Matrix: Water

Analysis Batch: 540519

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
Cyclohexane	0.0500	0.0545		mg/L		109	80 - 120	0	20
Dibromochloromethane	0.0500	0.0492		mg/L		98	80 - 121	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0475		mg/L		95	71 - 134	2	20
1,2-Dibromoethane	0.0500	0.0457		mg/L		91	80 - 120	6	20
1,2-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120	0	20
1,4-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0589		mg/L		118	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0502		mg/L		100	80 - 120	1	20
1,2-Dichloroethane	0.0500	0.0528		mg/L		106	80 - 120	2	50
1,1-Dichloroethene	0.0500	0.0526		mg/L		105	76 - 120	0	20
1,2-Dichloropropane	0.0500	0.0512		mg/L		102	80 - 120	3	20
Ethylbenzene	0.0500	0.0517		mg/L		103	80 - 120	2	20
2-Hexanone	0.250	0.211		mg/L		85	74 - 127	3	20
Isopropylbenzene	0.0500	0.0527		mg/L		105	80 - 120	2	20
Methyl acetate	0.100	0.0837		mg/L		84	45 - 158	5	20
Methylcyclohexane	0.0500	0.0587		mg/L		117	85 - 122	2	20
Methylene Chloride	0.0500	0.0503		mg/L		101	80 - 120	3	20
4-Methyl-2-pentanone	0.250	0.222		mg/L		89	76 - 124	5	20
Methyl tert-butyl ether	0.0500	0.0478		mg/L		96	80 - 120	4	20
Naphthalene	0.0500	0.0441		mg/L		88	59 - 140	1	20
Styrene	0.0500	0.0546		mg/L		109	80 - 120	2	20
1,1,2,2-Tetrachloroethane	0.0500	0.0452		mg/L		90	80 - 120	5	20
Tetrachloroethene	0.0500	0.0525		mg/L		105	80 - 121	0	20
Toluene	0.0500	0.0500		mg/L		100	80 - 113	1	20
trans-1,2-Dichloroethene	0.0500	0.0512		mg/L		102	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0490		mg/L		98	80 - 120	5	30
1,2,4-Trichlorobenzene	0.0500	0.0486		mg/L		97	68 - 128	2	20
1,1,1-Trichloroethane	0.0500	0.0536		mg/L		107	80 - 120	1	20
1,1,2-Trichloroethane	0.0500	0.0456		mg/L		91	80 - 120	5	20
Trichloroethene	0.0500	0.0530		mg/L		106	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0588		mg/L		118	60 - 141	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0584		mg/L		117	79 - 124	2	20
Vinyl chloride	0.0500	0.0519		mg/L		104	71 - 128	2	20
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
1,2-Dichloroethane-d4 (Surr)	95		73 - 131
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540656/9

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Benzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromoform	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromomethane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
2-Butanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/25/18 10:56	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chloroethane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Chloroform	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
2-Hexanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/25/18 10:56	1
Naphthalene	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Styrene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Toluene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/25/18 10:56	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: MB 680-540656/9

Matrix: Water

Analysis Batch: 540656

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			09/25/18 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		09/25/18 10:56	1
Dibromofluoromethane (Surr)	96		80 - 122		09/25/18 10:56	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/25/18 10:56	1
Toluene-d8 (Surr)	103		80 - 120		09/25/18 10:56	1

Lab Sample ID: LCS 680-540656/5

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.220		mg/L		88	70 - 135
Benzene	0.0500	0.0476		mg/L		95	80 - 120
Bromodichloromethane	0.0500	0.0517		mg/L		103	80 - 120
Bromoform	0.0500	0.0536		mg/L		107	74 - 126
Bromomethane	0.0500	0.0460		mg/L		92	62 - 130
2-Butanone	0.250	0.206		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0509		mg/L		102	80 - 120
Carbon tetrachloride	0.0500	0.0552		mg/L		110	76 - 123
Chlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135
Chloroform	0.0500	0.0497		mg/L		99	80 - 120
Chloromethane	0.0500	0.0468		mg/L		94	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0492		mg/L		98	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120
Cyclohexane	0.0500	0.0579		mg/L		116	80 - 120
Dibromochloromethane	0.0500	0.0489		mg/L		98	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134
1,2-Dibromoethane	0.0500	0.0454		mg/L		91	80 - 120
1,2-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120
1,3-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0487		mg/L		97	80 - 120
Dichlorodifluoromethane	0.0500	0.0648		mg/L		130	47 - 155
1,1-Dichloroethane	0.0500	0.0492		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0529		mg/L		106	76 - 120
1,2-Dichloropropane	0.0500	0.0505		mg/L		101	80 - 120
Ethylbenzene	0.0500	0.0524		mg/L		105	80 - 120
2-Hexanone	0.250	0.204		mg/L		82	74 - 127
Isopropylbenzene	0.0500	0.0526		mg/L		105	80 - 120
Methyl acetate	0.100	0.0803		mg/L		80	45 - 158
Methylcyclohexane	0.0500	0.0622	*	mg/L		124	85 - 122
Methylene Chloride	0.0500	0.0494		mg/L		99	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0469		mg/L		94	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCS 680-540656/5

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.0500	0.0552		mg/L		110	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0459		mg/L		92	80 - 120
Tetrachloroethene	0.0500	0.0514		mg/L		103	80 - 121
Toluene	0.0500	0.0498		mg/L		100	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0492		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0488		mg/L		98	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0479		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0531		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0458		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0598		mg/L		120	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0594		mg/L		119	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		80 - 122
1,2-Dichloroethane-d4 (Surr)	90		73 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.236		mg/L		94	70 - 135	7	30
Benzene	0.0500	0.0476		mg/L		95	80 - 120	0	20
Bromodichloromethane	0.0500	0.0523		mg/L		105	80 - 120	1	20
Bromoform	0.0500	0.0550		mg/L		110	74 - 126	3	20
Bromomethane	0.0500	0.0460		mg/L		92	62 - 130	0	20
2-Butanone	0.250	0.221		mg/L		88	80 - 131	7	20
Carbon disulfide	0.0500	0.0492		mg/L		98	80 - 120	3	20
Carbon tetrachloride	0.0500	0.0544		mg/L		109	76 - 123	1	20
Chlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	1	20
Chloroethane	0.0500	0.0480		mg/L		96	66 - 135	2	20
Chloroform	0.0500	0.0505		mg/L		101	80 - 120	2	20
Chloromethane	0.0500	0.0463		mg/L		93	69 - 131	1	30
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 120	0	20
Cyclohexane	0.0500	0.0566		mg/L		113	80 - 120	2	20
Dibromochloromethane	0.0500	0.0501		mg/L		100	80 - 121	2	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0503		mg/L		101	71 - 134	4	20
1,2-Dibromoethane	0.0500	0.0476		mg/L		95	80 - 120	5	20
1,2-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	0	20
1,3-Dichlorobenzene	0.0500	0.0507		mg/L		101	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120	3	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

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
Dichlorodifluoromethane	0.0500	0.0630		mg/L		126	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0495		mg/L		99	80 - 120	1	20
1,2-Dichloroethane	0.0500	0.0515		mg/L		103	80 - 120	3	50
1,1-Dichloroethene	0.0500	0.0514		mg/L		103	76 - 120	3	20
1,2-Dichloropropane	0.0500	0.0517		mg/L		103	80 - 120	2	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.215		mg/L		86	74 - 127	5	20
Isopropylbenzene	0.0500	0.0522		mg/L		104	80 - 120	1	20
Methyl acetate	0.100	0.0870		mg/L		87	45 - 158	8	20
Methylcyclohexane	0.0500	0.0602		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0492		mg/L		98	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.233		mg/L		93	76 - 124	8	20
Methyl tert-butyl ether	0.0500	0.0481		mg/L		96	80 - 120	3	20
Naphthalene	0.0500	0.0458		mg/L		92	59 - 140	4	20
Styrene	0.0500	0.0559		mg/L		112	80 - 120	1	20
1,1,2,2-Tetrachloroethane	0.0500	0.0472		mg/L		94	80 - 120	3	20
Tetrachloroethene	0.0500	0.0514		mg/L		103	80 - 121	0	20
Toluene	0.0500	0.0495		mg/L		99	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0505		mg/L		101	80 - 120	3	30
1,2,4-Trichlorobenzene	0.0500	0.0494		mg/L		99	68 - 128	3	20
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20
1,1,2-Trichloroethane	0.0500	0.0473		mg/L		95	80 - 120	3	20
Trichloroethene	0.0500	0.0516		mg/L		103	80 - 120	2	20
Trichlorofluoromethane	0.0500	0.0592		mg/L		118	60 - 141	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0599		mg/L		120	79 - 124	1	20
Vinyl chloride	0.0500	0.0516		mg/L		103	71 - 128	2	20
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
1,2-Dichloroethane-d4 (Surr)	94		73 - 131
Toluene-d8 (Surr)	98		80 - 120

QC Association Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

GC/MS VOA

Analysis Batch: 540258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-17	Trip Blank	Total/NA	Water	8260B	
MB 680-540258/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540258/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540258/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-14	YMW-18	Total/NA	Water	8260B	
MB 680-540261/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540261/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540261/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-1	YMW-2	Total/NA	Water	8260B	
680-157969-2	YMW-5	Total/NA	Water	8260B	
680-157969-4	YMW-7	Total/NA	Water	8260B	
680-157969-5	YMW-8	Total/NA	Water	8260B	
680-157969-6	YMW-9	Total/NA	Water	8260B	
680-157969-8	YMW-11	Total/NA	Water	8260B	
680-157969-10	YMW-14	Total/NA	Water	8260B	
680-157969-11	YMW-15	Total/NA	Water	8260B	
680-157969-13	YMW-17	Total/NA	Water	8260B	
MB 680-540411/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540411/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540411/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-7	YMW-10	Total/NA	Water	8260B	
680-157969-9	YMW-13	Total/NA	Water	8260B	
680-157969-12	YMW-16	Total/NA	Water	8260B	
MB 680-540418/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540418/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540418/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-15	Dup-1	Total/NA	Water	8260B	
680-157969-16	Dup-2	Total/NA	Water	8260B	
MB 680-540519/8	Method Blank	Total/NA	Water	8260B	
LCS 680-540519/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540519/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-2 - DL	YMW-5	Total/NA	Water	8260B	
680-157969-3	YMW-6	Total/NA	Water	8260B	
MB 680-540656/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540656/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540656/6	Lab Control Sample Dup	Total/NA	Water	8260B	

TestAmerica Savannah

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-2

Date Collected: 09/12/18 11:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	540411	09/22/18 20:06	Y1S	TAL SAV

Client Sample ID: YMW-5

Date Collected: 09/12/18 10:14

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	540411	09/22/18 20:30	Y1S	TAL SAV
Total/NA	Analysis	8260B	DL	50	540656	09/25/18 16:42	EMA	TAL SAV

Client Sample ID: YMW-6

Date Collected: 09/11/18 15:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540656	09/25/18 17:57	EMA	TAL SAV

Client Sample ID: YMW-7

Date Collected: 09/12/18 14:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	540411	09/22/18 19:17	Y1S	TAL SAV

Client Sample ID: YMW-8

Date Collected: 09/12/18 10:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 17:14	Y1S	TAL SAV

Client Sample ID: YMW-9

Date Collected: 09/12/18 14:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 17:39	Y1S	TAL SAV

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-10

Date Collected: 09/12/18 15:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	540418	09/22/18 18:25	Y1S	TAL SAV

Client Sample ID: YMW-11

Date Collected: 09/11/18 16:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 18:03	Y1S	TAL SAV

Client Sample ID: YMW-13

Date Collected: 09/11/18 14:20
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	540418	09/22/18 18:48	Y1S	TAL SAV

Client Sample ID: YMW-14

Date Collected: 09/12/18 11:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 18:28	Y1S	TAL SAV

Client Sample ID: YMW-15

Date Collected: 09/12/18 09:25
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	540411	09/22/18 19:41	Y1S	TAL SAV

Client Sample ID: YMW-16

Date Collected: 09/12/18 15:40
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	540418	09/22/18 19:11	Y1S	TAL SAV

TestAmerica Savannah

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

Client Sample ID: YMW-17

Date Collected: 09/12/18 08:55
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 18:52	Y1S	TAL SAV

Client Sample ID: YMW-18

Date Collected: 09/12/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 18:14	Y1S	TAL SAV

Client Sample ID: Dup-1

Date Collected: 09/12/18 00:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	540519	09/24/18 17:21	Y1S	TAL SAV

Client Sample ID: Dup-2

Date Collected: 09/11/18 00:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	540519	09/24/18 17:46	Y1S	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 09/12/18 00:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540258	09/21/18 11:34	JLK	TAL SAV

Laboratory References:

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

Serial Number 120583

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

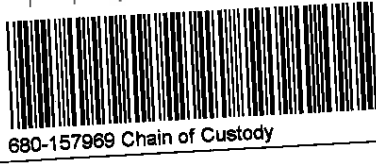
Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

1/2

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)	CONTRACT NO.	MATRIX TYPE	REQUIRED ANALYSIS	PAGE	OF
TAL (LAB) PROJECT MANAGER Jerry Lanier	02.20180044.01	GA		COMPOSITE (C) OR GRAB (G) INDICATE		1	2
CLIENT (SITE) PM Jeffrey Madden	CLIENT PHONE (770) 328-5232	CLIENT FAX		AQUEOUS (WATER)		STANDARD REPORT DELIVERY	
CLIENT NAME EarthCan	CLIENT E-MAIL jmadden@earthcan.com			SOLID OR SEMISOLID		DATE DUE	
CLIENT ADDRESS 1880 W. Oak Pkwy				AIR		EXPEDITED REPORT DELIVERY (SURCHARGE)	
COMPANY CONTRACTING THIS WORK (if applicable) Grant Cement Holdings Inc						DATE DUE	
SAMPLE IDENTIFICATION						NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	
DATE	TIME			GW			
9/12/18	11:55	YMW-2					
9/12/18	10:14	YMW-5					
9/11/18	15:30	YMW-6					
9/12/18	14:30	YMW-7					
9/12/18	10:10	YMW-8					
9/12/18	14:30	YMW-9					
9/12/18	15:30	YMW-10					
9/11/18	16:30	YMW-11					
9/11/18	14:20	YMW-13					
9/12/18	11:00	YMW-14					
9/12/18	09:25	YMW-15					
9/12/18	15:40	YMW-16		GW			
RELINQUISHED BY: (SIGNATURE) Jeffrey Madden	DATE 9/13/18	TIME 13:05	RELINQUISHED BY: (SIGNATURE) J. Madden	DATE 9/13/18	TIME 13:18	RELINQUISHED BY: (SIGNATURE)	DATE TIME
RECEIVED BY: (SIGNATURE) J. Madden	DATE 9/13/18	TIME 13:05	RECEIVED BY: (SIGNATURE) J. Madden	DATE 9/13/18	TIME 13:18	RECEIVED BY: (SIGNATURE)	DATE TIME
LABORATORY USE ONLY							
RECEIVED FOR LABORATORY BY: (SIGNATURE) V. [Signature]	DATE 9-14-18	TIME 700	CUSTODY INTACT YES <input type="checkbox"/> NO <input type="checkbox"/>	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS 1.3/1.5 3.8/4.0	



TAL-8240-860 (1,008)

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-1

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-1

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

TestAmerica Savannah

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 680-157969-2
Client Project/Site: EarthCon - SECHEM

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

Attn: Rachel Odzer



Authorized for release by:
9/25/2018 4:33:39 PM
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Job ID: 680-157969-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-2

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples YMW-2 (680-157969-1), YMW-5 (680-157969-2), YMW-6 (680-157969-3), YMW-7 (680-157969-4), YMW-8 (680-157969-5), YMW-9 (680-157969-6), YMW-10 (680-157969-7), YMW-11 (680-157969-8), YMW-13 (680-157969-9), YMW-14 (680-157969-10), YMW-15 (680-157969-11), YMW-16 (680-157969-12), YMW-17 (680-157969-13), YMW-18 (680-157969-14), Dup-1 (680-157969-15), Dup-2 (680-157969-16) and Trip Blank (680-157969-17) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 09/22/2018, 09/24/2018 and 09/25/2018.

1,4-Dioxane was detected in method blank MB 310-216453/19 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,4-Dioxane was detected in method blank MB 310-216626/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples YMW-5 (680-157969-2)[100X], YMW-5 (680-157969-2)[20X], YMW-6 (680-157969-3)[10X], YMW-10 (680-157969-7)[10X], YMW-11 (680-157969-8)[10X], YMW-13 (680-157969-9)[10X], YMW-15 (680-157969-11)[10X], YMW-16 (680-157969-12)[10X], YMW-17 (680-157969-13)[10X], Dup-1 (680-157969-15)[10X], Dup-2 (680-157969-16)[10X] and Dup-2 (680-157969-16)[100X] 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.

The samples were received on 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

Sample Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-1	YMW-2	Water	09/12/18 11:55	09/14/18 07:00
680-157969-2	YMW-5	Water	09/12/18 10:14	09/14/18 07:00
680-157969-3	YMW-6	Water	09/11/18 15:30	09/14/18 07:00
680-157969-4	YMW-7	Water	09/12/18 14:30	09/14/18 07:00
680-157969-5	YMW-8	Water	09/12/18 10:10	09/14/18 07:00
680-157969-6	YMW-9	Water	09/12/18 14:30	09/14/18 07:00
680-157969-7	YMW-10	Water	09/12/18 15:30	09/14/18 07:00
680-157969-8	YMW-11	Water	09/11/18 16:30	09/14/18 07:00
680-157969-9	YMW-13	Water	09/11/18 14:20	09/14/18 07:00
680-157969-10	YMW-14	Water	09/12/18 11:00	09/14/18 07:00
680-157969-11	YMW-15	Water	09/12/18 09:25	09/14/18 07:00
680-157969-12	YMW-16	Water	09/12/18 15:40	09/14/18 07:00
680-157969-13	YMW-17	Water	09/12/18 08:55	09/14/18 07:00
680-157969-14	YMW-18	Water	09/12/18 11:45	09/14/18 07:00
680-157969-15	Dup-1	Water	09/12/18 00:00	09/14/18 07:00
680-157969-16	Dup-2	Water	09/11/18 00:00	09/14/18 07:00
680-157969-17	Trip Blank	Water	09/12/18 00:00	09/14/18 07:00

Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CF
5030B	Purge and Trap	SW846	TAL CF

Protocol References:

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

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Definitions/Glossary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
α	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-2

Lab Sample ID: 680-157969-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0018	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-5

Lab Sample ID: 680-157969-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.6		0.10	0.030	mg/L	100		8260B SIM	Total/NA

Client Sample ID: YMW-6

Lab Sample ID: 680-157969-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.026		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-7

Lab Sample ID: 680-157969-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0093		0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-8

Lab Sample ID: 680-157969-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0035		0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-9

Lab Sample ID: 680-157969-6

No Detections.

Client Sample ID: YMW-10

Lab Sample ID: 680-157969-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.16		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-11

Lab Sample ID: 680-157969-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.069		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-13

Lab Sample ID: 680-157969-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.047		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-14

Lab Sample ID: 680-157969-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00067	J	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-15

Lab Sample ID: 680-157969-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.28		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-16

Lab Sample ID: 680-157969-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.21		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-17

Lab Sample ID: 680-157969-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.064		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-18

Lab Sample ID: 680-157969-14

No Detections.

Client Sample ID: Dup-1

Lab Sample ID: 680-157969-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.14		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: Dup-2

Lab Sample ID: 680-157969-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.45		0.10	0.030	mg/L	100		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0019		0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-2
Date Collected: 09/12/18 11:55
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0018	B	0.0010	0.00030	mg/L			09/22/18 01:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					09/22/18 01:49	1
Dibromofluoromethane (Surr)	105		80 - 120					09/22/18 01:49	1
Toluene-d8 (Surr)	101		80 - 120					09/22/18 01:49	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-5
Date Collected: 09/12/18 10:14
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.6		0.10	0.030	mg/L			09/25/18 13:27	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					09/25/18 05:00	20
4-Bromofluorobenzene (Surr)	99		80 - 120					09/25/18 13:27	100
Dibromofluoromethane (Surr)	102		80 - 120					09/25/18 05:00	20
Dibromofluoromethane (Surr)	101		80 - 120					09/25/18 13:27	100
Toluene-d8 (Surr)	100		80 - 120					09/25/18 05:00	20
Toluene-d8 (Surr)	100		80 - 120					09/25/18 13:27	100



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-6
Date Collected: 09/11/18 15:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.026		0.010	0.0030	mg/L			09/24/18 17:00	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 17:00	10
Dibromofluoromethane (Surr)	101		80 - 120					09/24/18 17:00	10
Toluene-d8 (Surr)	99		80 - 120					09/24/18 17:00	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-7
Date Collected: 09/12/18 14:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0093		0.0010	0.00030	mg/L			09/24/18 13:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 13:00	1
Dibromofluoromethane (Surr)	103		80 - 120					09/24/18 13:00	1
Toluene-d8 (Surr)	100		80 - 120					09/24/18 13:00	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-8
Date Collected: 09/12/18 10:10
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0035		0.0010	0.00030	mg/L			09/24/18 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 13:24	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 13:24	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 13:24	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-9
Date Collected: 09/12/18 14:30
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00030	U	0.0010	0.00030	mg/L			09/25/18 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/25/18 00:12	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 00:12	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 00:12	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-10

Lab Sample ID: 680-157969-7

Date Collected: 09/12/18 15:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.16		0.010	0.0030	mg/L			09/24/18 17:24	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					09/24/18 17:24	10
Dibromofluoromethane (Surr)	102		80 - 120					09/24/18 17:24	10
Toluene-d8 (Surr)	98		80 - 120					09/24/18 17:24	10



Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-11

Lab Sample ID: 680-157969-8

Date Collected: 09/11/18 16:30

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.069		0.010	0.0030	mg/L			09/24/18 17:48	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 17:48	10
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 17:48	10
Toluene-d8 (Surr)	99		80 - 120					09/24/18 17:48	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-13

Lab Sample ID: 680-157969-9

Date Collected: 09/11/18 14:20

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.047		0.010	0.0030	mg/L			09/24/18 18:12	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 18:12	10
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 18:12	10
Toluene-d8 (Surr)	100		80 - 120					09/24/18 18:12	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-14

Lab Sample ID: 680-157969-10

Date Collected: 09/12/18 11:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00067	J	0.0010	0.00030	mg/L			09/24/18 13:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 13:48	1
Dibromofluoromethane (Surr)	103		80 - 120					09/24/18 13:48	1
Toluene-d8 (Surr)	98		80 - 120					09/24/18 13:48	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-15

Lab Sample ID: 680-157969-11

Date Collected: 09/12/18 09:25

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.28		0.010	0.0030	mg/L			09/24/18 18:36	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					09/24/18 18:36	10
Dibromofluoromethane (Surr)	103		80 - 120					09/24/18 18:36	10
Toluene-d8 (Surr)	99		80 - 120					09/24/18 18:36	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-16

Lab Sample ID: 680-157969-12

Date Collected: 09/12/18 15:40

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21		0.010	0.0030	mg/L			09/24/18 19:00	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 19:00	10
Dibromofluoromethane (Surr)	102		80 - 120					09/24/18 19:00	10
Toluene-d8 (Surr)	99		80 - 120					09/24/18 19:00	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-17

Lab Sample ID: 680-157969-13

Date Collected: 09/12/18 08:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.064		0.010	0.0030	mg/L			09/24/18 19:24	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 19:24	10
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 19:24	10
Toluene-d8 (Surr)	99		80 - 120					09/24/18 19:24	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-18

Lab Sample ID: 680-157969-14

Date Collected: 09/12/18 11:45

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00030	U	0.0010	0.00030	mg/L			09/24/18 14:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 14:12	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 14:12	1
Toluene-d8 (Surr)	100		80 - 120					09/24/18 14:12	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: Dup-1

Lab Sample ID: 680-157969-15

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.14		0.010	0.0030	mg/L			09/24/18 19:48	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					09/24/18 19:48	10
Dibromofluoromethane (Surr)	101		80 - 120					09/24/18 19:48	10
Toluene-d8 (Surr)	98		80 - 120					09/24/18 19:48	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: Dup-2

Lab Sample ID: 680-157969-16

Date Collected: 09/11/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.45		0.10	0.030	mg/L			09/25/18 13:50	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 04:36	10
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 13:50	100
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 04:36	10
Dibromofluoromethane (Surr)	99		80 - 120					09/25/18 13:50	100
Toluene-d8 (Surr)	101		80 - 120					09/25/18 04:36	10
Toluene-d8 (Surr)	100		80 - 120					09/25/18 13:50	100



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-17

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0019		0.0010	0.00030	mg/L			09/24/18 12:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 12:37	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 12:37	1
Toluene-d8 (Surr)	100		80 - 120					09/24/18 12:37	1



Surrogate Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (80-120)	TOL (80-120)
680-157969-1	YMW-2	99	105	101
680-157969-2	YMW-5	99	102	100
680-157969-2	YMW-5	99	101	100
680-157969-3	YMW-6	100	101	99
680-157969-4	YMW-7	101	103	100
680-157969-5	YMW-8	100	100	99
680-157969-6	YMW-9	101	100	99
680-157969-7	YMW-10	99	102	98
680-157969-8	YMW-11	100	100	99
680-157969-9	YMW-13	101	100	100
680-157969-10	YMW-14	101	103	98
680-157969-11	YMW-15	99	103	99
680-157969-12	YMW-16	101	102	99
680-157969-13	YMW-17	100	100	99
680-157969-14	YMW-18	100	100	100
680-157969-15	Dup-1	99	101	98
680-157969-16	Dup-2	100	100	101
680-157969-16	Dup-2	100	99	100
680-157969-17	Trip Blank	101	100	100
LCS 310-216453/20	Lab Control Sample	100	98	100
LCS 310-216588/6	Lab Control Sample	100	99	99
LCS 310-216626/6	Lab Control Sample	99	100	99
LCS 310-216754/6	Lab Control Sample	99	101	99
LCSD 310-216453/21	Lab Control Sample Dup	99	98	100
LCSD 310-216588/7	Lab Control Sample Dup	100	98	99
LCSD 310-216626/7	Lab Control Sample Dup	100	100	100
LCSD 310-216754/7	Lab Control Sample Dup	99	100	99
MB 310-216453/19	Method Blank	100	98	100
MB 310-216588/5	Method Blank	101	98	99
MB 310-216626/5	Method Blank	100	100	99
MB 310-216754/5	Method Blank	100	100	99

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

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

Lab Sample ID: MB 310-216453/19

Matrix: Water

Analysis Batch: 216453

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	0.000401	J	0.0010	0.00030	mg/L			09/21/18 17:01	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/21/18 17:01	1
Dibromofluoromethane (Surr)	98		80 - 120					09/21/18 17:01	1
Toluene-d8 (Surr)	100		80 - 120					09/21/18 17:01	1

Lab Sample ID: LCS 310-216453/20

Matrix: Water

Analysis Batch: 216453

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	0.00400	0.00325		mg/L		81	49 - 150
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		80 - 120				
Dibromofluoromethane (Surr)	98		80 - 120				
Toluene-d8 (Surr)	100		80 - 120				

Lab Sample ID: LCSD 310-216453/21

Matrix: Water

Analysis Batch: 216453

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
1,4-Dioxane	0.00400	0.00443		mg/L		111	49 - 150	31	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	98		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

Lab Sample ID: MB 310-216588/5

Matrix: Water

Analysis Batch: 216588

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	0.00030	U	0.0010	0.00030	mg/L			09/24/18 10:14	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 10:14	1
Dibromofluoromethane (Surr)	98		80 - 120					09/24/18 10:14	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 10:14	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

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

Lab Sample ID: LCS 310-216588/6

Matrix: Water

Analysis Batch: 216588

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	0.00400	0.00348		mg/L		87	49 - 150
Surrogate							
	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		80 - 120				
Dibromofluoromethane (Surr)	99		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

Lab Sample ID: LCSD 310-216588/7

Matrix: Water

Analysis Batch: 216588

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
1,4-Dioxane	0.00400	0.00485		mg/L		121	49 - 150	33	35
Surrogate									
	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	98		80 - 120						
Toluene-d8 (Surr)	99		80 - 120						

Lab Sample ID: MB 310-216626/5

Matrix: Water

Analysis Batch: 216626

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	0.000499	J	0.0010	0.00030	mg/L			09/24/18 22:12	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 22:12	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 22:12	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 22:12	1

Lab Sample ID: LCS 310-216626/6

Matrix: Water

Analysis Batch: 216626

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	0.00400	0.00340		mg/L		85	49 - 150
Surrogate							
	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	100		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

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

Lab Sample ID: LCSD 310-216626/7

Matrix: Water

Analysis Batch: 216626

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
1,4-Dioxane	0.00400	0.00480		mg/L		120	49 - 150	34	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

Lab Sample ID: MB 310-216754/5

Matrix: Water

Analysis Batch: 216754

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	0.00030	U	0.0010	0.00030	mg/L			09/25/18 10:38	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 10:38	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 10:38	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 10:38	1

Lab Sample ID: LCS 310-216754/6

Matrix: Water

Analysis Batch: 216754

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	0.00400	0.00365		mg/L		91	49 - 150		
Surrogate	%Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	101		80 - 120						
Toluene-d8 (Surr)	99		80 - 120						

Lab Sample ID: LCSD 310-216754/7

Matrix: Water

Analysis Batch: 216754

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
1,4-Dioxane	0.00400	0.00471		mg/L		118	49 - 150	25	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	99		80 - 120						

TestAmerica Savannah

QC Association Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

GC/MS VOA

Analysis Batch: 216453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-1	YMW-2	Total/NA	Water	8260B SIM	
MB 310-216453/19	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216453/20	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216453/21	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-3	YMW-6	Total/NA	Water	8260B SIM	
680-157969-4	YMW-7	Total/NA	Water	8260B SIM	
680-157969-5	YMW-8	Total/NA	Water	8260B SIM	
680-157969-7	YMW-10	Total/NA	Water	8260B SIM	
680-157969-8	YMW-11	Total/NA	Water	8260B SIM	
680-157969-9	YMW-13	Total/NA	Water	8260B SIM	
680-157969-10	YMW-14	Total/NA	Water	8260B SIM	
680-157969-11	YMW-15	Total/NA	Water	8260B SIM	
680-157969-12	YMW-16	Total/NA	Water	8260B SIM	
680-157969-13	YMW-17	Total/NA	Water	8260B SIM	
680-157969-14	YMW-18	Total/NA	Water	8260B SIM	
680-157969-15	Dup-1	Total/NA	Water	8260B SIM	
680-157969-17	Trip Blank	Total/NA	Water	8260B SIM	
MB 310-216588/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216588/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216588/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-2	YMW-5	Total/NA	Water	8260B SIM	
680-157969-6	YMW-9	Total/NA	Water	8260B SIM	
680-157969-16	Dup-2	Total/NA	Water	8260B SIM	
MB 310-216626/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216626/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216626/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-2	YMW-5	Total/NA	Water	8260B SIM	
680-157969-16	Dup-2	Total/NA	Water	8260B SIM	
MB 310-216754/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216754/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216754/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-2

Date Collected: 09/12/18 11:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/22/18 01:49	TRZ	TAL CF

Client Sample ID: YMW-5

Date Collected: 09/12/18 10:14

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		20	216626	09/25/18 05:00	TRZ	TAL CF
Total/NA	Analysis	8260B SIM		100	216754	09/25/18 13:27	TRZ	TAL CF

Client Sample ID: YMW-6

Date Collected: 09/11/18 15:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 17:00	TRZ	TAL CF

Client Sample ID: YMW-7

Date Collected: 09/12/18 14:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216588	09/24/18 13:00	TRZ	TAL CF

Client Sample ID: YMW-8

Date Collected: 09/12/18 10:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216588	09/24/18 13:24	TRZ	TAL CF

Client Sample ID: YMW-9

Date Collected: 09/12/18 14:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 00:12	TRZ	TAL CF

TestAmerica Savannah

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-10

Date Collected: 09/12/18 15:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 17:24	TRZ	TAL CF

Client Sample ID: YMW-11

Date Collected: 09/11/18 16:30

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 17:48	TRZ	TAL CF

Client Sample ID: YMW-13

Date Collected: 09/11/18 14:20

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 18:12	TRZ	TAL CF

Client Sample ID: YMW-14

Date Collected: 09/12/18 11:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216588	09/24/18 13:48	TRZ	TAL CF

Client Sample ID: YMW-15

Date Collected: 09/12/18 09:25

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 18:36	TRZ	TAL CF

Client Sample ID: YMW-16

Date Collected: 09/12/18 15:40

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 19:00	TRZ	TAL CF

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Client Sample ID: YMW-17

Lab Sample ID: 680-157969-13

Date Collected: 09/12/18 08:55

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 19:24	TRZ	TAL CF

Client Sample ID: YMW-18

Lab Sample ID: 680-157969-14

Date Collected: 09/12/18 11:45

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216588	09/24/18 14:12	TRZ	TAL CF

Client Sample ID: Dup-1

Lab Sample ID: 680-157969-15

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 19:48	TRZ	TAL CF

Client Sample ID: Dup-2

Lab Sample ID: 680-157969-16

Date Collected: 09/11/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		10	216626	09/25/18 04:36	TRZ	TAL CF
Total/NA	Analysis	8260B SIM		100	216754	09/25/18 13:50	TRZ	TAL CF

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-17

Date Collected: 09/12/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216588	09/24/18 12:37	TRZ	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

Serial Number 120583

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

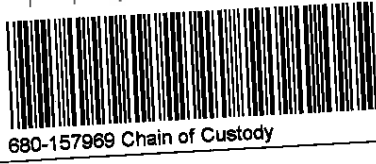
Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

1/2

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)	CONTRACT NO.	MATRIX TYPE	REQUIRED ANALYSIS	PAGE	OF
TAL (LAB) PROJECT MANAGER Jerry Lanier	02.20180044.01	GA		COMPOSITE (C) OR GRAB (G) INDICATE		1	2
CLIENT (SITE) PM Jeffrey Madden	(770) 328-5232			AQUEOUS (WATER)		STANDARD REPORT DELIVERY	
CLIENT NAME EarthCan	jmadden@earthcan.com			SOLID OR SEMISOLID		DATE DUE	
CLIENT ADDRESS 1980 W. Oak Pkwy				AIR		EXPEDITED REPORT DELIVERY (SURCHARGE)	
COMPANY CONTRACTING THIS WORK (if applicable) Grant Cement Holdings Inc						DATE DUE	
SAMPLE IDENTIFICATION						NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	
DATE	TIME			GW			
9/12/18	11:55	YMW-2					
9/12/18	10:14	YMW-5					
9/11/18	15:30	YMW-6					
9/12/18	14:30	YMW-7					
9/12/18	10:10	YMW-8					
9/12/18	14:30	YMW-9					
9/12/18	15:30	YMW-10					
9/11/18	16:30	YMW-11					
9/11/18	14:20	YMW-13					
9/12/18	11:00	YMW-14					
9/12/18	09:25	YMW-15					
9/12/18	15:40	YMW-16		GW			
RELINQUISHED BY: (SIGNATURE) Jeffrey Madden	DATE 9/13/18	TIME 13:05	RELINQUISHED BY: (SIGNATURE) J. Madden	DATE 9/13/18	TIME 13:18	RELINQUISHED BY: (SIGNATURE)	DATE TIME
RECEIVED BY: (SIGNATURE) J. Madden	DATE 9/13/18	TIME 13:05	RECEIVED BY: (SIGNATURE) J. Madden	DATE 9/13/18	TIME 13:18	RECEIVED BY: (SIGNATURE)	DATE TIME
LABORATORY USE ONLY							
RECEIVED FOR LABORATORY BY: (SIGNATURE) V. [Signature]	DATE 9-14-18	TIME 700	CUSTODY INTACT YES <input type="checkbox"/> NO <input type="checkbox"/>	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS 1.3/1.5 3.8/4.0	



TAL-8240-660 (1,008)

Chain of Custody Record

Client Information (Sub Contract Lab)		Lab Pkt: Lanier, Jerry A	Carrier Tracking No(s): 680-535475-2																																																																																																				
Client Contact: Shipping/Receiving		E-Mail: jerry.lanier@testamericainc.com	Page: Page 2 of 3																																																																																																				
Company: TestAmerica Laboratories, Inc		State of Origin: Georgia	Job #: 680-157969-2																																																																																																				
Address: 704 Enterprise Drive,		Accreditations Required (See note): NELAP - Florida																																																																																																					
City: Cedar Falls	Due Date Requested: 9/26/2018	Analysis Requested <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID (Lab ID)</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=wastel/oi, BT=Tissue, A=Air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8260B_SIM/5030B 1,4-Dioxane (Only)</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>YMW-14 (680-157969-10)</td> <td>9/12/18</td> <td>11:00 Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>YMW-15 (680-157969-11)</td> <td>9/12/18</td> <td>09:25 Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>YMW-16 (680-157969-12)</td> <td>9/12/18</td> <td>15:40 Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>YMW-17 (680-157969-13)</td> <td>9/12/18</td> <td>08:55 Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>YMW-18 (680-157969-14)</td> <td>9/12/18</td> <td>11:45 Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>Dup-1 (680-157969-15)</td> <td>9/12/18</td> <td>Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>Dup-2 (680-157969-16)</td> <td>9/11/18</td> <td>Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> <tr> <td>Trip Blank (680-157969-17)</td> <td>9/12/18</td> <td>Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>2</td> <td></td> </tr> <tr> <td>WMW-1 (680-157969-32)</td> <td>9/10/18</td> <td>14:36 Eastern</td> <td>Water</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>3</td> <td></td> </tr> </tbody> </table>		Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastel/oi, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_SIM/5030B 1,4-Dioxane (Only)	Total Number of Containers	Special Instructions/Note:	YMW-14 (680-157969-10)	9/12/18	11:00 Eastern	Water	Water	X	X	X	3		YMW-15 (680-157969-11)	9/12/18	09:25 Eastern	Water	Water	X	X	X	3		YMW-16 (680-157969-12)	9/12/18	15:40 Eastern	Water	Water	X	X	X	3		YMW-17 (680-157969-13)	9/12/18	08:55 Eastern	Water	Water	X	X	X	3		YMW-18 (680-157969-14)	9/12/18	11:45 Eastern	Water	Water	X	X	X	3		Dup-1 (680-157969-15)	9/12/18	Eastern	Water	Water	X	X	X	3		Dup-2 (680-157969-16)	9/11/18	Eastern	Water	Water	X	X	X	3		Trip Blank (680-157969-17)	9/12/18	Eastern	Water	Water	X	X	X	2		WMW-1 (680-157969-32)	9/10/18	14:36 Eastern	Water	Water	X	X	X	3	
Sample ID (Lab ID)	Sample Date			Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastel/oi, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_SIM/5030B 1,4-Dioxane (Only)	Total Number of Containers	Special Instructions/Note:																																																																																												
YMW-14 (680-157969-10)	9/12/18			11:00 Eastern	Water	Water	X	X	X	3																																																																																													
YMW-15 (680-157969-11)	9/12/18			09:25 Eastern	Water	Water	X	X	X	3																																																																																													
YMW-16 (680-157969-12)	9/12/18			15:40 Eastern	Water	Water	X	X	X	3																																																																																													
YMW-17 (680-157969-13)	9/12/18	08:55 Eastern	Water	Water	X	X	X	3																																																																																															
YMW-18 (680-157969-14)	9/12/18	11:45 Eastern	Water	Water	X	X	X	3																																																																																															
Dup-1 (680-157969-15)	9/12/18	Eastern	Water	Water	X	X	X	3																																																																																															
Dup-2 (680-157969-16)	9/11/18	Eastern	Water	Water	X	X	X	3																																																																																															
Trip Blank (680-157969-17)	9/12/18	Eastern	Water	Water	X	X	X	2																																																																																															
WMW-1 (680-157969-32)	9/10/18	14:36 Eastern	Water	Water	X	X	X	3																																																																																															
City: Cedar Falls	TAT Requested (days):	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:																																																																																																					
State, Zip: IA, 50613	PO #:																																																																																																						
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	WO #:																																																																																																						
Email:	Project #: 68002623																																																																																																						
Site: EarthCon - SECHEM	SSOW#:																																																																																																						

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____ Time: _____

Relinquished by: *V. [Signature]* Date: 9-14-18 1526 Company: TA
 Relinquished by: *[Signature]* Date: 9-15-18 920 Company: TACP
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No
 Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____

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: _____

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-2

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-2

Login Number: 157969

List Number: 2

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:39 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-2

Login Number: 157969

List Number: 3

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-2

Login Number: 157969

List Number: 4

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Cedar Falls

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

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-2

Laboratory: TestAmerica Cedar Falls (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-18
Illinois	NELAP	5	200024	11-29-18
Iowa	State Program	7	007	12-01-19
Kansas	NELAP	7	E-10341	01-31-19
Minnesota	NELAP	5	019-999-319	12-31-18
Minnesota (Petrofund)	State Program	1	3349	08-22-19
North Dakota	State Program	8	R-186	09-29-18
Oregon	NELAP	10	IA100001	09-29-18

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: 680-157969-3

Client Project/Site: EarthCon - SECHEM

For:

Giant Cement

654 Judge Street

PO BOX 218

Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:

9/27/2018 2:22:19 PM

Michele Kersey, Project Manager II

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Designee for

Jerry Lanier, Project Manager I

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jerry.lanier@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.

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

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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Job ID: 680-157969-3

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-3

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

Receipt Exceptions

Method(s) 8260B: The container label for the following sample did not match the information listed on the Chain-of-Custody: SW-4 (680-157969-21). The container label lists ID SW-3 while the COC lists ID SW-4, the collection time on the label lists 08:10am. The client was contacted, and the lab was instructed to assign the volume collected at 08:10 as sample ID SW-4.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SW-1 (680-157969-18), SW-2 (680-157969-19), SW-3 (680-157969-20), SW-4 (680-157969-21) and Trip Blank (680-157969-22) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/21/2018 and 09/26/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540258.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540261.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540832.

Sample SW-1 (680-157969-18)[10X] 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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-18	SW-1	Water	09/13/18 09:25	09/14/18 07:00
680-157969-19	SW-2	Water	09/13/18 09:05	09/14/18 07:00
680-157969-20	SW-3	Water	09/13/18 07:55	09/14/18 07:00
680-157969-21	SW-4	Water	09/13/18 08:10	09/14/18 07:00
680-157969-22	Trip Blank	Water	09/13/18 00:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
5030B	Purge and Trap	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-1

Lab Sample ID: 680-157969-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.60		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.012		0.010		mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.017		0.010		mg/L	10		8260B	Total/NA
Tetrachloroethene	0.26		0.010		mg/L	10		8260B	Total/NA
Toluene	0.060		0.010		mg/L	10		8260B	Total/NA
1,1,1-Trichloroethane	0.054		0.010		mg/L	10		8260B	Total/NA
Trichloroethene	0.38		0.010		mg/L	10		8260B	Total/NA
Vinyl chloride	0.033		0.010		mg/L	10		8260B	Total/NA

Client Sample ID: SW-2

Lab Sample ID: 680-157969-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.050		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.0016		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0025		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.010		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0084		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.012		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.021		0.0010		mg/L	1		8260B	Total/NA
Vinyl chloride	0.0020		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SW-3

Lab Sample ID: 680-157969-20

No Detections.

Client Sample ID: SW-4

Lab Sample ID: 680-157969-21

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-1

Lab Sample ID: 680-157969-18

Date Collected: 09/13/18 09:25

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.10	U	0.10		mg/L			09/26/18 19:22	10
Benzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
Bromodichloromethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Bromoform	0.010	U	0.010		mg/L			09/26/18 19:22	10
Bromomethane	0.050	U	0.050		mg/L			09/26/18 19:22	10
2-Butanone	0.10	U	0.10		mg/L			09/26/18 19:22	10
Carbon disulfide	0.020	U	0.020		mg/L			09/26/18 19:22	10
Carbon tetrachloride	0.010	U	0.010		mg/L			09/26/18 19:22	10
Chlorobenzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
Chloroethane	0.050	U	0.050		mg/L			09/26/18 19:22	10
Chloroform	0.010	U	0.010		mg/L			09/26/18 19:22	10
Chloromethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
cis-1,2-Dichloroethene	0.60		0.010		mg/L			09/26/18 19:22	10
cis-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/26/18 19:22	10
Cyclohexane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Dibromochloromethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,2-Dibromo-3-Chloropropane	0.050	U	0.050		mg/L			09/26/18 19:22	10
1,2-Dibromoethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,2-Dichlorobenzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,3-Dichlorobenzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,4-Dichlorobenzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
Dichlorodifluoromethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,1-Dichloroethane	0.012		0.010		mg/L			09/26/18 19:22	10
1,2-Dichloroethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,1-Dichloroethene	0.017		0.010		mg/L			09/26/18 19:22	10
1,2-Dichloropropane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Ethylbenzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
2-Hexanone	0.10	U	0.10		mg/L			09/26/18 19:22	10
Isopropylbenzene	0.010	U	0.010		mg/L			09/26/18 19:22	10
Methyl acetate	0.050	U	0.050		mg/L			09/26/18 19:22	10
Methylcyclohexane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Methylene Chloride	0.050	U	0.050		mg/L			09/26/18 19:22	10
4-Methyl-2-pentanone	0.10	U	0.10		mg/L			09/26/18 19:22	10
Methyl tert-butyl ether	0.10	U	0.10		mg/L			09/26/18 19:22	10
Naphthalene	0.050	U	0.050		mg/L			09/26/18 19:22	10
Styrene	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,1,2,2-Tetrachloroethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Tetrachloroethene	0.26		0.010		mg/L			09/26/18 19:22	10
Toluene	0.060		0.010		mg/L			09/26/18 19:22	10
trans-1,2-Dichloroethene	0.010	U	0.010		mg/L			09/26/18 19:22	10
trans-1,3-Dichloropropene	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,2,4-Trichlorobenzene	0.050	U	0.050		mg/L			09/26/18 19:22	10
1,1,1-Trichloroethane	0.054		0.010		mg/L			09/26/18 19:22	10
1,1,2-Trichloroethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Trichloroethene	0.38		0.010		mg/L			09/26/18 19:22	10
Trichlorofluoromethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
1,1,2-Trichloro-1,2,2-trifluoroethane	0.010	U	0.010		mg/L			09/26/18 19:22	10
Vinyl chloride	0.033		0.010		mg/L			09/26/18 19:22	10
Xylenes, Total	0.010	U	0.010		mg/L			09/26/18 19:22	10

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-1

Date Collected: 09/13/18 09:25

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-18

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/26/18 19:22	10
Dibromofluoromethane (Surr)	100		80 - 122		09/26/18 19:22	10
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		09/26/18 19:22	10
Toluene-d8 (Surr)	102		80 - 120		09/26/18 19:22	10

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-2
Date Collected: 09/13/18 09:05
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 17:49	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 17:49	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 17:49	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
cis-1,2-Dichloroethene	0.050		0.0010		mg/L			09/21/18 17:49	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,2-Dichlorobenzene	0.0016		0.0010		mg/L			09/21/18 17:49	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,1-Dichloroethane	0.0025		0.0010		mg/L			09/21/18 17:49	1
1,2-Dichloroethane	0.010		0.0010		mg/L			09/21/18 17:49	1
1,1-Dichloroethene	0.0084		0.0010		mg/L			09/21/18 17:49	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 17:49	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 17:49	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 17:49	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Tetrachloroethene	0.012		0.0010		mg/L			09/21/18 17:49	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 17:49	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Trichloroethene	0.021		0.0010		mg/L			09/21/18 17:49	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 17:49	1
Vinyl chloride	0.0020		0.0010		mg/L			09/21/18 17:49	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 17:49	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-2

Date Collected: 09/13/18 09:05

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-19

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/21/18 17:49	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 17:49	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/21/18 17:49	1
Toluene-d8 (Surr)	102		80 - 120		09/21/18 17:49	1

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-3

Lab Sample ID: 680-157969-20

Date Collected: 09/13/18 07:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 17:25	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 17:25	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 17:25	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 17:25	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 17:25	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 17:25	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 17:25	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 17:25	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 17:25	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-3

Date Collected: 09/13/18 07:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-20

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	100		80 - 120		09/21/18 17:25	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 17:25	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/21/18 17:25	1
Toluene-d8 (Surr)	103		80 - 120		09/21/18 17:25	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-4

Lab Sample ID: 680-157969-21

Date Collected: 09/13/18 08:10

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 17:00	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 17:00	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 17:00	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 17:00	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 17:00	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 17:00	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 17:00	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 17:00	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 17:00	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-4

Date Collected: 09/13/18 08:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-21

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/21/18 17:00	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 17:00	1
1,2-Dichloroethane-d4 (Surr)	91		73 - 131		09/21/18 17:00	1
Toluene-d8 (Surr)	102		80 - 120		09/21/18 17:00	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-22

Date Collected: 09/13/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 10:28	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 10:28	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 10:28	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 10:28	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 10:28	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 10:28	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 10:28	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 10:28	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 10:28	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-22

Date Collected: 09/13/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	96		80 - 120		09/21/18 10:28	1
Dibromofluoromethane (Surr)	111		80 - 122		09/21/18 10:28	1
1,2-Dichloroethane-d4 (Surr)	102		73 - 131		09/21/18 10:28	1
Toluene-d8 (Surr)	104		80 - 120		09/21/18 10:28	1

Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (80-120)	DBFM (80-122)	DCA (73-131)	TOL (80-120)
680-157969-18	SW-1	98	100	95	102
680-157969-19	SW-2	98	95	90	102
680-157969-20	SW-3	100	95	90	103
680-157969-21	SW-4	99	95	91	102
680-157969-22	Trip Blank	96	111	102	104
LCS 680-540258/3	Lab Control Sample	97	103	97	104
LCS 680-540261/4	Lab Control Sample	96	96	89	97
LCS 680-540832/4	Lab Control Sample	97	98	93	97
LCSD 680-540258/4	Lab Control Sample Dup	97	103	97	105
LCSD 680-540261/5	Lab Control Sample Dup	97	96	88	98
LCSD 680-540832/6	Lab Control Sample Dup	100	99	94	98
MB 680-540258/10	Method Blank	97	112	101	106
MB 680-540261/9	Method Blank	98	95	88	102
MB 680-540832/9	Method Blank	100	95	90	102

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 09:52	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 09:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

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			09/21/18 09:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/18 09:52	1
Dibromofluoromethane (Surr)	112		80 - 122		09/21/18 09:52	1
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/21/18 09:52	1
Toluene-d8 (Surr)	106		80 - 120		09/21/18 09:52	1

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.228		mg/L		91	70 - 135
Benzene	0.0500	0.0492		mg/L		98	80 - 120
Bromodichloromethane	0.0500	0.0501		mg/L		100	80 - 120
Bromoform	0.0500	0.0467		mg/L		93	74 - 126
Bromomethane	0.0500	0.0401		mg/L		80	62 - 130
2-Butanone	0.250	0.214		mg/L		85	80 - 131
Carbon disulfide	0.0500	0.0519		mg/L		104	80 - 120
Carbon tetrachloride	0.0500	0.0534		mg/L		107	76 - 123
Chlorobenzene	0.0500	0.0486		mg/L		97	80 - 120
Chloroethane	0.0500	0.0456		mg/L		91	66 - 135
Chloroform	0.0500	0.0496		mg/L		99	80 - 120
Chloromethane	0.0500	0.0481		mg/L		96	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0501		mg/L		100	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0515		mg/L		103	80 - 120
Cyclohexane	0.0500	0.0503		mg/L		101	80 - 120
Dibromochloromethane	0.0500	0.0502		mg/L		100	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0447		mg/L		89	71 - 134
1,2-Dibromoethane	0.0500	0.0471		mg/L		94	80 - 120
1,2-Dichlorobenzene	0.0500	0.0521		mg/L		104	80 - 120
1,3-Dichlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0559		mg/L		112	47 - 155
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0512		mg/L		102	80 - 120
1,1-Dichloroethene	0.0500	0.0549		mg/L		110	76 - 120
1,2-Dichloropropane	0.0500	0.0474		mg/L		95	80 - 120
Ethylbenzene	0.0500	0.0469		mg/L		94	80 - 120
2-Hexanone	0.250	0.212		mg/L		85	74 - 127
Isopropylbenzene	0.0500	0.0457		mg/L		91	80 - 120
Methyl acetate	0.100	0.0881		mg/L		88	45 - 158
Methylcyclohexane	0.0500	0.0517		mg/L		103	85 - 122
Methylene Chloride	0.0500	0.0501		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124
Methyl tert-butyl ether	0.0500	0.0527		mg/L		105	80 - 120
Naphthalene	0.0500	0.0489		mg/L		98	59 - 140

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.0500	0.0454		mg/L		91	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0439		mg/L		88	80 - 120
Tetrachloroethene	0.0500	0.0529		mg/L		106	80 - 121
Toluene	0.0500	0.0503		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0534		mg/L		107	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0528		mg/L		106	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0545		mg/L		109	68 - 128
1,1,1-Trichloroethane	0.0500	0.0530		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0538		mg/L		108	80 - 120
Trichloroethene	0.0500	0.0520		mg/L		104	80 - 120
Trichlorofluoromethane	0.0500	0.0606		mg/L		121	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0566		mg/L		113	79 - 124
Vinyl chloride	0.0500	0.0527		mg/L		105	71 - 128
Xylenes, Total	0.100	0.0910		mg/L		91	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.218		mg/L		87	70 - 135	5	30
Benzene	0.0500	0.0484		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0494		mg/L		99	80 - 120	2	20
Bromoform	0.0500	0.0467		mg/L		93	74 - 126	0	20
Bromomethane	0.0500	0.0396		mg/L		79	62 - 130	1	20
2-Butanone	0.250	0.206		mg/L		82	80 - 131	4	20
Carbon disulfide	0.0500	0.0516		mg/L		103	80 - 120	1	20
Carbon tetrachloride	0.0500	0.0542		mg/L		108	76 - 123	1	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0447		mg/L		89	66 - 135	2	20
Chloroform	0.0500	0.0497		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0397		mg/L		79	69 - 131	19	30
cis-1,2-Dichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	0	20
Cyclohexane	0.0500	0.0505		mg/L		101	80 - 120	0	20
Dibromochloromethane	0.0500	0.0498		mg/L		100	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0423		mg/L		85	71 - 134	5	20
1,2-Dibromoethane	0.0500	0.0472		mg/L		94	80 - 120	0	20
1,2-Dichlorobenzene	0.0500	0.0514		mg/L		103	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

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
Dichlorodifluoromethane	0.0500	0.0551		mg/L		110	47 - 155	1	40
1,1-Dichloroethane	0.0500	0.0520		mg/L		104	80 - 120	3	20
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	0	50
1,1-Dichloroethene	0.0500	0.0572		mg/L		114	76 - 120	4	20
1,2-Dichloropropane	0.0500	0.0481		mg/L		96	80 - 120	1	20
Ethylbenzene	0.0500	0.0487		mg/L		97	80 - 120	4	20
2-Hexanone	0.250	0.205		mg/L		82	74 - 127	3	20
Isopropylbenzene	0.0500	0.0465		mg/L		93	80 - 120	2	20
Methyl acetate	0.100	0.0847		mg/L		85	45 - 158	4	20
Methylcyclohexane	0.0500	0.0523		mg/L		105	85 - 122	1	20
Methylene Chloride	0.0500	0.0491		mg/L		98	80 - 120	2	20
4-Methyl-2-pentanone	0.250	0.214		mg/L		86	76 - 124	4	20
Methyl tert-butyl ether	0.0500	0.0517		mg/L		103	80 - 120	2	20
Naphthalene	0.0500	0.0475		mg/L		95	59 - 140	3	20
Styrene	0.0500	0.0468		mg/L		94	80 - 120	3	20
1,1,2,2-Tetrachloroethane	0.0500	0.0422		mg/L		84	80 - 120	4	20
Tetrachloroethene	0.0500	0.0536		mg/L		107	80 - 121	1	20
Toluene	0.0500	0.0514		mg/L		103	80 - 113	2	20
trans-1,2-Dichloroethene	0.0500	0.0544		mg/L		109	80 - 120	2	20
trans-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	2	30
1,2,4-Trichlorobenzene	0.0500	0.0537		mg/L		107	68 - 128	2	20
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20
1,1,2-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	3	20
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0616		mg/L		123	60 - 141	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0588		mg/L		118	79 - 124	4	20
Vinyl chloride	0.0500	0.0486		mg/L		97	71 - 128	8	20
Xylenes, Total	0.100	0.0946		mg/L		95	80 - 120	4	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 12:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 12:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		80 - 120		09/21/18 12:52	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 12:52	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/21/18 12:52	1
Toluene-d8 (Surr)	102		80 - 120		09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.223		mg/L		89	70 - 135
Benzene	0.0500	0.0481		mg/L		96	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0508		mg/L		102	74 - 126
Bromomethane	0.0500	0.0484		mg/L		97	62 - 130
2-Butanone	0.250	0.208		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123
Chlorobenzene	0.0500	0.0494		mg/L		99	80 - 120
Chloroethane	0.0500	0.0497		mg/L		99	66 - 135
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0486		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0495		mg/L		99	80 - 120
Cyclohexane	0.0500	0.0534		mg/L		107	80 - 120
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0461		mg/L		92	71 - 134
1,2-Dibromoethane	0.0500	0.0460		mg/L		92	80 - 120
1,2-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0493		mg/L		99	80 - 120
Dichlorodifluoromethane	0.0500	0.0602		mg/L		120	47 - 155
1,1-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1,1-Dichloroethene	0.0500	0.0509		mg/L		102	76 - 120
1,2-Dichloropropane	0.0500	0.0511		mg/L		102	80 - 120
Ethylbenzene	0.0500	0.0512		mg/L		102	80 - 120
2-Hexanone	0.250	0.204		mg/L		81	74 - 127
Isopropylbenzene	0.0500	0.0516		mg/L		103	80 - 120
Methyl acetate	0.100	0.0809		mg/L		81	45 - 158
Methylcyclohexane	0.0500	0.0584		mg/L		117	85 - 122
Methylene Chloride	0.0500	0.0498		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0460		mg/L		92	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0542		mg/L		108	80 - 120
1,1,1,2-Tetrachloroethane	0.0500	0.0453		mg/L		91	80 - 120
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121
Toluene	0.0500	0.0495		mg/L		99	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0485		mg/L		97	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0480		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120
1,1,2-Trichloroethane	0.0500	0.0461		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0551		mg/L		110	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0556		mg/L		111	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	89		73 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.230		mg/L		92	70 - 135	3	30
Benzene	0.0500	0.0479		mg/L		96	80 - 120	0	20
Bromodichloromethane	0.0500	0.0513		mg/L		103	80 - 120	1	20
Bromoform	0.0500	0.0518		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0489		mg/L		98	62 - 130	1	20
2-Butanone	0.250	0.214		mg/L		86	80 - 131	3	20
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123	0	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135	2	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0465		mg/L		93	69 - 131	4	30
cis-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0554		mg/L		111	80 - 120	4	20
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0473		mg/L		95	71 - 134	3	20
1,2-Dibromoethane	0.0500	0.0464		mg/L		93	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120	1	20
Dichlorodifluoromethane	0.0500	0.0582		mg/L		116	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0501		mg/L		100	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0494		mg/L		99	80 - 120	1	50
1,1-Dichloroethene	0.0500	0.0516		mg/L		103	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0518		mg/L		104	80 - 120	1	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.207		mg/L		83	74 - 127	2	20
Isopropylbenzene	0.0500	0.0515		mg/L		103	80 - 120	0	20
Methyl acetate	0.100	0.0825		mg/L		82	45 - 158	2	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0504		mg/L		101	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.222		mg/L		89	76 - 124	3	20
Methyl tert-butyl ether	0.0500	0.0465		mg/L		93	80 - 120	1	20
Naphthalene	0.0500	0.0446		mg/L		89	59 - 140	2	20
Styrene	0.0500	0.0548		mg/L		110	80 - 120	1	20
1,1,1,2-Tetrachloroethane	0.0500	0.0460		mg/L		92	80 - 120	2	20
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

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		
Toluene	0.0500	0.0496		mg/L		99	80 - 113	0	20	
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20	
trans-1,3-Dichloropropene	0.0500	0.0477		mg/L		95	80 - 120	2	30	
1,2,4-Trichlorobenzene	0.0500	0.0488		mg/L		98	68 - 128	2	20	
1,1,1-Trichloroethane	0.0500	0.0506		mg/L		101	80 - 120	0	20	
1,1,2-Trichloroethane	0.0500	0.0459		mg/L		92	80 - 120	0	20	
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20	
Trichlorofluoromethane	0.0500	0.0554		mg/L		111	60 - 141	0	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0567		mg/L		113	79 - 124	2	20	
Vinyl chloride	0.0500	0.0521		mg/L		104	71 - 128	1	20	
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120	0	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	88		73 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 680-540832/9

Matrix: Water

Analysis Batch: 540832

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L		09/26/18 12:44	1	
Benzene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Bromodichloromethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Bromoform	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Bromomethane	0.0050	U	0.0050		mg/L		09/26/18 12:44	1	
2-Butanone	0.010	U	0.010		mg/L		09/26/18 12:44	1	
Carbon disulfide	0.0020	U	0.0020		mg/L		09/26/18 12:44	1	
Carbon tetrachloride	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Chlorobenzene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Chloroethane	0.0050	U	0.0050		mg/L		09/26/18 12:44	1	
Chloroform	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Chloromethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Cyclohexane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Dibromochloromethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L		09/26/18 12:44	1	
1,2-Dibromoethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
1,1-Dichloroethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	
1,2-Dichloroethane	0.0010	U	0.0010		mg/L		09/26/18 12:44	1	

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: MB 680-540832/9

Matrix: Water

Analysis Batch: 540832

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
2-Hexanone	0.010	U	0.010		mg/L			09/26/18 12:44	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/26/18 12:44	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/26/18 12:44	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/26/18 12:44	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/26/18 12:44	1
Naphthalene	0.0050	U	0.0050		mg/L			09/26/18 12:44	1
Styrene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Toluene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/26/18 12:44	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/26/18 12:44	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/26/18 12:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120		09/26/18 12:44	1
Dibromofluoromethane (Surr)	95		80 - 122		09/26/18 12:44	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/26/18 12:44	1
Toluene-d8 (Surr)	102		80 - 120		09/26/18 12:44	1

Lab Sample ID: LCS 680-540832/4

Matrix: Water

Analysis Batch: 540832

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.231		mg/L		92	70 - 135
Benzene	0.0500	0.0442		mg/L		88	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0518		mg/L		104	74 - 126
Bromomethane	0.0500	0.0399		mg/L		80	62 - 130
2-Butanone	0.250	0.220		mg/L		88	80 - 131
Carbon disulfide	0.0500	0.0409		mg/L		82	80 - 120
Carbon tetrachloride	0.0500	0.0505		mg/L		101	76 - 123
Chlorobenzene	0.0500	0.0473		mg/L		95	80 - 120
Chloroethane	0.0500	0.0453		mg/L		91	66 - 135
Chloroform	0.0500	0.0493		mg/L		99	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCS 680-540832/4

Matrix: Water

Analysis Batch: 540832

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	0.0500	0.0401		mg/L		80	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0470		mg/L		94	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120
Cyclohexane	0.0500	0.0485		mg/L		97	80 - 120
Dibromochloromethane	0.0500	0.0478		mg/L		96	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0472		mg/L		94	71 - 134
1,2-Dibromoethane	0.0500	0.0449		mg/L		90	80 - 120
1,2-Dichlorobenzene	0.0500	0.0486		mg/L		97	80 - 120
1,3-Dichlorobenzene	0.0500	0.0475		mg/L		95	80 - 120
1,4-Dichlorobenzene	0.0500	0.0467		mg/L		93	80 - 120
Dichlorodifluoromethane	0.0500	0.0514		mg/L		103	47 - 155
1,1-Dichloroethane	0.0500	0.0466		mg/L		93	80 - 120
1,2-Dichloroethane	0.0500	0.0497		mg/L		99	80 - 120
1,1-Dichloroethene	0.0500	0.0471		mg/L		94	76 - 120
1,2-Dichloropropane	0.0500	0.0507		mg/L		101	80 - 120
Ethylbenzene	0.0500	0.0483		mg/L		97	80 - 120
2-Hexanone	0.250	0.215		mg/L		86	74 - 127
Isopropylbenzene	0.0500	0.0493		mg/L		99	80 - 120
Methyl acetate	0.100	0.0874		mg/L		87	45 - 158
Methylcyclohexane	0.0500	0.0518		mg/L		104	85 - 122
Methylene Chloride	0.0500	0.0473		mg/L		95	80 - 120
4-Methyl-2-pentanone	0.250	0.229		mg/L		91	76 - 124
Methyl tert-butyl ether	0.0500	0.0457		mg/L		91	80 - 120
Naphthalene	0.0500	0.0434		mg/L		87	59 - 140
Styrene	0.0500	0.0514		mg/L		103	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0476		mg/L		95	80 - 120
Tetrachloroethene	0.0500	0.0464		mg/L		93	80 - 121
Toluene	0.0500	0.0460		mg/L		92	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0466		mg/L		93	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0473		mg/L		95	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0456		mg/L		91	68 - 128
1,1,1-Trichloroethane	0.0500	0.0504		mg/L		101	80 - 120
1,1,2-Trichloroethane	0.0500	0.0456		mg/L		91	80 - 120
Trichloroethene	0.0500	0.0481		mg/L		96	80 - 120
Trichlorofluoromethane	0.0500	0.0547		mg/L		109	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0537		mg/L		107	79 - 124
Vinyl chloride	0.0500	0.0459		mg/L		92	71 - 128
Xylenes, Total	0.100	0.0967		mg/L		97	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		80 - 122
1,2-Dichloroethane-d4 (Surr)	93		73 - 131
Toluene-d8 (Surr)	97		80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCSD 680-540832/6

Matrix: Water

Analysis Batch: 540832

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.237		mg/L		95	70 - 135	3	30
Benzene	0.0500	0.0443		mg/L		89	80 - 120	0	20
Bromodichloromethane	0.0500	0.0507		mg/L		101	80 - 120	1	20
Bromoform	0.0500	0.0532		mg/L		106	74 - 126	3	20
Bromomethane	0.0500	0.0400		mg/L		80	62 - 130	0	20
2-Butanone	0.250	0.218		mg/L		87	80 - 131	1	20
Carbon disulfide	0.0500	0.0410		mg/L		82	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0502		mg/L		100	76 - 123	1	20
Chlorobenzene	0.0500	0.0474		mg/L		95	80 - 120	0	20
Chloroethane	0.0500	0.0441		mg/L		88	66 - 135	3	20
Chloroform	0.0500	0.0490		mg/L		98	80 - 120	1	20
Chloromethane	0.0500	0.0397		mg/L		79	69 - 131	1	30
cis-1,2-Dichloroethene	0.0500	0.0469		mg/L		94	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0508		mg/L		102	80 - 120	2	20
Cyclohexane	0.0500	0.0483		mg/L		97	80 - 120	0	20
Dibromochloromethane	0.0500	0.0498		mg/L		100	80 - 121	4	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0494		mg/L		99	71 - 134	5	20
1,2-Dibromoethane	0.0500	0.0459		mg/L		92	80 - 120	2	20
1,2-Dichlorobenzene	0.0500	0.0497		mg/L		99	80 - 120	2	20
1,3-Dichlorobenzene	0.0500	0.0484		mg/L		97	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0472		mg/L		94	80 - 120	1	20
Dichlorodifluoromethane	0.0500	0.0509		mg/L		102	47 - 155	1	40
1,1-Dichloroethane	0.0500	0.0465		mg/L		93	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0499		mg/L		100	80 - 120	0	50
1,1-Dichloroethene	0.0500	0.0466		mg/L		93	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0514		mg/L		103	80 - 120	1	20
Ethylbenzene	0.0500	0.0481		mg/L		96	80 - 120	0	20
2-Hexanone	0.250	0.221		mg/L		88	74 - 127	3	20
Isopropylbenzene	0.0500	0.0497		mg/L		99	80 - 120	1	20
Methyl acetate	0.100	0.0875		mg/L		87	45 - 158	0	20
Methylcyclohexane	0.0500	0.0522		mg/L		104	85 - 122	1	20
Methylene Chloride	0.0500	0.0468		mg/L		94	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.233		mg/L		93	76 - 124	2	20
Methyl tert-butyl ether	0.0500	0.0464		mg/L		93	80 - 120	1	20
Naphthalene	0.0500	0.0452		mg/L		90	59 - 140	4	20
Styrene	0.0500	0.0509		mg/L		102	80 - 120	1	20
1,1,2,2-Tetrachloroethane	0.0500	0.0480		mg/L		96	80 - 120	1	20
Tetrachloroethene	0.0500	0.0468		mg/L		94	80 - 121	1	20
Toluene	0.0500	0.0466		mg/L		93	80 - 113	1	20
trans-1,2-Dichloroethene	0.0500	0.0466		mg/L		93	80 - 120	0	20
trans-1,3-Dichloropropene	0.0500	0.0480		mg/L		96	80 - 120	2	30
1,2,4-Trichlorobenzene	0.0500	0.0470		mg/L		94	68 - 128	3	20
1,1,1-Trichloroethane	0.0500	0.0494		mg/L		99	80 - 120	2	20
1,1,2-Trichloroethane	0.0500	0.0470		mg/L		94	80 - 120	3	20
Trichloroethene	0.0500	0.0491		mg/L		98	80 - 120	2	20
Trichlorofluoromethane	0.0500	0.0538		mg/L		108	60 - 141	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0535		mg/L		107	79 - 124	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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

Lab Sample ID: LCSD 680-540832/6

Matrix: Water

Analysis Batch: 540832

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	0.0449		mg/L		90	71 - 128	2	20
Xylenes, Total	0.100	0.0971		mg/L		97	80 - 120	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		80 - 122
1,2-Dichloroethane-d4 (Surr)	94		73 - 131
Toluene-d8 (Surr)	98		80 - 120

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- 9
- 10
- 11
- 12
- 13
- 14
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QC Association Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

GC/MS VOA

Analysis Batch: 540258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-22	Trip Blank	Total/NA	Water	8260B	
MB 680-540258/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540258/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540258/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-19	SW-2	Total/NA	Water	8260B	
680-157969-20	SW-3	Total/NA	Water	8260B	
680-157969-21	SW-4	Total/NA	Water	8260B	
MB 680-540261/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540261/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540261/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-18	SW-1	Total/NA	Water	8260B	
MB 680-540832/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540832/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540832/6	Lab Control Sample Dup	Total/NA	Water	8260B	



Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

Client Sample ID: SW-1

Date Collected: 09/13/18 09:25

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	540832	09/26/18 19:22	JLK	TAL SAV

Client Sample ID: SW-2

Date Collected: 09/13/18 09:05

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 17:49	Y1S	TAL SAV

Client Sample ID: SW-3

Date Collected: 09/13/18 07:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 17:25	Y1S	TAL SAV

Client Sample ID: SW-4

Date Collected: 09/13/18 08:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 17:00	Y1S	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 09/13/18 00:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540258	09/21/18 10:28	JLK	TAL SAV

Laboratory References:

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

Serial Number 120581

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

THE LEADER IN ENVIRONMENTAL TESTING

PROJECT REFERENCE EarthCon - SECHEM		PROJECT NO. 07.20180044.01	PROJECT LOCATION (STATE) GA	MATRIX TYPE	REQUIRED ANALYSIS	PAGE 1	OF 1
TAL (LAB) PROJECT MANAGER Jerry Lanier		P.O. NUMBER	CONTRACT NO.	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	STANDARD REPORT DELIVERY	DATE DUE	
CLIENT (SITE) PM Jeffrey Madden		CLIENT PHONE (770) 308-5230	CLIENT FAX	AQ	EXPEDITED REPORT DELIVERY (SURCHARGE)	DATE DUE	
CLIENT NAME Earth Con		CLIENT E-MAIL j.madden@earthcon.com		AW	DATE DUE	NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	
CLIENT ADDRESS 1460 W. Oak Pkwy				COMPPOSITE (C) OR GRAB (G) INDICATE	PRESERVATIVE		
COMPANY CONTRACTING THIS WORK (if applicable) Grant Lement Holdings Inc					NUMBER OF CONTAINERS SUBMITTED		
SAMPLE	DATE	TIME	SAMPLE IDENTIFICATION				REMARKS
	9/13/18	09:25	Sw-1	GW	3	3	
		09:05	Sw-2	GW	3	3	
		08:50	Sw-3	GW	3	3	
	9/13/18	07:55	Sw-4	GW	3	3	07:55 sample time
		08:10	Trip Blank - JM				08:10 sample time
			Trip Blank		2	2	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE
<i>Jerry Lanier</i>	9/13/18	13:05	<i>J. Madden</i>	9/13/18	13:08		
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE
<i>J. Madden</i>	9/13/18	13:08					
RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	SAVANNAH LOG NO.	LABORATORY REMARKS		
<i>V. B.</i>	9-14-18	200	YES <input type="checkbox"/> NO <input type="checkbox"/>		1-3/1-5	3-8/4.0	



TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-3

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-3

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

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

TestAmerica Savannah

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 680-157969-4
Client Project/Site: EarthCon - SECHEM

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

Attn: Rachel Odzer



Authorized for release by:
9/25/2018 4:35:50 PM
Michele Kersey, Project Manager II
(912)250-0282
michele.kersey@testamericainc.com

Designee for
Jerry Lanier, Project Manager I
(912)250-0281
jerry.lanier@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.



LINKS

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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Job ID: 680-157969-4

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-4

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SW-1 (680-157969-18), SW-2 (680-157969-19), SW-3 (680-157969-20), SW-4 (680-157969-21) and Trip Blank (680-157969-22) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 09/25/2018.

1,4-Dioxane was detected in method blank MB 310-216626/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

Sample Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-18	SW-1	Water	09/13/18 09:25	09/14/18 07:00
680-157969-19	SW-2	Water	09/13/18 09:05	09/14/18 07:00
680-157969-20	SW-3	Water	09/13/18 07:55	09/14/18 07:00
680-157969-21	SW-4	Water	09/13/18 08:10	09/14/18 07:00
680-157969-22	Trip Blank	Water	09/13/18 00:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CF
5030B	Purge and Trap	SW846	TAL CF

Protocol References:

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

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Definitions/Glossary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: SW-1

Lab Sample ID: 680-157969-18

No Detections.

Client Sample ID: SW-2

Lab Sample ID: 680-157969-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.037	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SW-3

Lab Sample ID: 680-157969-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.037	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SW-4

Lab Sample ID: 680-157969-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.021	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00058	J	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: SW-1

Lab Sample ID: 680-157969-18

Date Collected: 09/13/18 09:25

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00030	U	0.0010	0.00030	mg/L			09/25/18 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 00:36	1
Dibromofluoromethane (Surr)	108		80 - 120					09/25/18 00:36	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 00:36	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: SW-2
Date Collected: 09/13/18 09:05
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.037	B	0.0010	0.00030	mg/L			09/25/18 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 01:00	1
Dibromofluoromethane (Surr)	102		80 - 120					09/25/18 01:00	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 01:00	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: SW-3

Lab Sample ID: 680-157969-20

Date Collected: 09/13/18 07:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.037	B	0.0010	0.00030	mg/L			09/25/18 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 01:24	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 01:24	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 01:24	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: SW-4
Date Collected: 09/13/18 08:10
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.021	B	0.0010	0.00030	mg/L			09/25/18 01:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 01:48	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 01:48	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 01:48	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-22

Date Collected: 09/13/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00058	J	0.0010	0.00030	mg/L			09/25/18 12:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					09/25/18 12:15	1
Dibromofluoromethane (Surr)	99		80 - 120					09/25/18 12:15	1
Toluene-d8 (Surr)	98		80 - 120					09/25/18 12:15	1



Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (80-120)	TOL (80-120)
680-157969-18	SW-1	100	108	99
680-157969-19	SW-2	100	102	99
680-157969-20	SW-3	100	100	99
680-157969-21	SW-4	100	100	99
680-157969-22	Trip Blank	99	99	98
LCS 310-216626/6	Lab Control Sample	99	100	99
LCS 310-216754/6	Lab Control Sample	99	101	99
LCSD 310-216626/7	Lab Control Sample Dup	100	100	100
LCSD 310-216754/7	Lab Control Sample Dup	99	100	99
MB 310-216626/5	Method Blank	100	100	99
MB 310-216754/5	Method Blank	100	100	99

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

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

Lab Sample ID: MB 310-216626/5

Matrix: Water

Analysis Batch: 216626

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	0.000499	J	0.0010	0.00030	mg/L			09/24/18 22:12	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 22:12	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 22:12	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 22:12	1

Lab Sample ID: LCS 310-216626/6

Matrix: Water

Analysis Batch: 216626

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	0.00400	0.00340		mg/L		85	49 - 150
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	100		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

Lab Sample ID: LCSD 310-216626/7

Matrix: Water

Analysis Batch: 216626

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
1,4-Dioxane	0.00400	0.00480		mg/L		120	49 - 150	34	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

Lab Sample ID: MB 310-216754/5

Matrix: Water

Analysis Batch: 216754

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	0.00030	U	0.0010	0.00030	mg/L			09/25/18 10:38	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 10:38	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 10:38	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 10:38	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

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

Lab Sample ID: LCS 310-216754/6

Matrix: Water

Analysis Batch: 216754

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	0.00400	0.00365		mg/L		91	49 - 150
Surrogate							
	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	101		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

Lab Sample ID: LCSD 310-216754/7

Matrix: Water

Analysis Batch: 216754

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
1,4-Dioxane	0.00400	0.00471		mg/L		118	49 - 150	25	35
Surrogate									
	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	99		80 - 120						

QC Association Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

GC/MS VOA

Analysis Batch: 216626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-18	SW-1	Total/NA	Water	8260B SIM	
680-157969-19	SW-2	Total/NA	Water	8260B SIM	
680-157969-20	SW-3	Total/NA	Water	8260B SIM	
680-157969-21	SW-4	Total/NA	Water	8260B SIM	
MB 310-216626/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216626/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216626/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-22	Trip Blank	Total/NA	Water	8260B SIM	
MB 310-216754/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216754/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216754/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Client Sample ID: SW-1

Date Collected: 09/13/18 09:25

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 00:36	TRZ	TAL CF

Client Sample ID: SW-2

Date Collected: 09/13/18 09:05

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 01:00	TRZ	TAL CF

Client Sample ID: SW-3

Date Collected: 09/13/18 07:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 01:24	TRZ	TAL CF

Client Sample ID: SW-4

Date Collected: 09/13/18 08:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 01:48	TRZ	TAL CF

Client Sample ID: Trip Blank

Date Collected: 09/13/18 00:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216754	09/25/18 12:15	TRZ	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Lanier, Jerry A	Carrier Tracking No(s):	COC No: 680-535475.1					
Client Contact: Shipping/Receiving		E-Mail: jerry.lanier@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1					
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Florida							
Address: 704 Enterprise Drive,		Due Date Requested: 9/26/2018	Job #: 680-157969-4						
City: Cedar Falls		TAT Requested (days):	Preservation Codes:						
State, Zip: IA, 50613		PO #:	A - HCL M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - NCA W - pH 4.5 X - EDTA Y - EDA Z - other (specify)						
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:	Other:						
Email:		Project #: 68002623							
Project Name: EarthCon - SECHEM		SSOW#:							
Site:									
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B SIM/5030B 1,4-Dioxane (Only)	Total Number of Containers	Special Instructions/Note:
SW-1 (680-157969-18)	9/13/18	09:25 Eastern	Water	Water	X	X	X	3	
SW-2 (680-157969-19)	9/13/18	09:05 Eastern	Water	Water	X	X	X	3	
SW-3 (680-157969-20)	9/13/18	07:55 Eastern	Water	Water	X	X	X	3	
SW-4 (680-157969-21)	9/13/18	08:10 Eastern	Water	Water	X	X	X	3	
Trip Blank (680-157969-22)	9/13/18	Eastern	Water	Water	X	X	X	2	
<p>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/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>									
Possible Hazard Identification									
Unconfirmed									
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2									
Empty Kit Relinquished by:									
Relinquished by: <i>VES</i> Date: 9-14-18 1524 Company: <i>TL</i>									
Relinquished by: Date: 9-15-18 920 Company: TACF									
Relinquished by: Date: Company:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:									
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:									
Method of Shipment:									

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-4

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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	

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-4

Login Number: 157969

List Number: 2

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:39 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-4

Login Number: 157969

List Number: 3

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-4

Login Number: 157969

List Number: 4

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Cedar Falls

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

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-4

Laboratory: TestAmerica Cedar Falls (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-18
Illinois	NELAP	5	200024	11-29-18
Iowa	State Program	7	007	12-01-19
Kansas	NELAP	7	E-10341	01-31-19
Minnesota	NELAP	5	019-999-319	12-31-18
Minnesota (Petrofund)	State Program	1	3349	08-22-19
North Dakota	State Program	8	R-186	09-29-18
Oregon	NELAP	10	IA100001	09-29-18

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: 680-157969-5
Client Project/Site: EarthCon - SECHEM

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

Attn: Rachel Odzer



Authorized for release by:
9/25/2018 4:44:39 PM
Michele Kersey, Project Manager II
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Job ID: 680-157969-5

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-5

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples HMW-1 (680-157969-23) and HMW-2 (680-157969-24) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/21/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540261.

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-23	HMW-1	Water	09/11/18 14:50	09/14/18 07:00
680-157969-24	HMW-2	Water	09/11/18 13:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
5030B	Purge and Trap	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Client Sample ID: HMW-1

Lab Sample ID: 680-157969-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0027		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: HMW-2

Lab Sample ID: 680-157969-24

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

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Client Sample ID: HMW-1

Lab Sample ID: 680-157969-23

Date Collected: 09/11/18 14:50

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 18:39	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 18:39	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 18:39	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 18:39	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 18:39	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 18:39	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Tetrachloroethene	0.0027		0.0010		mg/L			09/21/18 18:39	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 18:39	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 18:39	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 18:39	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Client Sample ID: HMW-1
Date Collected: 09/11/18 14:50
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-23
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/21/18 18:39	1
Dibromofluoromethane (Surr)	96		80 - 122		09/21/18 18:39	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/21/18 18:39	1
Toluene-d8 (Surr)	103		80 - 120		09/21/18 18:39	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Client Sample ID: HMW-2

Lab Sample ID: 680-157969-24

Date Collected: 09/11/18 13:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 19:04	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 19:04	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 19:04	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,1-Dichloroethene	0.0018		0.0010		mg/L			09/21/18 19:04	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 19:04	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 19:04	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 19:04	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 19:04	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 19:04	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 19:04	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Client Sample ID: HMW-2
Date Collected: 09/11/18 13:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-24
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/21/18 19:04	1
Dibromofluoromethane (Surr)	96		80 - 122		09/21/18 19:04	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/21/18 19:04	1
Toluene-d8 (Surr)	103		80 - 120		09/21/18 19:04	1

Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(80-120)	(80-122)	(73-131)	(80-120)
680-157969-23	HMW-1	99	96	89	103
680-157969-24	HMW-2	99	96	88	103
LCS 680-540261/4	Lab Control Sample	96	96	89	97
LCSD 680-540261/5	Lab Control Sample Dup	97	96	88	98
MB 680-540261/9	Method Blank	98	95	88	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

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

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 12:52	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 12:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

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			09/21/18 12:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		09/21/18 12:52	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 12:52	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/21/18 12:52	1
Toluene-d8 (Surr)	102		80 - 120		09/21/18 12:52	1

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.223		mg/L		89	70 - 135
Benzene	0.0500	0.0481		mg/L		96	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0508		mg/L		102	74 - 126
Bromomethane	0.0500	0.0484		mg/L		97	62 - 130
2-Butanone	0.250	0.208		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123
Chlorobenzene	0.0500	0.0494		mg/L		99	80 - 120
Chloroethane	0.0500	0.0497		mg/L		99	66 - 135
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0486		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0495		mg/L		99	80 - 120
Cyclohexane	0.0500	0.0534		mg/L		107	80 - 120
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0461		mg/L		92	71 - 134
1,2-Dibromoethane	0.0500	0.0460		mg/L		92	80 - 120
1,2-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0493		mg/L		99	80 - 120
Dichlorodifluoromethane	0.0500	0.0602		mg/L		120	47 - 155
1,1-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0509		mg/L		102	76 - 120
1,2-Dichloropropane	0.0500	0.0511		mg/L		102	80 - 120
Ethylbenzene	0.0500	0.0512		mg/L		102	80 - 120
2-Hexanone	0.250	0.204		mg/L		81	74 - 127
Isopropylbenzene	0.0500	0.0516		mg/L		103	80 - 120
Methyl acetate	0.100	0.0809		mg/L		81	45 - 158
Methylcyclohexane	0.0500	0.0584		mg/L		117	85 - 122
Methylene Chloride	0.0500	0.0498		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0460		mg/L		92	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.0500	0.0542		mg/L		108	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0453		mg/L		91	80 - 120
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121
Toluene	0.0500	0.0495		mg/L		99	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0485		mg/L		97	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0480		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120
1,1,2-Trichloroethane	0.0500	0.0461		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0551		mg/L		110	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0556		mg/L		111	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	89		73 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.230		mg/L		92	70 - 135	3	30
Benzene	0.0500	0.0479		mg/L		96	80 - 120	0	20
Bromodichloromethane	0.0500	0.0513		mg/L		103	80 - 120	1	20
Bromoform	0.0500	0.0518		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0489		mg/L		98	62 - 130	1	20
2-Butanone	0.250	0.214		mg/L		86	80 - 131	3	20
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123	0	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135	2	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0465		mg/L		93	69 - 131	4	30
cis-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0554		mg/L		111	80 - 120	4	20
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0473		mg/L		95	71 - 134	3	20
1,2-Dibromoethane	0.0500	0.0464		mg/L		93	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120	1	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier				Limits		
Dichlorodifluoromethane	0.0500	0.0582		mg/L		116	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0501		mg/L		100	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0494		mg/L		99	80 - 120	1	50
1,1-Dichloroethene	0.0500	0.0516		mg/L		103	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0518		mg/L		104	80 - 120	1	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.207		mg/L		83	74 - 127	2	20
Isopropylbenzene	0.0500	0.0515		mg/L		103	80 - 120	0	20
Methyl acetate	0.100	0.0825		mg/L		82	45 - 158	2	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0504		mg/L		101	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.222		mg/L		89	76 - 124	3	20
Methyl tert-butyl ether	0.0500	0.0465		mg/L		93	80 - 120	1	20
Naphthalene	0.0500	0.0446		mg/L		89	59 - 140	2	20
Styrene	0.0500	0.0548		mg/L		110	80 - 120	1	20
1,1,2,2-Tetrachloroethane	0.0500	0.0460		mg/L		92	80 - 120	2	20
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121	0	20
Toluene	0.0500	0.0496		mg/L		99	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0477		mg/L		95	80 - 120	2	30
1,2,4-Trichlorobenzene	0.0500	0.0488		mg/L		98	68 - 128	2	20
1,1,1-Trichloroethane	0.0500	0.0506		mg/L		101	80 - 120	0	20
1,1,2-Trichloroethane	0.0500	0.0459		mg/L		92	80 - 120	0	20
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0554		mg/L		111	60 - 141	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0567		mg/L		113	79 - 124	2	20
Vinyl chloride	0.0500	0.0521		mg/L		104	71 - 128	1	20
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120	0	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	88		73 - 131
Toluene-d8 (Surr)	98		80 - 120

QC Association Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

GC/MS VOA

Analysis Batch: 540261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-23	HMW-1	Total/NA	Water	8260B	
680-157969-24	HMW-2	Total/NA	Water	8260B	
MB 680-540261/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540261/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540261/5	Lab Control Sample Dup	Total/NA	Water	8260B	

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- 13
- 14
- 15

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

Client Sample ID: HMW-1

Date Collected: 09/11/18 14:50

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 18:39	Y1S	TAL SAV

Client Sample ID: HMW-2

Date Collected: 09/11/18 13:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 19:04	Y1S	TAL SAV

Laboratory References:

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

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Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-5

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-5

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
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: 680-157969-6

Client Project/Site: EarthCon - SECHEM

For:

Giant Cement

654 Judge Street

PO BOX 218

Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:

9/25/2018 4:42:36 PM

Michele Kersey, Project Manager II

(912)250-0282

michele.kersey@testamericainc.com

Designee for

Jerry Lanier, Project Manager I

(912)250-0281

jerry.lanier@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.

LINKS

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results through

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www.testamericainc.com

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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Job ID: 680-157969-6

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-6

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples HMW-1 (680-157969-23) and HMW-2 (680-157969-24) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 09/25/2018.

1,4-Dioxane was detected in method blank MB 310-216626/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

Sample Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-23	HMW-1	Water	09/11/18 14:50	09/14/18 07:00
680-157969-24	HMW-2	Water	09/11/18 13:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CF
5030B	Purge and Trap	SW846	TAL CF

Protocol References:

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



Definitions/Glossary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Client Sample ID: HMW-1

Lab Sample ID: 680-157969-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0054	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: HMW-2

Lab Sample ID: 680-157969-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00095	J B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Client Sample ID: HMW-1
Date Collected: 09/11/18 14:50
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0054	B	0.0010	0.00030	mg/L			09/25/18 02:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/25/18 02:12	1
Dibromofluoromethane (Surr)	101		80 - 120					09/25/18 02:12	1
Toluene-d8 (Surr)	98		80 - 120					09/25/18 02:12	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Client Sample ID: HMW-2

Lab Sample ID: 680-157969-24

Date Collected: 09/11/18 13:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00095	J B	0.0010	0.00030	mg/L			09/25/18 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 02:36	1
Dibromofluoromethane (Surr)	101		80 - 120					09/25/18 02:36	1
Toluene-d8 (Surr)	98		80 - 120					09/25/18 02:36	1



Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

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	BFB	DBFM	TOL
		(80-120)	(80-120)	(80-120)
680-157969-23	HMW-1	101	101	98
680-157969-24	HMW-2	100	101	98
LCS 310-216626/6	Lab Control Sample	99	100	99
LCSD 310-216626/7	Lab Control Sample Dup	100	100	100
MB 310-216626/5	Method Blank	100	100	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

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

Lab Sample ID: MB 310-216626/5

Matrix: Water

Analysis Batch: 216626

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	0.000499	J	0.0010	0.00030	mg/L			09/24/18 22:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 22:12	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 22:12	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 22:12	1

Lab Sample ID: LCS 310-216626/6

Matrix: Water

Analysis Batch: 216626

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	0.00400	0.00340		mg/L		85	49 - 150
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	100		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

Lab Sample ID: LCSD 310-216626/7

Matrix: Water

Analysis Batch: 216626

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
1,4-Dioxane	0.00400	0.00480		mg/L		120	49 - 150	34	35
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

QC Association Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

GC/MS VOA

Analysis Batch: 216626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-23	HMW-1	Total/NA	Water	8260B SIM	
680-157969-24	HMW-2	Total/NA	Water	8260B SIM	
MB 310-216626/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216626/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216626/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

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Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Client Sample ID: HMW-1

Date Collected: 09/11/18 14:50

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 02:12	TRZ	TAL CF

Client Sample ID: HMW-2

Date Collected: 09/11/18 13:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 02:36	TRZ	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-6

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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	

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-6

Login Number: 157969

List Number: 2

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:39 AM

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

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-6

Login Number: 157969

List Number: 3

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-6

Login Number: 157969

List Number: 4

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	09-22-19
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Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
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Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
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Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18 *
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Massachusetts	State Program	1	M-GA006	06-30-19
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Pennsylvania	NELAP	3	68-00474	06-30-19
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Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Cedar Falls

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

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-6

Laboratory: TestAmerica Cedar Falls (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-18
Illinois	NELAP	5	200024	11-29-18
Iowa	State Program	7	007	12-01-19
Kansas	NELAP	7	E-10341	01-31-19
Minnesota	NELAP	5	019-999-319	12-31-18
Minnesota (Petrofund)	State Program	1	3349	08-22-19
North Dakota	State Program	8	R-186	09-29-18
Oregon	NELAP	10	IA100001	09-29-18

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: 680-157969-7

Client Project/Site: EarthCon - SECHEM

For:

Giant Cement

654 Judge Street

PO BOX 218

Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:

9/26/2018 3:59:15 PM

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

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

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

LINKS

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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Job ID: 680-157969-7

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-7

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SMW-1 (680-157969-25), SRW-1 (680-157969-26), SMW-2 (680-157969-27), SMW-3 (680-157969-28), SMW-4 (680-157969-29), Equipment Blank (680-157969-30) and Trip Blank (680-157969-31) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/21/2018, 09/22/2018 and 09/25/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540258.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540261.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540411.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540656.

The laboratory control sample (LCS) for analytical batch 680-540656 recovered outside control limits for the following analytes: Methylcyclohexane. This analytes was biased high in the LCS and as not detected in the associated samples; therefore, the data have been reported.

Samples SRW-1 (680-157969-26)[5X] and SMW-3 (680-157969-28)[10X] 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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-25	SMW-1	Water	09/11/18 10:15	09/14/18 07:00
680-157969-26	SRW-1	Water	09/11/18 09:15	09/14/18 07:00
680-157969-27	SMW-2	Water	09/11/18 10:45	09/14/18 07:00
680-157969-28	SMW-3	Water	09/11/18 11:45	09/14/18 07:00
680-157969-29	SMW-4	Water	09/10/18 18:00	09/14/18 07:00
680-157969-30	Equipment Blank	Water	09/11/18 00:00	09/14/18 07:00
680-157969-31	Trip Blank	Water	09/10/18 00:00	09/14/18 07:00



Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
5030B	Purge and Trap	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-1

Lab Sample ID: 680-157969-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.0044		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.0016		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0039		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0069		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SRW-1

Lab Sample ID: 680-157969-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.0027		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.011		0.0010		mg/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.0024		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.0017		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.039		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.13		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.096		0.0010		mg/L	1		8260B	Total/NA
1,1,2-Trichloroethane	0.0016		0.0010		mg/L	1		8260B	Total/NA
Xylenes, Total	0.0024		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene - DL	0.22		0.0050		mg/L	5		8260B	Total/NA
Tetrachloroethene - DL	0.28		0.0050		mg/L	5		8260B	Total/NA
Trichloroethene - DL	0.24		0.0050		mg/L	5		8260B	Total/NA

Client Sample ID: SMW-2

Lab Sample ID: 680-157969-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	0.098		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0096		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichlorobenzene	0.011		0.0010		mg/L	1		8260B	Total/NA
1,3-Dichlorobenzene	0.0068		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.020		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0024		0.0010		mg/L	1		8260B	Total/NA
1,2-Dichloroethane	0.014		0.0010		mg/L	1		8260B	Total/NA
Ethylbenzene	0.011		0.0010		mg/L	1		8260B	Total/NA
Isopropylbenzene	0.0012		0.0010		mg/L	1		8260B	Total/NA
Naphthalene	0.0057		0.0050		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.016		0.0010		mg/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.0014		0.0010		mg/L	1		8260B	Total/NA
1,1,2-Trichloroethane	0.0010		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.0067		0.0010		mg/L	1		8260B	Total/NA
Vinyl chloride	0.0059		0.0010		mg/L	1		8260B	Total/NA
Xylenes, Total	0.0014		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: SMW-3

Lab Sample ID: 680-157969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.12		0.010		mg/L	1		8260B	Total/NA
Benzene	0.0074		0.0010		mg/L	1		8260B	Total/NA
Chlorobenzene	0.0043		0.0010		mg/L	1		8260B	Total/NA
Chloroform	0.0025		0.0010		mg/L	1		8260B	Total/NA
1,4-Dichlorobenzene	0.14		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.057		0.0010		mg/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Detection Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-3 (Continued)

Lab Sample ID: 680-157969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.048		0.0010		mg/L	1		8260B	Total/NA
Ethylbenzene	0.030		0.0010		mg/L	1		8260B	Total/NA
Isopropylbenzene	0.0019		0.0010		mg/L	1		8260B	Total/NA
Naphthalene	0.052		0.0050		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.028		0.0010		mg/L	1		8260B	Total/NA
Toluene	0.030		0.0010		mg/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.0021		0.0010		mg/L	1		8260B	Total/NA
1,2,4-Trichlorobenzene	0.013		0.0050		mg/L	1		8260B	Total/NA
1,1,1-Trichloroethane	0.0068		0.0010		mg/L	1		8260B	Total/NA
1,1,2-Trichloroethane	0.013		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.022		0.0010		mg/L	1		8260B	Total/NA
Vinyl chloride	0.15		0.0010		mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene - DL	0.48		0.010		mg/L	10		8260B	Total/NA
1,2-Dichlorobenzene - DL	0.82		0.010		mg/L	10		8260B	Total/NA
1,3-Dichlorobenzene - DL	0.21		0.010		mg/L	10		8260B	Total/NA
1,2-Dichloroethane - DL	0.29		0.010		mg/L	10		8260B	Total/NA
4-Methyl-2-pentanone - DL	2.1		0.10		mg/L	10		8260B	Total/NA
Xylenes, Total - DL	0.68		0.010		mg/L	10		8260B	Total/NA

Client Sample ID: SMW-4

Lab Sample ID: 680-157969-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.0049		0.0010		mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0026		0.0010		mg/L	1		8260B	Total/NA
Tetrachloroethene	0.16		0.0010		mg/L	1		8260B	Total/NA
Trichloroethene	0.025		0.0010		mg/L	1		8260B	Total/NA

Client Sample ID: Equipment Blank

Lab Sample ID: 680-157969-30

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-1

Lab Sample ID: 680-157969-25

Date Collected: 09/11/18 10:15

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 19:28	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 19:28	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 19:28	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
cis-1,2-Dichloroethene	0.0044		0.0010		mg/L			09/21/18 19:28	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,2-Dichloroethane	0.0016		0.0010		mg/L			09/21/18 19:28	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 19:28	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 19:28	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 19:28	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Tetrachloroethene	0.0039		0.0010		mg/L			09/21/18 19:28	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 19:28	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Trichloroethene	0.0069		0.0010		mg/L			09/21/18 19:28	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 19:28	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 19:28	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-1
Date Collected: 09/11/18 10:15
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-25
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/21/18 19:28	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 19:28	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/21/18 19:28	1
Toluene-d8 (Surr)	100		80 - 120		09/21/18 19:28	1

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Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SRW-1

Lab Sample ID: 680-157969-26

Date Collected: 09/11/18 09:15

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 16:25	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 16:25	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 16:25	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
Chloroform	0.0027		0.0010		mg/L			09/22/18 16:25	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,2-Dichlorobenzene	0.011		0.0010		mg/L			09/22/18 16:25	1
1,3-Dichlorobenzene	0.0024		0.0010		mg/L			09/22/18 16:25	1
1,4-Dichlorobenzene	0.0017		0.0010		mg/L			09/22/18 16:25	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,1-Dichloroethane	0.039		0.0010		mg/L			09/22/18 16:25	1
1,2-Dichloroethane	0.13		0.0010		mg/L			09/22/18 16:25	1
1,1-Dichloroethene	0.096		0.0010		mg/L			09/22/18 16:25	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 16:25	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 16:25	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 16:25	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 16:25	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,1,2-Trichloroethane	0.0016		0.0010		mg/L			09/22/18 16:25	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 16:25	1
Xylenes, Total	0.0024		0.0010		mg/L			09/22/18 16:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 16:25	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SRW-1

Lab Sample ID: 680-157969-26

Date Collected: 09/11/18 09:15

Matrix: Water

Date Received: 09/14/18 07:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	94		80 - 122		09/22/18 16:25	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/22/18 16:25	1
Toluene-d8 (Surr)	101		80 - 120		09/22/18 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.22		0.0050		mg/L			09/25/18 18:46	5
Tetrachloroethene	0.28		0.0050		mg/L			09/25/18 18:46	5
Trichloroethene	0.24		0.0050		mg/L			09/25/18 18:46	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		09/25/18 18:46	5
Dibromofluoromethane (Surr)	105		80 - 122		09/25/18 18:46	5
1,2-Dichloroethane-d4 (Surr)	104		73 - 131		09/25/18 18:46	5
Toluene-d8 (Surr)	96		80 - 120		09/25/18 18:46	5

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-2

Lab Sample ID: 680-157969-27

Date Collected: 09/11/18 10:45

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 16:49	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 16:49	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 16:49	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 16:49	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Chlorobenzene	0.098		0.0010		mg/L			09/22/18 16:49	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 16:49	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
cis-1,2-Dichloroethene	0.0096		0.0010		mg/L			09/22/18 16:49	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 16:49	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,2-Dichlorobenzene	0.011		0.0010		mg/L			09/22/18 16:49	1
1,3-Dichlorobenzene	0.0068		0.0010		mg/L			09/22/18 16:49	1
1,4-Dichlorobenzene	0.020		0.0010		mg/L			09/22/18 16:49	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,1-Dichloroethane	0.0024		0.0010		mg/L			09/22/18 16:49	1
1,2-Dichloroethane	0.014		0.0010		mg/L			09/22/18 16:49	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Ethylbenzene	0.011		0.0010		mg/L			09/22/18 16:49	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 16:49	1
Isopropylbenzene	0.0012		0.0010		mg/L			09/22/18 16:49	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 16:49	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 16:49	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 16:49	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 16:49	1
Naphthalene	0.0057		0.0050		mg/L			09/22/18 16:49	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Tetrachloroethene	0.016		0.0010		mg/L			09/22/18 16:49	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
trans-1,2-Dichloroethene	0.0014		0.0010		mg/L			09/22/18 16:49	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 16:49	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,1,2-Trichloroethane	0.0010		0.0010		mg/L			09/22/18 16:49	1
Trichloroethene	0.0067		0.0010		mg/L			09/22/18 16:49	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 16:49	1
Vinyl chloride	0.0059		0.0010		mg/L			09/22/18 16:49	1
Xylenes, Total	0.0014		0.0010		mg/L			09/22/18 16:49	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-2
Date Collected: 09/11/18 10:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-27
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/22/18 16:49	1
Dibromofluoromethane (Surr)	95		80 - 122		09/22/18 16:49	1
1,2-Dichloroethane-d4 (Surr)	87		73 - 131		09/22/18 16:49	1
Toluene-d8 (Surr)	103		80 - 120		09/22/18 16:49	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-3
Date Collected: 09/11/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-28
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.12		0.010		mg/L			09/22/18 16:00	1
Benzene	0.0074		0.0010		mg/L			09/22/18 16:00	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 16:00	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 16:00	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 16:00	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Chlorobenzene	0.0043		0.0010		mg/L			09/22/18 16:00	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 16:00	1
Chloroform	0.0025		0.0010		mg/L			09/22/18 16:00	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 16:00	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
1,4-Dichlorobenzene	0.14		0.0010		mg/L			09/22/18 16:00	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
1,1-Dichloroethane	0.057		0.0010		mg/L			09/22/18 16:00	1
1,1-Dichloroethene	0.048		0.0010		mg/L			09/22/18 16:00	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Ethylbenzene	0.030		0.0010		mg/L			09/22/18 16:00	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 16:00	1
Isopropylbenzene	0.0019		0.0010		mg/L			09/22/18 16:00	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 16:00	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 16:00	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 16:00	1
Naphthalene	0.052		0.0050		mg/L			09/22/18 16:00	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Tetrachloroethene	0.028		0.0010		mg/L			09/22/18 16:00	1
Toluene	0.030		0.0010		mg/L			09/22/18 16:00	1
trans-1,2-Dichloroethene	0.0021		0.0010		mg/L			09/22/18 16:00	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
1,2,4-Trichlorobenzene	0.013		0.0050		mg/L			09/22/18 16:00	1
1,1,1-Trichloroethane	0.0068		0.0010		mg/L			09/22/18 16:00	1
1,1,2-Trichloroethane	0.013		0.0010		mg/L			09/22/18 16:00	1
Trichloroethene	0.022		0.0010		mg/L			09/22/18 16:00	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 16:00	1
Vinyl chloride	0.15		0.0010		mg/L			09/22/18 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		09/22/18 16:00	1
Dibromofluoromethane (Surr)	96		80 - 122		09/22/18 16:00	1
1,2-Dichloroethane-d4 (Surr)	87		73 - 131		09/22/18 16:00	1
Toluene-d8 (Surr)	101		80 - 120		09/22/18 16:00	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-3
Date Collected: 09/11/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-28
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.48		0.010		mg/L			09/25/18 19:11	10
1,2-Dichlorobenzene	0.82		0.010		mg/L			09/25/18 19:11	10
1,3-Dichlorobenzene	0.21		0.010		mg/L			09/25/18 19:11	10
1,2-Dichloroethane	0.29		0.010		mg/L			09/25/18 19:11	10
4-Methyl-2-pentanone	2.1		0.10		mg/L			09/25/18 19:11	10
Xylenes, Total	0.68		0.010		mg/L			09/25/18 19:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/25/18 19:11	10
Dibromofluoromethane (Surr)	101		80 - 122		09/25/18 19:11	10
1,2-Dichloroethane-d4 (Surr)	99		73 - 131		09/25/18 19:11	10
Toluene-d8 (Surr)	98		80 - 120		09/25/18 19:11	10

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-4

Lab Sample ID: 680-157969-29

Date Collected: 09/10/18 18:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 14:46	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 14:46	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 14:46	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
Chloroform	0.0049		0.0010		mg/L			09/22/18 14:46	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,1-Dichloroethene	0.0026		0.0010		mg/L			09/22/18 14:46	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 14:46	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 14:46	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 14:46	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Tetrachloroethene	0.16		0.0010		mg/L			09/22/18 14:46	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 14:46	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Trichloroethene	0.025		0.0010		mg/L			09/22/18 14:46	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 14:46	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 14:46	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-4
Date Collected: 09/10/18 18:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-29
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 14:46	1
Dibromofluoromethane (Surr)	97		80 - 122		09/22/18 14:46	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/22/18 14:46	1
Toluene-d8 (Surr)	102		80 - 120		09/22/18 14:46	1

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: Equipment Blank

Lab Sample ID: 680-157969-30

Date Collected: 09/11/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 10:50	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 10:50	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 10:50	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 10:50	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 10:50	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 10:50	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 10:50	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 10:50	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 10:50	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: Equipment Blank

Lab Sample ID: 680-157969-30

Date Collected: 09/11/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/18 10:50	1
Dibromofluoromethane (Surr)	108		80 - 122		09/21/18 10:50	1
1,2-Dichloroethane-d4 (Surr)	96		73 - 131		09/21/18 10:50	1
Toluene-d8 (Surr)	103		80 - 120		09/21/18 10:50	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 11:12	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 11:12	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 11:12	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 11:12	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 11:12	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 11:12	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 11:12	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 11:12	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 11:12	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	95		80 - 120		09/21/18 11:12	1
Dibromofluoromethane (Surr)	107		80 - 122		09/21/18 11:12	1
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/21/18 11:12	1
Toluene-d8 (Surr)	104		80 - 120		09/21/18 11:12	1

Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (80-120)	DBFM (80-122)	DCA (73-131)	TOL (80-120)
680-157969-25	SMW-1	99	95	90	100
680-157969-26	SRW-1	99	94	88	101
680-157969-26 - DL	SRW-1	99	105	104	96
680-157969-27	SMW-2	98	95	87	103
680-157969-28	SMW-3	101	96	87	101
680-157969-28 - DL	SMW-3	97	101	99	98
680-157969-29	SMW-4	99	97	89	102
680-157969-30	Equipment Blank	97	108	96	103
680-157969-31	Trip Blank	95	107	97	104
LCS 680-540258/3	Lab Control Sample	97	103	97	104
LCS 680-540261/4	Lab Control Sample	96	96	89	97
LCS 680-540411/4	Lab Control Sample	99	101	93	100
LCS 680-540656/5	Lab Control Sample	97	98	90	98
LCSD 680-540258/4	Lab Control Sample Dup	97	103	97	105
LCSD 680-540261/5	Lab Control Sample Dup	97	96	88	98
LCSD 680-540411/5	Lab Control Sample Dup	99	100	92	102
LCSD 680-540656/6	Lab Control Sample Dup	98	100	94	98
MB 680-540258/10	Method Blank	97	112	101	106
MB 680-540261/9	Method Blank	98	95	88	102
MB 680-540411/10	Method Blank	99	96	89	102
MB 680-540656/9	Method Blank	99	96	89	103

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 09:52	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 09:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

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			09/21/18 09:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/18 09:52	1
Dibromofluoromethane (Surr)	112		80 - 122		09/21/18 09:52	1
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/21/18 09:52	1
Toluene-d8 (Surr)	106		80 - 120		09/21/18 09:52	1

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.228		mg/L		91	70 - 135
Benzene	0.0500	0.0492		mg/L		98	80 - 120
Bromodichloromethane	0.0500	0.0501		mg/L		100	80 - 120
Bromoform	0.0500	0.0467		mg/L		93	74 - 126
Bromomethane	0.0500	0.0401		mg/L		80	62 - 130
2-Butanone	0.250	0.214		mg/L		85	80 - 131
Carbon disulfide	0.0500	0.0519		mg/L		104	80 - 120
Carbon tetrachloride	0.0500	0.0534		mg/L		107	76 - 123
Chlorobenzene	0.0500	0.0486		mg/L		97	80 - 120
Chloroethane	0.0500	0.0456		mg/L		91	66 - 135
Chloroform	0.0500	0.0496		mg/L		99	80 - 120
Chloromethane	0.0500	0.0481		mg/L		96	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0501		mg/L		100	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0515		mg/L		103	80 - 120
Cyclohexane	0.0500	0.0503		mg/L		101	80 - 120
Dibromochloromethane	0.0500	0.0502		mg/L		100	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0447		mg/L		89	71 - 134
1,2-Dibromoethane	0.0500	0.0471		mg/L		94	80 - 120
1,2-Dichlorobenzene	0.0500	0.0521		mg/L		104	80 - 120
1,3-Dichlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0559		mg/L		112	47 - 155
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0512		mg/L		102	80 - 120
1,1-Dichloroethene	0.0500	0.0549		mg/L		110	76 - 120
1,2-Dichloropropane	0.0500	0.0474		mg/L		95	80 - 120
Ethylbenzene	0.0500	0.0469		mg/L		94	80 - 120
2-Hexanone	0.250	0.212		mg/L		85	74 - 127
Isopropylbenzene	0.0500	0.0457		mg/L		91	80 - 120
Methyl acetate	0.100	0.0881		mg/L		88	45 - 158
Methylcyclohexane	0.0500	0.0517		mg/L		103	85 - 122
Methylene Chloride	0.0500	0.0501		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124
Methyl tert-butyl ether	0.0500	0.0527		mg/L		105	80 - 120
Naphthalene	0.0500	0.0489		mg/L		98	59 - 140

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.0500	0.0454		mg/L		91	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0439		mg/L		88	80 - 120
Tetrachloroethene	0.0500	0.0529		mg/L		106	80 - 121
Toluene	0.0500	0.0503		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0534		mg/L		107	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0528		mg/L		106	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0545		mg/L		109	68 - 128
1,1,1-Trichloroethane	0.0500	0.0530		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0538		mg/L		108	80 - 120
Trichloroethene	0.0500	0.0520		mg/L		104	80 - 120
Trichlorofluoromethane	0.0500	0.0606		mg/L		121	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0566		mg/L		113	79 - 124
Vinyl chloride	0.0500	0.0527		mg/L		105	71 - 128
Xylenes, Total	0.100	0.0910		mg/L		91	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.218		mg/L		87	70 - 135	5	30
Benzene	0.0500	0.0484		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0494		mg/L		99	80 - 120	2	20
Bromoform	0.0500	0.0467		mg/L		93	74 - 126	0	20
Bromomethane	0.0500	0.0396		mg/L		79	62 - 130	1	20
2-Butanone	0.250	0.206		mg/L		82	80 - 131	4	20
Carbon disulfide	0.0500	0.0516		mg/L		103	80 - 120	1	20
Carbon tetrachloride	0.0500	0.0542		mg/L		108	76 - 123	1	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0447		mg/L		89	66 - 135	2	20
Chloroform	0.0500	0.0497		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0397		mg/L		79	69 - 131	19	30
cis-1,2-Dichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	0	20
Cyclohexane	0.0500	0.0505		mg/L		101	80 - 120	0	20
Dibromochloromethane	0.0500	0.0498		mg/L		100	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0423		mg/L		85	71 - 134	5	20
1,2-Dibromoethane	0.0500	0.0472		mg/L		94	80 - 120	0	20
1,2-Dichlorobenzene	0.0500	0.0514		mg/L		103	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

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
Dichlorodifluoromethane	0.0500	0.0551		mg/L		110	47 - 155	1	40	
1,1-Dichloroethane	0.0500	0.0520		mg/L		104	80 - 120	3	20	
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	0	50	
1,1-Dichloroethene	0.0500	0.0572		mg/L		114	76 - 120	4	20	
1,2-Dichloropropane	0.0500	0.0481		mg/L		96	80 - 120	1	20	
Ethylbenzene	0.0500	0.0487		mg/L		97	80 - 120	4	20	
2-Hexanone	0.250	0.205		mg/L		82	74 - 127	3	20	
Isopropylbenzene	0.0500	0.0465		mg/L		93	80 - 120	2	20	
Methyl acetate	0.100	0.0847		mg/L		85	45 - 158	4	20	
Methylcyclohexane	0.0500	0.0523		mg/L		105	85 - 122	1	20	
Methylene Chloride	0.0500	0.0491		mg/L		98	80 - 120	2	20	
4-Methyl-2-pentanone	0.250	0.214		mg/L		86	76 - 124	4	20	
Methyl tert-butyl ether	0.0500	0.0517		mg/L		103	80 - 120	2	20	
Naphthalene	0.0500	0.0475		mg/L		95	59 - 140	3	20	
Styrene	0.0500	0.0468		mg/L		94	80 - 120	3	20	
1,1,2,2-Tetrachloroethane	0.0500	0.0422		mg/L		84	80 - 120	4	20	
Tetrachloroethene	0.0500	0.0536		mg/L		107	80 - 121	1	20	
Toluene	0.0500	0.0514		mg/L		103	80 - 113	2	20	
trans-1,2-Dichloroethene	0.0500	0.0544		mg/L		109	80 - 120	2	20	
trans-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	2	30	
1,2,4-Trichlorobenzene	0.0500	0.0537		mg/L		107	68 - 128	2	20	
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20	
1,1,2-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	3	20	
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20	
Trichlorofluoromethane	0.0500	0.0616		mg/L		123	60 - 141	2	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0588		mg/L		118	79 - 124	4	20	
Vinyl chloride	0.0500	0.0486		mg/L		97	71 - 128	8	20	
Xylenes, Total	0.100	0.0946		mg/L		95	80 - 120	4	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: MB 680-540261/9

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 12:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 12:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 12:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 12:52	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 12:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		80 - 120		09/21/18 12:52	1
Dibromofluoromethane (Surr)	95		80 - 122		09/21/18 12:52	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/21/18 12:52	1
Toluene-d8 (Surr)	102		80 - 120		09/21/18 12:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.223		mg/L		89	70 - 135
Benzene	0.0500	0.0481		mg/L		96	80 - 120
Bromodichloromethane	0.0500	0.0509		mg/L		102	80 - 120
Bromoform	0.0500	0.0508		mg/L		102	74 - 126
Bromomethane	0.0500	0.0484		mg/L		97	62 - 130
2-Butanone	0.250	0.208		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123
Chlorobenzene	0.0500	0.0494		mg/L		99	80 - 120
Chloroethane	0.0500	0.0497		mg/L		99	66 - 135
Chloroform	0.0500	0.0493		mg/L		99	80 - 120
Chloromethane	0.0500	0.0486		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0495		mg/L		99	80 - 120
Cyclohexane	0.0500	0.0534		mg/L		107	80 - 120
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0461		mg/L		92	71 - 134
1,2-Dibromoethane	0.0500	0.0460		mg/L		92	80 - 120
1,2-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0493		mg/L		99	80 - 120
Dichlorodifluoromethane	0.0500	0.0602		mg/L		120	47 - 155
1,1-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1,1-Dichloroethene	0.0500	0.0509		mg/L		102	76 - 120
1,2-Dichloropropane	0.0500	0.0511		mg/L		102	80 - 120
Ethylbenzene	0.0500	0.0512		mg/L		102	80 - 120
2-Hexanone	0.250	0.204		mg/L		81	74 - 127
Isopropylbenzene	0.0500	0.0516		mg/L		103	80 - 120
Methyl acetate	0.100	0.0809		mg/L		81	45 - 158
Methylcyclohexane	0.0500	0.0584		mg/L		117	85 - 122
Methylene Chloride	0.0500	0.0498		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0460		mg/L		92	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0542		mg/L		108	80 - 120
1,1,1,2-Tetrachloroethane	0.0500	0.0453		mg/L		91	80 - 120
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121
Toluene	0.0500	0.0495		mg/L		99	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0485		mg/L		97	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0480		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0508		mg/L		102	80 - 120
1,1,2-Trichloroethane	0.0500	0.0461		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0551		mg/L		110	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0556		mg/L		111	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCS 680-540261/4

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	89		73 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
Acetone	0.250	0.230		mg/L		92	70 - 135	3	30
Benzene	0.0500	0.0479		mg/L		96	80 - 120	0	20
Bromodichloromethane	0.0500	0.0513		mg/L		103	80 - 120	1	20
Bromoform	0.0500	0.0518		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0489		mg/L		98	62 - 130	1	20
2-Butanone	0.250	0.214		mg/L		86	80 - 131	3	20
Carbon disulfide	0.0500	0.0501		mg/L		100	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0529		mg/L		106	76 - 123	0	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135	2	20
Chloroform	0.0500	0.0493		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0465		mg/L		93	69 - 131	4	30
cis-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0554		mg/L		111	80 - 120	4	20
Dibromochloromethane	0.0500	0.0477		mg/L		95	80 - 121	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0473		mg/L		95	71 - 134	3	20
1,2-Dibromoethane	0.0500	0.0464		mg/L		93	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0508		mg/L		102	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0496		mg/L		99	80 - 120	1	20
Dichlorodifluoromethane	0.0500	0.0582		mg/L		116	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0501		mg/L		100	80 - 120	0	20
1,2-Dichloroethane	0.0500	0.0494		mg/L		99	80 - 120	1	50
1,1-Dichloroethene	0.0500	0.0516		mg/L		103	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0518		mg/L		104	80 - 120	1	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.207		mg/L		83	74 - 127	2	20
Isopropylbenzene	0.0500	0.0515		mg/L		103	80 - 120	0	20
Methyl acetate	0.100	0.0825		mg/L		82	45 - 158	2	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0504		mg/L		101	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.222		mg/L		89	76 - 124	3	20
Methyl tert-butyl ether	0.0500	0.0465		mg/L		93	80 - 120	1	20
Naphthalene	0.0500	0.0446		mg/L		89	59 - 140	2	20
Styrene	0.0500	0.0548		mg/L		110	80 - 120	1	20
1,1,1,2-Tetrachloroethane	0.0500	0.0460		mg/L		92	80 - 120	2	20
Tetrachloroethene	0.0500	0.0504		mg/L		101	80 - 121	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCSD 680-540261/5

Matrix: Water

Analysis Batch: 540261

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		
Toluene	0.0500	0.0496		mg/L		99	80 - 113	0	20	
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20	
trans-1,3-Dichloropropene	0.0500	0.0477		mg/L		95	80 - 120	2	30	
1,2,4-Trichlorobenzene	0.0500	0.0488		mg/L		98	68 - 128	2	20	
1,1,1-Trichloroethane	0.0500	0.0506		mg/L		101	80 - 120	0	20	
1,1,2-Trichloroethane	0.0500	0.0459		mg/L		92	80 - 120	0	20	
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20	
Trichlorofluoromethane	0.0500	0.0554		mg/L		111	60 - 141	0	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0567		mg/L		113	79 - 124	2	20	
Vinyl chloride	0.0500	0.0521		mg/L		104	71 - 128	1	20	
Xylenes, Total	0.100	0.103		mg/L		103	80 - 120	0	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	88		73 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 680-540411/10

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L		09/22/18 12:44	1	
Benzene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Bromodichloromethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Bromoform	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Bromomethane	0.0050	U	0.0050		mg/L		09/22/18 12:44	1	
2-Butanone	0.010	U	0.010		mg/L		09/22/18 12:44	1	
Carbon disulfide	0.0020	U	0.0020		mg/L		09/22/18 12:44	1	
Carbon tetrachloride	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Chlorobenzene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Chloroethane	0.0050	U	0.0050		mg/L		09/22/18 12:44	1	
Chloroform	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Chloromethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Cyclohexane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Dibromochloromethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L		09/22/18 12:44	1	
1,2-Dibromoethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
1,1-Dichloroethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	
1,2-Dichloroethane	0.0010	U	0.0010		mg/L		09/22/18 12:44	1	

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: MB 680-540411/10

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 12:44	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 12:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 12:44	1
Dibromofluoromethane (Surr)	96		80 - 122		09/22/18 12:44	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/22/18 12:44	1
Toluene-d8 (Surr)	102		80 - 120		09/22/18 12:44	1

Lab Sample ID: LCS 680-540411/4

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.230		mg/L		92	70 - 135
Benzene	0.0500	0.0496		mg/L		99	80 - 120
Bromodichloromethane	0.0500	0.0526		mg/L		105	80 - 120
Bromoform	0.0500	0.0530		mg/L		106	74 - 126
Bromomethane	0.0500	0.0493		mg/L		99	62 - 130
2-Butanone	0.250	0.216		mg/L		87	80 - 131
Carbon disulfide	0.0500	0.0513		mg/L		103	80 - 120
Carbon tetrachloride	0.0500	0.0551		mg/L		110	76 - 123
Chlorobenzene	0.0500	0.0517		mg/L		103	80 - 120
Chloroethane	0.0500	0.0496		mg/L		99	66 - 135
Chloroform	0.0500	0.0520		mg/L		104	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCS 680-540411/4

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	0.0500	0.0487		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0513		mg/L		103	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0504		mg/L		101	80 - 120
Cyclohexane	0.0500	0.0569		mg/L		114	80 - 120
Dibromochloromethane	0.0500	0.0493		mg/L		99	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0489		mg/L		98	71 - 134
1,2-Dibromoethane	0.0500	0.0463		mg/L		93	80 - 120
1,2-Dichlorobenzene	0.0500	0.0516		mg/L		103	80 - 120
1,3-Dichlorobenzene	0.0500	0.0518		mg/L		104	80 - 120
1,4-Dichlorobenzene	0.0500	0.0509		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0635		mg/L		127	47 - 155
1,1-Dichloroethane	0.0500	0.0521		mg/L		104	80 - 120
1,2-Dichloroethane	0.0500	0.0521		mg/L		104	80 - 120
1,1-Dichloroethene	0.0500	0.0530		mg/L		106	76 - 120
1,2-Dichloropropane	0.0500	0.0529		mg/L		106	80 - 120
Ethylbenzene	0.0500	0.0530		mg/L		106	80 - 120
2-Hexanone	0.250	0.205		mg/L		82	74 - 127
Isopropylbenzene	0.0500	0.0534		mg/L		107	80 - 120
Methyl acetate	0.100	0.0843		mg/L		84	45 - 158
Methylcyclohexane	0.0500	0.0609		mg/L		122	85 - 122
Methylene Chloride	0.0500	0.0520		mg/L		104	80 - 120
4-Methyl-2-pentanone	0.250	0.220		mg/L		88	76 - 124
Methyl tert-butyl ether	0.0500	0.0480		mg/L		96	80 - 120
Naphthalene	0.0500	0.0443		mg/L		89	59 - 140
Styrene	0.0500	0.0566		mg/L		113	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0473		mg/L		95	80 - 120
Tetrachloroethene	0.0500	0.0510		mg/L		102	80 - 121
Toluene	0.0500	0.0506		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0506		mg/L		101	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0491		mg/L		98	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0481		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120
1,1,2-Trichloroethane	0.0500	0.0465		mg/L		93	80 - 120
Trichloroethene	0.0500	0.0530		mg/L		106	80 - 120
Trichlorofluoromethane	0.0500	0.0583		mg/L		117	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0599		mg/L		120	79 - 124
Vinyl chloride	0.0500	0.0529		mg/L		106	71 - 128
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
1,2-Dichloroethane-d4 (Surr)	93		73 - 131
Toluene-d8 (Surr)	100		80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCSD 680-540411/5

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
Acetone	0.250	0.231		mg/L		92	70 - 135	0	30
Benzene	0.0500	0.0486		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0522		mg/L		104	80 - 120	1	20
Bromoform	0.0500	0.0521		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0500		mg/L		100	62 - 130	1	20
2-Butanone	0.250	0.216		mg/L		87	80 - 131	0	20
Carbon disulfide	0.0500	0.0512		mg/L		102	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0538		mg/L		108	76 - 123	2	20
Chlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
Chloroethane	0.0500	0.0503		mg/L		101	66 - 135	1	20
Chloroform	0.0500	0.0513		mg/L		103	80 - 120	1	20
Chloromethane	0.0500	0.0485		mg/L		97	69 - 131	0	30
cis-1,2-Dichloroethene	0.0500	0.0505		mg/L		101	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0561		mg/L		112	80 - 120	1	20
Dibromochloromethane	0.0500	0.0488		mg/L		98	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134	2	20
1,2-Dibromoethane	0.0500	0.0459		mg/L		92	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0623		mg/L		125	47 - 155	2	40
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120	3	20
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	2	50
1,1-Dichloroethene	0.0500	0.0527		mg/L		105	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0529		mg/L		106	80 - 120	0	20
Ethylbenzene	0.0500	0.0529		mg/L		106	80 - 120	0	20
2-Hexanone	0.250	0.209		mg/L		84	74 - 127	2	20
Isopropylbenzene	0.0500	0.0529		mg/L		106	80 - 120	1	20
Methyl acetate	0.100	0.0843		mg/L		84	45 - 158	0	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	1	20
Methylene Chloride	0.0500	0.0521		mg/L		104	80 - 120	0	20
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124	2	20
Methyl tert-butyl ether	0.0500	0.0476		mg/L		95	80 - 120	1	20
Naphthalene	0.0500	0.0442		mg/L		88	59 - 140	0	20
Styrene	0.0500	0.0567		mg/L		113	80 - 120	0	20
1,1,2,2-Tetrachloroethane	0.0500	0.0478		mg/L		96	80 - 120	1	20
Tetrachloroethene	0.0500	0.0516		mg/L		103	80 - 121	1	20
Toluene	0.0500	0.0505		mg/L		101	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0509		mg/L		102	80 - 120	0	20
trans-1,3-Dichloropropene	0.0500	0.0492		mg/L		98	80 - 120	0	30
1,2,4-Trichlorobenzene	0.0500	0.0485		mg/L		97	68 - 128	1	20
1,1,1-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	0	20
1,1,2-Trichloroethane	0.0500	0.0458		mg/L		92	80 - 120	2	20
Trichloroethene	0.0500	0.0532		mg/L		106	80 - 120	0	20
Trichlorofluoromethane	0.0500	0.0582		mg/L		116	60 - 141	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0587		mg/L		117	79 - 124	2	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCSD 680-540411/5

Matrix: Water

Analysis Batch: 540411

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	0.0530		mg/L		106	71 - 128	0	20
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
1,2-Dichloroethane-d4 (Surr)	92		73 - 131
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: MB 680-540656/9

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Benzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromoform	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromomethane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
2-Butanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/25/18 10:56	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chloroethane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Chloroform	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
2-Hexanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/25/18 10:56	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: MB 680-540656/9

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Styrene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Toluene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/25/18 10:56	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		80 - 120		09/25/18 10:56	1
Dibromofluoromethane (Surr)	96		80 - 122		09/25/18 10:56	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/25/18 10:56	1
Toluene-d8 (Surr)	103		80 - 120		09/25/18 10:56	1

Lab Sample ID: LCS 680-540656/5

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.220		mg/L		88	70 - 135
Benzene	0.0500	0.0476		mg/L		95	80 - 120
Bromodichloromethane	0.0500	0.0517		mg/L		103	80 - 120
Bromoform	0.0500	0.0536		mg/L		107	74 - 126
Bromomethane	0.0500	0.0460		mg/L		92	62 - 130
2-Butanone	0.250	0.206		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0509		mg/L		102	80 - 120
Carbon tetrachloride	0.0500	0.0552		mg/L		110	76 - 123
Chlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135
Chloroform	0.0500	0.0497		mg/L		99	80 - 120
Chloromethane	0.0500	0.0468		mg/L		94	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0492		mg/L		98	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120
Cyclohexane	0.0500	0.0579		mg/L		116	80 - 120
Dibromochloromethane	0.0500	0.0489		mg/L		98	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134
1,2-Dibromoethane	0.0500	0.0454		mg/L		91	80 - 120
1,2-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120
1,3-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0487		mg/L		97	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCS 680-540656/5

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0648		mg/L		130	47 - 155
1,1-Dichloroethane	0.0500	0.0492		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0529		mg/L		106	76 - 120
1,2-Dichloropropane	0.0500	0.0505		mg/L		101	80 - 120
Ethylbenzene	0.0500	0.0524		mg/L		105	80 - 120
2-Hexanone	0.250	0.204		mg/L		82	74 - 127
Isopropylbenzene	0.0500	0.0526		mg/L		105	80 - 120
Methyl acetate	0.100	0.0803		mg/L		80	45 - 158
Methylcyclohexane	0.0500	0.0622	*	mg/L		124	85 - 122
Methylene Chloride	0.0500	0.0494		mg/L		99	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0469		mg/L		94	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0552		mg/L		110	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0459		mg/L		92	80 - 120
Tetrachloroethene	0.0500	0.0514		mg/L		103	80 - 121
Toluene	0.0500	0.0498		mg/L		100	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0492		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0488		mg/L		98	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0479		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0531		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0458		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0598		mg/L		120	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0594		mg/L		119	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		80 - 122
1,2-Dichloroethane-d4 (Surr)	90		73 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.236		mg/L		94	70 - 135	7	30
Benzene	0.0500	0.0476		mg/L		95	80 - 120	0	20
Bromodichloromethane	0.0500	0.0523		mg/L		105	80 - 120	1	20
Bromoform	0.0500	0.0550		mg/L		110	74 - 126	3	20
Bromomethane	0.0500	0.0460		mg/L		92	62 - 130	0	20
2-Butanone	0.250	0.221		mg/L		88	80 - 131	7	20
Carbon disulfide	0.0500	0.0492		mg/L		98	80 - 120	3	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

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
Carbon tetrachloride	0.0500	0.0544		mg/L		109	76 - 123	1	20
Chlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	1	20
Chloroethane	0.0500	0.0480		mg/L		96	66 - 135	2	20
Chloroform	0.0500	0.0505		mg/L		101	80 - 120	2	20
Chloromethane	0.0500	0.0463		mg/L		93	69 - 131	1	30
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 120	0	20
Cyclohexane	0.0500	0.0566		mg/L		113	80 - 120	2	20
Dibromochloromethane	0.0500	0.0501		mg/L		100	80 - 121	2	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0503		mg/L		101	71 - 134	4	20
1,2-Dibromoethane	0.0500	0.0476		mg/L		95	80 - 120	5	20
1,2-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	0	20
1,3-Dichlorobenzene	0.0500	0.0507		mg/L		101	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120	3	20
Dichlorodifluoromethane	0.0500	0.0630		mg/L		126	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0495		mg/L		99	80 - 120	1	20
1,2-Dichloroethane	0.0500	0.0515		mg/L		103	80 - 120	3	50
1,1-Dichloroethene	0.0500	0.0514		mg/L		103	76 - 120	3	20
1,2-Dichloropropane	0.0500	0.0517		mg/L		103	80 - 120	2	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.215		mg/L		86	74 - 127	5	20
Isopropylbenzene	0.0500	0.0522		mg/L		104	80 - 120	1	20
Methyl acetate	0.100	0.0870		mg/L		87	45 - 158	8	20
Methylcyclohexane	0.0500	0.0602		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0492		mg/L		98	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.233		mg/L		93	76 - 124	8	20
Methyl tert-butyl ether	0.0500	0.0481		mg/L		96	80 - 120	3	20
Naphthalene	0.0500	0.0458		mg/L		92	59 - 140	4	20
Styrene	0.0500	0.0559		mg/L		112	80 - 120	1	20
1,1,2,2-Tetrachloroethane	0.0500	0.0472		mg/L		94	80 - 120	3	20
Tetrachloroethene	0.0500	0.0514		mg/L		103	80 - 121	0	20
Toluene	0.0500	0.0495		mg/L		99	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0505		mg/L		101	80 - 120	3	30
1,2,4-Trichlorobenzene	0.0500	0.0494		mg/L		99	68 - 128	3	20
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20
1,1,2-Trichloroethane	0.0500	0.0473		mg/L		95	80 - 120	3	20
Trichloroethene	0.0500	0.0516		mg/L		103	80 - 120	2	20
Trichlorofluoromethane	0.0500	0.0592		mg/L		118	60 - 141	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0599		mg/L		120	79 - 124	1	20
Vinyl chloride	0.0500	0.0516		mg/L		103	71 - 128	2	20
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
1,2-Dichloroethane-d4 (Surr)	94		73 - 131

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

<i>Surrogate</i>	<i>LCSD</i> <i>%Recovery</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Limits</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120

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QC Association Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

GC/MS VOA

Analysis Batch: 540258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-30	Equipment Blank	Total/NA	Water	8260B	
680-157969-31	Trip Blank	Total/NA	Water	8260B	
MB 680-540258/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540258/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540258/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-25	SMW-1	Total/NA	Water	8260B	
MB 680-540261/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540261/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540261/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-26	SRW-1	Total/NA	Water	8260B	
680-157969-27	SMW-2	Total/NA	Water	8260B	
680-157969-28	SMW-3	Total/NA	Water	8260B	
680-157969-29	SMW-4	Total/NA	Water	8260B	
MB 680-540411/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540411/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540411/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-26 - DL	SRW-1	Total/NA	Water	8260B	
680-157969-28 - DL	SMW-3	Total/NA	Water	8260B	
MB 680-540656/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540656/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540656/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: SMW-1
Date Collected: 09/11/18 10:15
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540261	09/21/18 19:28	Y1S	TAL SAV

Client Sample ID: SRW-1
Date Collected: 09/11/18 09:15
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 16:25	Y1S	TAL SAV
Total/NA	Analysis	8260B	DL	5	540656	09/25/18 18:46	EMA	TAL SAV

Client Sample ID: SMW-2
Date Collected: 09/11/18 10:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 16:49	Y1S	TAL SAV

Client Sample ID: SMW-3
Date Collected: 09/11/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-28
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 16:00	Y1S	TAL SAV
Total/NA	Analysis	8260B	DL	10	540656	09/25/18 19:11	EMA	TAL SAV

Client Sample ID: SMW-4
Date Collected: 09/10/18 18:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-29
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 14:46	Y1S	TAL SAV

Client Sample ID: Equipment Blank
Date Collected: 09/11/18 00:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540258	09/21/18 10:50	JLK	TAL SAV

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540258	09/21/18 11:12	JLK	TAL SAV

Laboratory References:

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

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Serial Number 120606

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

THE LEADER IN ENVIRONMENTAL TESTING

PROJECT REFERENCE <i>Earthlon - SCLHEM</i>		PROJECT NO. <i>02.20180044.01</i>	PROJECT LOCATION (STATE) <i>GA</i>	MATRIX TYPE	REQUIRED ANALYSIS	PAGE 1 of 1
TAL (LAB) PROJECT MANAGER <i>Jerry Lavender</i>		P.O. NUMBER	CONTRACT NO.	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	STANDARD REPORT DELIVERY	
CLIENT (SITE) PM <i>Jeffrey Madalon</i>		CLIENT PHONE <i>(770) 388-5232</i>	CLIENT FAX	AIR	DATE DUE	<input checked="" type="checkbox"/>
CLIENT NAME <i>Earthlon</i>		CLIENT E-MAIL <i>jmadalon@earthlon.com</i>		AQUEOUS (WATER)	EXPEDITED REPORT DELIVERY (SURCHARGE)	<input type="checkbox"/>
CLIENT ADDRESS <i>1480 West Oak Pkwy Marietta, GA, 30062</i>		COMPANY CONTRACTING THIS WORK (if applicable) <i>Grant Cement Holdings Inc.</i>		COMPOSITE (C) OR GRAB (G) INDICATE	DATE DUE	
SAMPLE		SAMPLE IDENTIFICATION			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:	
DATE	TIME					
<i>9/11/18</i>	<i>10:15</i>	<i>SMW-1</i>		<i>GW</i>	<i>36</i>	
<i>9/11/18</i>	<i>09:15</i>	<i>SRW-1</i>		<i>GW</i>	<i>3</i>	
<i>9/11/18</i>	<i>10:45</i>	<i>SMW-2</i>		<i>GW</i>	<i>3</i>	
<i>9/11/18</i>	<i>11:45</i>	<i>SMW-3</i>		<i>GW</i>	<i>3</i>	
<i>9/10/18</i>	<i>18:00</i>	<i>SMW-4</i>		<i>GW</i>	<i>3</i>	
<i>9/11/18</i>	<i>---</i>	<i>Equipment Blank</i>		<i>GW</i>	<i>3</i>	
		<i>Trip blank</i>			<i>2</i>	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	DATE
<i>[Signature]</i>	<i>9/13/18</i>	<i>13:05</i>	<i>[Signature]</i>	<i>9/13/18</i>	<i>13:18p</i>	
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	DATE
<i>[Signature]</i>	<i>9/13/18</i>	<i>13:05p</i>	<i>[Signature]</i>			
RECEIVED FOR LABORATORY BY: (SIGNATURE)				LABORATORY USE ONLY		
<i>[Signature]</i>				CUSTODY SEAL NO.	CUSTODY INTACT	SAVANNAH LOG NO.
					YES <input type="checkbox"/>	
					NO <input type="checkbox"/>	
				DATE	TIME	LABORATORY REMARKS
				<i>9-14-18</i>	<i>700</i>	<i>1.3/1.5 3.8/4.0</i>



TAL8240-680 (1009)

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-7

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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

Accreditation/Certification Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-7

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
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: 680-157969-8

Client Project/Site: EarthCon - SECHEM

For:

Giant Cement

654 Judge Street

PO BOX 218

Harleyville, South Carolina 29448

Attn: Rachel Odzer



Authorized for release by:

9/25/2018 4:39:45 PM

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LINKS

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

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

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

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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Job ID: 680-157969-8

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-8

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SMW-1 (680-157969-25), SRW-1 (680-157969-26), SMW-2 (680-157969-27), SMW-3 (680-157969-28), SMW-4 (680-157969-29), Equipment Blank (680-157969-30) and Trip Blank (680-157969-31) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 09/21/2018, 09/24/2018 and 09/25/2018.

1,4-Dioxane was detected in method blank MB 310-216453/19 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,4-Dioxane was detected in method blank MB 310-216626/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Reanalysis of the following sample was performed outside of the analytical holding time to confirm a hit for 1,4-Dioxane : Trip Blank (680-157969-31).

Samples SMW-2 (680-157969-27)[10X] and SMW-3 (680-157969-28)[20X] 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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-25	SMW-1	Water	09/11/18 10:15	09/14/18 07:00
680-157969-26	SRW-1	Water	09/11/18 09:15	09/14/18 07:00
680-157969-27	SMW-2	Water	09/11/18 10:45	09/14/18 07:00
680-157969-28	SMW-3	Water	09/11/18 11:45	09/14/18 07:00
680-157969-29	SMW-4	Water	09/10/18 18:00	09/14/18 07:00
680-157969-30	Equipment Blank	Water	09/11/18 00:00	09/14/18 07:00
680-157969-31	Trip Blank	Water	09/10/18 00:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CF
5030B	Purge and Trap	SW846	TAL CF

Protocol References:

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

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Definitions/Glossary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time
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.
α	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SMW-1

Lab Sample ID: 680-157969-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0021	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SRW-1

Lab Sample ID: 680-157969-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.025	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: SMW-2

Lab Sample ID: 680-157969-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.12		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: SMW-3

Lab Sample ID: 680-157969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.51		0.020	0.0060	mg/L	20		8260B SIM	Total/NA

Client Sample ID: SMW-4

Lab Sample ID: 680-157969-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0087	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Equipment Blank

Lab Sample ID: 680-157969-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.00071	J B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0015	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SMW-1

Lab Sample ID: 680-157969-25

Date Collected: 09/11/18 10:15

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0021	B	0.0010	0.00030	mg/L			09/25/18 03:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 03:00	1
Dibromofluoromethane (Surr)	101		80 - 120					09/25/18 03:00	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 03:00	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SRW-1

Lab Sample ID: 680-157969-26

Date Collected: 09/11/18 09:15

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.025	B	0.0010	0.00030	mg/L			09/25/18 03:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/25/18 03:24	1
Dibromofluoromethane (Surr)	103		80 - 120					09/25/18 03:24	1
Toluene-d8 (Surr)	98		80 - 120					09/25/18 03:24	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SMW-2
Date Collected: 09/11/18 10:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-27
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.12		0.010	0.0030	mg/L			09/25/18 12:39	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120					09/25/18 03:48	1
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 12:39	10
Dibromofluoromethane (Surr)	102		80 - 120					09/25/18 03:48	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 12:39	10
Toluene-d8 (Surr)	99		80 - 120					09/25/18 03:48	1
Toluene-d8 (Surr)	98		80 - 120					09/25/18 12:39	10



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SMW-3
Date Collected: 09/11/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-28
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.51		0.020	0.0060	mg/L			09/25/18 13:03	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		80 - 120					09/25/18 04:12	1
4-Bromofluorobenzene (Surr)	99		80 - 120					09/25/18 13:03	20
Dibromofluoromethane (Surr)	89		80 - 120					09/25/18 04:12	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 13:03	20
Toluene-d8 (Surr)	103		80 - 120					09/25/18 04:12	1
Toluene-d8 (Surr)	102		80 - 120					09/25/18 13:03	20



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SMW-4
Date Collected: 09/10/18 18:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-29
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0087	B	0.0010	0.00030	mg/L			09/21/18 23:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/21/18 23:01	1
Dibromofluoromethane (Surr)	102		80 - 120					09/21/18 23:01	1
Toluene-d8 (Surr)	99		80 - 120					09/21/18 23:01	1

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Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: Equipment Blank

Lab Sample ID: 680-157969-30

Date Collected: 09/11/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00071	J B	0.0010	0.00030	mg/L			09/21/18 23:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/21/18 23:25	1
Dibromofluoromethane (Surr)	100		80 - 120					09/21/18 23:25	1
Toluene-d8 (Surr)	101		80 - 120					09/21/18 23:25	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0015	B	0.0010	0.00030	mg/L			09/21/18 18:13	1
1,4-Dioxane	0.00030	U H	0.0010	0.00030	mg/L			09/24/18 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/21/18 18:13	1
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 23:48	1
Dibromofluoromethane (Surr)	98		80 - 120					09/21/18 18:13	1
Dibromofluoromethane (Surr)	100		80 - 120					09/24/18 23:48	1
Toluene-d8 (Surr)	98		80 - 120					09/21/18 18:13	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 23:48	1

Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (80-120)	TOL (80-120)
680-157969-25	SMW-1	100	101	99
680-157969-26	SRW-1	101	103	98
680-157969-27	SMW-2	97	102	99
680-157969-27	SMW-2	100	100	98
680-157969-28	SMW-3	96	89	103
680-157969-28	SMW-3	99	100	102
680-157969-29	SMW-4	101	102	99
680-157969-30	Equipment Blank	101	100	101
680-157969-31	Trip Blank	100	98	98
680-157969-31	Trip Blank	100	100	99
LCS 310-216453/20	Lab Control Sample	100	98	100
LCS 310-216626/6	Lab Control Sample	99	100	99
LCS 310-216754/6	Lab Control Sample	99	101	99
LCSD 310-216453/21	Lab Control Sample Dup	99	98	100
LCSD 310-216626/7	Lab Control Sample Dup	100	100	100
LCSD 310-216754/7	Lab Control Sample Dup	99	100	99
MB 310-216453/19	Method Blank	100	98	100
MB 310-216626/5	Method Blank	100	100	99
MB 310-216754/5	Method Blank	100	100	99

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

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

Lab Sample ID: MB 310-216453/19

Matrix: Water

Analysis Batch: 216453

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	0.000401	J	0.0010	0.00030	mg/L			09/21/18 17:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		80 - 120				09/21/18 17:01	1	
Dibromofluoromethane (Surr)	98		80 - 120				09/21/18 17:01	1	
Toluene-d8 (Surr)	100		80 - 120				09/21/18 17:01	1	

Lab Sample ID: LCS 310-216453/20

Matrix: Water

Analysis Batch: 216453

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	0.00400	0.00325		mg/L		81	49 - 150
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		80 - 120				
Dibromofluoromethane (Surr)	98		80 - 120				
Toluene-d8 (Surr)	100		80 - 120				

Lab Sample ID: LCSD 310-216453/21

Matrix: Water

Analysis Batch: 216453

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
1,4-Dioxane	0.00400	0.00443		mg/L		111	49 - 150	31	35
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	98		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

Lab Sample ID: MB 310-216626/5

Matrix: Water

Analysis Batch: 216626

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	0.000499	J	0.0010	0.00030	mg/L			09/24/18 22:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		80 - 120				09/24/18 22:12	1	
Dibromofluoromethane (Surr)	100		80 - 120				09/24/18 22:12	1	
Toluene-d8 (Surr)	99		80 - 120				09/24/18 22:12	1	

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

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

Lab Sample ID: LCS 310-216626/6

Matrix: Water

Analysis Batch: 216626

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	0.00400	0.00340		mg/L		85	49 - 150
Surrogate							
	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	100		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

Lab Sample ID: LCSD 310-216626/7

Matrix: Water

Analysis Batch: 216626

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
1,4-Dioxane	0.00400	0.00480		mg/L		120	49 - 150	34	35
Surrogate									
	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

Lab Sample ID: MB 310-216754/5

Matrix: Water

Analysis Batch: 216754

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	0.00030	U	0.0010	0.00030	mg/L			09/25/18 10:38	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/25/18 10:38	1
Dibromofluoromethane (Surr)	100		80 - 120					09/25/18 10:38	1
Toluene-d8 (Surr)	99		80 - 120					09/25/18 10:38	1

Lab Sample ID: LCS 310-216754/6

Matrix: Water

Analysis Batch: 216754

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	0.00400	0.00365		mg/L		91	49 - 150
Surrogate							
	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	101		80 - 120				
Toluene-d8 (Surr)	99		80 - 120				

QC Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

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

Lab Sample ID: LCSD 310-216754/7

Matrix: Water

Analysis Batch: 216754

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
1,4-Dioxane	0.00400	0.00471		mg/L		118	49 - 150	25	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

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QC Association Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

GC/MS VOA

Analysis Batch: 216453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-29	SMW-4	Total/NA	Water	8260B SIM	
680-157969-30	Equipment Blank	Total/NA	Water	8260B SIM	
680-157969-31	Trip Blank	Total/NA	Water	8260B SIM	
MB 310-216453/19	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216453/20	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216453/21	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-25	SMW-1	Total/NA	Water	8260B SIM	
680-157969-26	SRW-1	Total/NA	Water	8260B SIM	
680-157969-27	SMW-2	Total/NA	Water	8260B SIM	
680-157969-28	SMW-3	Total/NA	Water	8260B SIM	
680-157969-31	Trip Blank	Total/NA	Water	8260B SIM	
MB 310-216626/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216626/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216626/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-27	SMW-2	Total/NA	Water	8260B SIM	
680-157969-28	SMW-3	Total/NA	Water	8260B SIM	
MB 310-216754/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216754/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216754/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	



Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: SMW-1
Date Collected: 09/11/18 10:15
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 03:00	TRZ	TAL CF

Client Sample ID: SRW-1
Date Collected: 09/11/18 09:15
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 03:24	TRZ	TAL CF

Client Sample ID: SMW-2
Date Collected: 09/11/18 10:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 03:48	TRZ	TAL CF
Total/NA	Analysis	8260B SIM		10	216754	09/25/18 12:39	TRZ	TAL CF

Client Sample ID: SMW-3
Date Collected: 09/11/18 11:45
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-28
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216626	09/25/18 04:12	TRZ	TAL CF
Total/NA	Analysis	8260B SIM		20	216754	09/25/18 13:03	TRZ	TAL CF

Client Sample ID: SMW-4
Date Collected: 09/10/18 18:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-29
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/21/18 23:01	TRZ	TAL CF

Client Sample ID: Equipment Blank
Date Collected: 09/11/18 00:00
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/21/18 23:25	TRZ	TAL CF

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-31

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/21/18 18:13	TRZ	TAL CF
Total/NA	Analysis	8260B SIM		1	216626	09/24/18 23:48	TRZ	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

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Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Lanier, Jerry A	Carrier Tracking No(s):	COC No: 680-535475.1
Client Contact: Shipping/Receiving		E-Mail: jerry.lanier@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Florida		
Address: 704 Enterprise Drive,		Job #: 680-157969-8		
City: Cedar Falls	State: IA, 50613	Preservation Codes:		
Phone: 319-277-2401(Tel) 319-277-2425(Fax)	PO #:	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:		
Email:	WO #:	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)		
Project Name: EarthCon - SECHEM	Project #: 68002623	Total Number of containers		
Site:	SSOW#:	Special Instructions/Note:		
Sample Identification - Client ID (Lab ID)		Field Filtered Sample (Yes or No)		
SMW-1 (680-157969-25)	9/11/18	10:15 Eastern	Water	X
SRW-1 (680-157969-26)	9/11/18	09:15 Eastern	Water	X
SMW-2 (680-157969-27)	9/11/18	10:45 Eastern	Water	X
SMW-3 (680-157969-28)	9/11/18	11:45 Eastern	Water	X
SMW-4 (680-157969-29)	9/10/18	18:00 Eastern	Water	X
Equipment Blank (680-157969-30)	9/11/18	Eastern	Water	X
Trip Blank (680-157969-31)	9/10/18	Eastern	Water	2
<p>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/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>				
Possible Hazard Identification				
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Special Instructions/QC Requirements:				
Primary Deliverable Rank: 2				
Date: _____ Time: _____ Method of Shipment: _____				
Relinquished by: <i>V.S.P.</i>	Date/Time: 9-14-18 1624	Company: TA	Received by: <i>Kurt W. Fagan</i>	Date/Time: 9-15-18 920
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		
Cooler Temperature(s) °C and Other Remarks:				

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-8

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-8

Login Number: 157969

List Number: 2

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:39 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-8

Login Number: 157969

List Number: 3

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-8

Login Number: 157969

List Number: 4

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Cedar Falls

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

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-8

Laboratory: TestAmerica Cedar Falls (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-18
Illinois	NELAP	5	200024	11-29-18
Iowa	State Program	7	007	12-01-19
Kansas	NELAP	7	E-10341	01-31-19
Minnesota	NELAP	5	019-999-319	12-31-18
Minnesota (Petrofund)	State Program	1	3349	08-22-19
North Dakota	State Program	8	R-186	09-29-18
Oregon	NELAP	10	IA100001	09-29-18

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: 680-157969-9
Client Project/Site: EarthCon - SECHEM

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

Attn: Rachel Odzer



Authorized for release by:
9/27/2018 2:19:35 PM
Michele Kersey, Project Manager II
(912)250-0282
michele.kersey@testamericainc.com

Designee for
Jerry Lanier, Project Manager I
(912)250-0281
jerry.lanier@testamericainc.com

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

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

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



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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Job ID: 680-157969-9

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-9

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WMW-1 (680-157969-32), WMW-2 (680-157969-33), YMW-1 (680-157969-34), YMW-4 (680-157969-35), YMW-19 (680-157969-36) and Trip Blank (680-157969-37) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/21/2018, 09/22/2018, 09/24/2018 and 09/25/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540258.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540411.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540519.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-540656.

The laboratory control sample (LCS) for analytical batch 680-540656 recovered outside control limits for the following analytes: Methylcyclohexane. This analytes was biased high in the LCS and as not detected in the associated samples; therefore, the data have been reported.

Reanalysis of the following sample was performed outside of the analytical holding time: YMW-19 (680-157969-36).

Samples YMW-1 (680-157969-34)[2X] and YMW-19 (680-157969-36)[5X] 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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-32	WMW-1	Water	09/10/18 14:36	09/14/18 07:00
680-157969-33	WMW-2	Water	09/10/18 14:10	09/14/18 07:00
680-157969-34	YMW-1	Water	09/10/18 15:55	09/14/18 07:00
680-157969-35	YMW-4	Water	09/10/18 16:50	09/14/18 07:00
680-157969-36	YMW-19	Water	09/10/18 16:55	09/14/18 07:00
680-157969-37	Trip Blank	Water	09/10/18 00:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
5030B	Purge and Trap	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

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- 14
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Definitions/Glossary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: WMW-1

Lab Sample ID: 680-157969-32

No Detections.

Client Sample ID: WMW-2

Lab Sample ID: 680-157969-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chloroform	0.0015		0.0010		mg/L			1	8260B	Total/NA

Client Sample ID: YMW-1

Lab Sample ID: 680-157969-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.046		0.0020		mg/L			2	8260B	Total/NA
1,2-Dichlorobenzene	0.014		0.0020		mg/L			2	8260B	Total/NA
1,3-Dichlorobenzene	0.0043		0.0020		mg/L			2	8260B	Total/NA
1,4-Dichlorobenzene	0.0032		0.0020		mg/L			2	8260B	Total/NA
1,1-Dichloroethene	0.0052		0.0020		mg/L			2	8260B	Total/NA
Tetrachloroethene	0.072		0.0020		mg/L			2	8260B	Total/NA
1,1,1-Trichloroethane	0.0038		0.0020		mg/L			2	8260B	Total/NA
Trichloroethene	0.037		0.0020		mg/L			2	8260B	Total/NA

Client Sample ID: YMW-4

Lab Sample ID: 680-157969-35

No Detections.

Client Sample ID: YMW-19

Lab Sample ID: 680-157969-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.072		0.0010		mg/L			1	8260B	Total/NA
cis-1,2-Dichloroethene	0.075	H	0.0050		mg/L			5	8260B	Total/NA
1,1-Dichloroethane	0.010		0.0010		mg/L			1	8260B	Total/NA
1,1-Dichloroethane	0.011	H	0.0050		mg/L			5	8260B	Total/NA
1,2-Dichloroethane	0.039		0.0010		mg/L			1	8260B	Total/NA
1,2-Dichloroethane	0.046	H	0.0050		mg/L			5	8260B	Total/NA
1,1-Dichloroethene	0.025		0.0010		mg/L			1	8260B	Total/NA
1,1-Dichloroethene	0.018	H	0.0050		mg/L			5	8260B	Total/NA
Tetrachloroethene	0.13		0.0010		mg/L			1	8260B	Total/NA
Tetrachloroethene	0.11	H	0.0050		mg/L			5	8260B	Total/NA
Trichloroethene	0.22	E	0.0010		mg/L			1	8260B	Total/NA
Trichloroethene	0.21	H	0.0050		mg/L			5	8260B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-37

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: WMW-1

Lab Sample ID: 680-157969-32

Date Collected: 09/10/18 14:36

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 14:22	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 14:22	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 14:22	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 14:22	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 14:22	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 14:22	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 14:22	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 14:22	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 14:22	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: WMW-1

Date Collected: 09/10/18 14:36

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-32

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	100		80 - 120		09/22/18 14:22	1
Dibromofluoromethane (Surr)	97		80 - 122		09/22/18 14:22	1
1,2-Dichloroethane-d4 (Surr)	91		73 - 131		09/22/18 14:22	1
Toluene-d8 (Surr)	103		80 - 120		09/22/18 14:22	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: WMW-2

Lab Sample ID: 680-157969-33

Date Collected: 09/10/18 14:10

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 13:57	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 13:57	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 13:57	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
Chloroform	0.0015		0.0010		mg/L			09/22/18 13:57	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 13:57	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 13:57	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 13:57	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 13:57	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 13:57	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 13:57	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: WMW-2

Date Collected: 09/10/18 14:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-33

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	100		80 - 120		09/22/18 13:57	1
Dibromofluoromethane (Surr)	95		80 - 122		09/22/18 13:57	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/22/18 13:57	1
Toluene-d8 (Surr)	103		80 - 120		09/22/18 13:57	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-1

Lab Sample ID: 680-157969-34

Date Collected: 09/10/18 15:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.020	U	0.020		mg/L			09/22/18 15:36	2
Benzene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Bromodichloromethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Bromoform	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Bromomethane	0.010	U	0.010		mg/L			09/22/18 15:36	2
2-Butanone	0.020	U	0.020		mg/L			09/22/18 15:36	2
Carbon disulfide	0.0040	U	0.0040		mg/L			09/22/18 15:36	2
Carbon tetrachloride	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Chlorobenzene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Chloroethane	0.010	U	0.010		mg/L			09/22/18 15:36	2
Chloroform	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Chloromethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
cis-1,2-Dichloroethene	0.046		0.0020		mg/L			09/22/18 15:36	2
cis-1,3-Dichloropropene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Cyclohexane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Dibromochloromethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,2-Dibromo-3-Chloropropane	0.010	U	0.010		mg/L			09/22/18 15:36	2
1,2-Dibromoethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,2-Dichlorobenzene	0.014		0.0020		mg/L			09/22/18 15:36	2
1,3-Dichlorobenzene	0.0043		0.0020		mg/L			09/22/18 15:36	2
1,4-Dichlorobenzene	0.0032		0.0020		mg/L			09/22/18 15:36	2
Dichlorodifluoromethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,1-Dichloroethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,2-Dichloroethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,1-Dichloroethene	0.0052		0.0020		mg/L			09/22/18 15:36	2
1,2-Dichloropropane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Ethylbenzene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
2-Hexanone	0.020	U	0.020		mg/L			09/22/18 15:36	2
Isopropylbenzene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Methyl acetate	0.010	U	0.010		mg/L			09/22/18 15:36	2
Methylcyclohexane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Methylene Chloride	0.010	U	0.010		mg/L			09/22/18 15:36	2
4-Methyl-2-pentanone	0.020	U	0.020		mg/L			09/22/18 15:36	2
Methyl tert-butyl ether	0.020	U	0.020		mg/L			09/22/18 15:36	2
Naphthalene	0.010	U	0.010		mg/L			09/22/18 15:36	2
Styrene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,1,2,2-Tetrachloroethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Tetrachloroethene	0.072		0.0020		mg/L			09/22/18 15:36	2
Toluene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
trans-1,2-Dichloroethene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
trans-1,3-Dichloropropene	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,2,4-Trichlorobenzene	0.010	U	0.010		mg/L			09/22/18 15:36	2
1,1,1-Trichloroethane	0.0038		0.0020		mg/L			09/22/18 15:36	2
1,1,2-Trichloroethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Trichloroethene	0.037		0.0020		mg/L			09/22/18 15:36	2
Trichlorofluoromethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Vinyl chloride	0.0020	U	0.0020		mg/L			09/22/18 15:36	2
Xylenes, Total	0.0020	U	0.0020		mg/L			09/22/18 15:36	2

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-1

Date Collected: 09/10/18 15:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-34

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/22/18 15:36	2
Dibromofluoromethane (Surr)	105		80 - 122		09/22/18 15:36	2
1,2-Dichloroethane-d4 (Surr)	105		73 - 131		09/22/18 15:36	2
Toluene-d8 (Surr)	96		80 - 120		09/22/18 15:36	2

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-4

Lab Sample ID: 680-157969-35

Date Collected: 09/10/18 16:50

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/22/18 13:33	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 13:33	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 13:33	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 13:33	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 13:33	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 13:33	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 13:33	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 13:33	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 13:33	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-4
Date Collected: 09/10/18 16:50
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-35
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	98		80 - 120		09/22/18 13:33	1
Dibromofluoromethane (Surr)	95		80 - 122		09/22/18 13:33	1
1,2-Dichloroethane-d4 (Surr)	88		73 - 131		09/22/18 13:33	1
Toluene-d8 (Surr)	104		80 - 120		09/22/18 13:33	1

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-19

Lab Sample ID: 680-157969-36

Date Collected: 09/10/18 16:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/24/18 16:56	1
Acetone	0.050	U H	0.050		mg/L			09/25/18 17:07	5
Benzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Benzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Bromodichloromethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Bromoform	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Bromoform	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Bromomethane	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
Bromomethane	0.025	U H	0.025		mg/L			09/25/18 17:07	5
2-Butanone	0.010	U	0.010		mg/L			09/24/18 16:56	1
2-Butanone	0.050	U H	0.050		mg/L			09/25/18 17:07	5
Carbon disulfide	0.0020	U	0.0020		mg/L			09/24/18 16:56	1
Carbon disulfide	0.010	U H	0.010		mg/L			09/25/18 17:07	5
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Carbon tetrachloride	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Chlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Chlorobenzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Chloroethane	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
Chloroethane	0.025	U H	0.025		mg/L			09/25/18 17:07	5
Chloroform	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Chloroform	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Chloromethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Chloromethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
cis-1,2-Dichloroethene	0.072		0.0010		mg/L			09/24/18 16:56	1
cis-1,2-Dichloroethene	0.075	H	0.0050		mg/L			09/25/18 17:07	5
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
cis-1,3-Dichloropropene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Cyclohexane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Cyclohexane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Dibromochloromethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
1,2-Dibromo-3-Chloropropane	0.025	U H	0.025		mg/L			09/25/18 17:07	5
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,2-Dibromoethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,2-Dichlorobenzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,3-Dichlorobenzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,4-Dichlorobenzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Dichlorodifluoromethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,1-Dichloroethane	0.010		0.0010		mg/L			09/24/18 16:56	1
1,1-Dichloroethane	0.011	H	0.0050		mg/L			09/25/18 17:07	5
1,2-Dichloroethane	0.039		0.0010		mg/L			09/24/18 16:56	1
1,2-Dichloroethane	0.046	H	0.0050		mg/L			09/25/18 17:07	5
1,1-Dichloroethene	0.025		0.0010		mg/L			09/24/18 16:56	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-19

Lab Sample ID: 680-157969-36

Date Collected: 09/10/18 16:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.018	H	0.0050		mg/L			09/25/18 17:07	5
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,2-Dichloropropane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Ethylbenzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Ethylbenzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
2-Hexanone	0.010	U	0.010		mg/L			09/24/18 16:56	1
2-Hexanone	0.050	U H	0.050		mg/L			09/25/18 17:07	5
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Isopropylbenzene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Methyl acetate	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
Methyl acetate	0.025	U H	0.025		mg/L			09/25/18 17:07	5
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Methylcyclohexane	0.0050	U H *	0.0050		mg/L			09/25/18 17:07	5
Methylene Chloride	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
Methylene Chloride	0.025	U H	0.025		mg/L			09/25/18 17:07	5
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/24/18 16:56	1
4-Methyl-2-pentanone	0.050	U H	0.050		mg/L			09/25/18 17:07	5
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/24/18 16:56	1
Methyl tert-butyl ether	0.050	U H	0.050		mg/L			09/25/18 17:07	5
Naphthalene	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
Naphthalene	0.025	U H	0.025		mg/L			09/25/18 17:07	5
Styrene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Styrene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,1,2,2-Tetrachloroethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Tetrachloroethene	0.13		0.0010		mg/L			09/24/18 16:56	1
Tetrachloroethene	0.11	H	0.0050		mg/L			09/25/18 17:07	5
Toluene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Toluene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
trans-1,2-Dichloroethene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
trans-1,3-Dichloropropene	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 16:56	1
1,2,4-Trichlorobenzene	0.025	U H	0.025		mg/L			09/25/18 17:07	5
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,1,1-Trichloroethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,1,2-Trichloroethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Trichloroethene	0.22	E	0.0010		mg/L			09/24/18 16:56	1
Trichloroethene	0.21	H	0.0050		mg/L			09/25/18 17:07	5
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Trichlorofluoromethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Vinyl chloride	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Vinyl chloride	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5
Xylenes, Total	0.0010	U	0.0010		mg/L			09/24/18 16:56	1
Xylenes, Total	0.0050	U H	0.0050		mg/L			09/25/18 17:07	5

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: YMW-19
Date Collected: 09/10/18 16:55
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-36
Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	96		80 - 120		09/24/18 16:56	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/25/18 17:07	5
Dibromofluoromethane (Surr)	97		80 - 122		09/24/18 16:56	1
Dibromofluoromethane (Surr)	102		80 - 122		09/25/18 17:07	5
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/24/18 16:56	1
1,2-Dichloroethane-d4 (Surr)	100		73 - 131		09/25/18 17:07	5
Toluene-d8 (Surr)	103		80 - 120		09/24/18 16:56	1
Toluene-d8 (Surr)	99		80 - 120		09/25/18 17:07	5



Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-37

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 11:56	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 11:56	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 11:56	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 11:56	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 11:56	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 11:56	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 11:56	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 11:56	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/21/18 11:56	1

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-37

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	95		80 - 120		09/21/18 11:56	1
Dibromofluoromethane (Surr)	110		80 - 122		09/21/18 11:56	1
1,2-Dichloroethane-d4 (Surr)	97		73 - 131		09/21/18 11:56	1
Toluene-d8 (Surr)	105		80 - 120		09/21/18 11:56	1

Surrogate Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (80-120)	DBFM (80-122)	DCA (73-131)	TOL (80-120)
680-157969-32	WMW-1	100	97	91	103
680-157969-33	WMW-2	100	95	88	103
680-157969-34	YMW-1	98	105	105	96
680-157969-35	YMW-4	98	95	88	104
680-157969-36	YMW-19	96	97	89	103
680-157969-36	YMW-19	99	102	100	99
680-157969-37	Trip Blank	95	110	97	105
LCS 680-540258/3	Lab Control Sample	97	103	97	104
LCS 680-540411/4	Lab Control Sample	99	101	93	100
LCS 680-540519/4	Lab Control Sample	97	102	96	99
LCS 680-540656/5	Lab Control Sample	97	98	90	98
LCSD 680-540258/4	Lab Control Sample Dup	97	103	97	105
LCSD 680-540411/5	Lab Control Sample Dup	99	100	92	102
LCSD 680-540519/5	Lab Control Sample Dup	98	101	95	97
LCSD 680-540656/6	Lab Control Sample Dup	98	100	94	98
MB 680-540258/10	Method Blank	97	112	101	106
MB 680-540411/10	Method Blank	99	96	89	102
MB 680-540519/8	Method Blank	97	96	90	103
MB 680-540656/9	Method Blank	99	96	89	103

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Benzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromoform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Bromomethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
2-Butanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/21/18 09:52	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloroethane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Chloroform	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Chloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
2-Hexanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/21/18 09:52	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/21/18 09:52	1
Naphthalene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
Styrene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Toluene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/21/18 09:52	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/21/18 09:52	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/21/18 09:52	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: MB 680-540258/10

Matrix: Water

Analysis Batch: 540258

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			09/21/18 09:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/18 09:52	1
Dibromofluoromethane (Surr)	112		80 - 122		09/21/18 09:52	1
1,2-Dichloroethane-d4 (Surr)	101		73 - 131		09/21/18 09:52	1
Toluene-d8 (Surr)	106		80 - 120		09/21/18 09:52	1

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.228		mg/L		91	70 - 135
Benzene	0.0500	0.0492		mg/L		98	80 - 120
Bromodichloromethane	0.0500	0.0501		mg/L		100	80 - 120
Bromoform	0.0500	0.0467		mg/L		93	74 - 126
Bromomethane	0.0500	0.0401		mg/L		80	62 - 130
2-Butanone	0.250	0.214		mg/L		85	80 - 131
Carbon disulfide	0.0500	0.0519		mg/L		104	80 - 120
Carbon tetrachloride	0.0500	0.0534		mg/L		107	76 - 123
Chlorobenzene	0.0500	0.0486		mg/L		97	80 - 120
Chloroethane	0.0500	0.0456		mg/L		91	66 - 135
Chloroform	0.0500	0.0496		mg/L		99	80 - 120
Chloromethane	0.0500	0.0481		mg/L		96	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0501		mg/L		100	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0515		mg/L		103	80 - 120
Cyclohexane	0.0500	0.0503		mg/L		101	80 - 120
Dibromochloromethane	0.0500	0.0502		mg/L		100	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0447		mg/L		89	71 - 134
1,2-Dibromoethane	0.0500	0.0471		mg/L		94	80 - 120
1,2-Dichlorobenzene	0.0500	0.0521		mg/L		104	80 - 120
1,3-Dichlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0559		mg/L		112	47 - 155
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0512		mg/L		102	80 - 120
1,1-Dichloroethene	0.0500	0.0549		mg/L		110	76 - 120
1,2-Dichloropropane	0.0500	0.0474		mg/L		95	80 - 120
Ethylbenzene	0.0500	0.0469		mg/L		94	80 - 120
2-Hexanone	0.250	0.212		mg/L		85	74 - 127
Isopropylbenzene	0.0500	0.0457		mg/L		91	80 - 120
Methyl acetate	0.100	0.0881		mg/L		88	45 - 158
Methylcyclohexane	0.0500	0.0517		mg/L		103	85 - 122
Methylene Chloride	0.0500	0.0501		mg/L		100	80 - 120
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124
Methyl tert-butyl ether	0.0500	0.0527		mg/L		105	80 - 120
Naphthalene	0.0500	0.0489		mg/L		98	59 - 140

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCS 680-540258/3

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	0.0500	0.0454		mg/L		91	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0439		mg/L		88	80 - 120
Tetrachloroethene	0.0500	0.0529		mg/L		106	80 - 121
Toluene	0.0500	0.0503		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0534		mg/L		107	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0528		mg/L		106	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0545		mg/L		109	68 - 128
1,1,1-Trichloroethane	0.0500	0.0530		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0538		mg/L		108	80 - 120
Trichloroethene	0.0500	0.0520		mg/L		104	80 - 120
Trichlorofluoromethane	0.0500	0.0606		mg/L		121	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0566		mg/L		113	79 - 124
Vinyl chloride	0.0500	0.0527		mg/L		105	71 - 128
Xylenes, Total	0.100	0.0910		mg/L		91	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.218		mg/L		87	70 - 135	5	30
Benzene	0.0500	0.0484		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0494		mg/L		99	80 - 120	2	20
Bromoform	0.0500	0.0467		mg/L		93	74 - 126	0	20
Bromomethane	0.0500	0.0396		mg/L		79	62 - 130	1	20
2-Butanone	0.250	0.206		mg/L		82	80 - 131	4	20
Carbon disulfide	0.0500	0.0516		mg/L		103	80 - 120	1	20
Carbon tetrachloride	0.0500	0.0542		mg/L		108	76 - 123	1	20
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0447		mg/L		89	66 - 135	2	20
Chloroform	0.0500	0.0497		mg/L		99	80 - 120	0	20
Chloromethane	0.0500	0.0397		mg/L		79	69 - 131	19	30
cis-1,2-Dichloroethene	0.0500	0.0508		mg/L		102	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	0	20
Cyclohexane	0.0500	0.0505		mg/L		101	80 - 120	0	20
Dibromochloromethane	0.0500	0.0498		mg/L		100	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0423		mg/L		85	71 - 134	5	20
1,2-Dibromoethane	0.0500	0.0472		mg/L		94	80 - 120	0	20
1,2-Dichlorobenzene	0.0500	0.0514		mg/L		103	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0485		mg/L		97	80 - 120	2	20
1,4-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	0	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCSD 680-540258/4

Matrix: Water

Analysis Batch: 540258

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
Dichlorodifluoromethane	0.0500	0.0551		mg/L		110	47 - 155	1	40	
1,1-Dichloroethane	0.0500	0.0520		mg/L		104	80 - 120	3	20	
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	0	50	
1,1-Dichloroethene	0.0500	0.0572		mg/L		114	76 - 120	4	20	
1,2-Dichloropropane	0.0500	0.0481		mg/L		96	80 - 120	1	20	
Ethylbenzene	0.0500	0.0487		mg/L		97	80 - 120	4	20	
2-Hexanone	0.250	0.205		mg/L		82	74 - 127	3	20	
Isopropylbenzene	0.0500	0.0465		mg/L		93	80 - 120	2	20	
Methyl acetate	0.100	0.0847		mg/L		85	45 - 158	4	20	
Methylcyclohexane	0.0500	0.0523		mg/L		105	85 - 122	1	20	
Methylene Chloride	0.0500	0.0491		mg/L		98	80 - 120	2	20	
4-Methyl-2-pentanone	0.250	0.214		mg/L		86	76 - 124	4	20	
Methyl tert-butyl ether	0.0500	0.0517		mg/L		103	80 - 120	2	20	
Naphthalene	0.0500	0.0475		mg/L		95	59 - 140	3	20	
Styrene	0.0500	0.0468		mg/L		94	80 - 120	3	20	
1,1,2,2-Tetrachloroethane	0.0500	0.0422		mg/L		84	80 - 120	4	20	
Tetrachloroethene	0.0500	0.0536		mg/L		107	80 - 121	1	20	
Toluene	0.0500	0.0514		mg/L		103	80 - 113	2	20	
trans-1,2-Dichloroethene	0.0500	0.0544		mg/L		109	80 - 120	2	20	
trans-1,3-Dichloropropene	0.0500	0.0516		mg/L		103	80 - 120	2	30	
1,2,4-Trichlorobenzene	0.0500	0.0537		mg/L		107	68 - 128	2	20	
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20	
1,1,2-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	3	20	
Trichloroethene	0.0500	0.0523		mg/L		105	80 - 120	1	20	
Trichlorofluoromethane	0.0500	0.0616		mg/L		123	60 - 141	2	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0588		mg/L		118	79 - 124	4	20	
Vinyl chloride	0.0500	0.0486		mg/L		97	71 - 128	8	20	
Xylenes, Total	0.100	0.0946		mg/L		95	80 - 120	4	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	103		80 - 122
1,2-Dichloroethane-d4 (Surr)	97		73 - 131
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: MB 680-540411/10

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Benzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Bromoform	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Bromomethane	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
2-Butanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/22/18 12:44	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: MB 680-540411/10

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Chloroethane	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Chloroform	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Chloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
2-Hexanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/22/18 12:44	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/22/18 12:44	1
Naphthalene	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
Styrene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,1,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Toluene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/22/18 12:44	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/22/18 12:44	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/22/18 12:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		80 - 120		09/22/18 12:44	1
Dibromofluoromethane (Surr)	96		80 - 122		09/22/18 12:44	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/22/18 12:44	1
Toluene-d8 (Surr)	102		80 - 120		09/22/18 12:44	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Lab Sample ID: LCS 680-540411/4

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.230		mg/L		92	70 - 135
Benzene	0.0500	0.0496		mg/L		99	80 - 120
Bromodichloromethane	0.0500	0.0526		mg/L		105	80 - 120
Bromoform	0.0500	0.0530		mg/L		106	74 - 126
Bromomethane	0.0500	0.0493		mg/L		99	62 - 130
2-Butanone	0.250	0.216		mg/L		87	80 - 131
Carbon disulfide	0.0500	0.0513		mg/L		103	80 - 120
Carbon tetrachloride	0.0500	0.0551		mg/L		110	76 - 123
Chlorobenzene	0.0500	0.0517		mg/L		103	80 - 120
Chloroethane	0.0500	0.0496		mg/L		99	66 - 135
Chloroform	0.0500	0.0520		mg/L		104	80 - 120
Chloromethane	0.0500	0.0487		mg/L		97	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0513		mg/L		103	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0504		mg/L		101	80 - 120
Cyclohexane	0.0500	0.0569		mg/L		114	80 - 120
Dibromochloromethane	0.0500	0.0493		mg/L		99	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0489		mg/L		98	71 - 134
1,2-Dibromoethane	0.0500	0.0463		mg/L		93	80 - 120
1,2-Dichlorobenzene	0.0500	0.0516		mg/L		103	80 - 120
1,3-Dichlorobenzene	0.0500	0.0518		mg/L		104	80 - 120
1,4-Dichlorobenzene	0.0500	0.0509		mg/L		102	80 - 120
Dichlorodifluoromethane	0.0500	0.0635		mg/L		127	47 - 155
1,1-Dichloroethane	0.0500	0.0521		mg/L		104	80 - 120
1,2-Dichloroethane	0.0500	0.0521		mg/L		104	80 - 120
1,1,1-Dichloroethene	0.0500	0.0530		mg/L		106	76 - 120
1,2-Dichloropropane	0.0500	0.0529		mg/L		106	80 - 120
Ethylbenzene	0.0500	0.0530		mg/L		106	80 - 120
2-Hexanone	0.250	0.205		mg/L		82	74 - 127
Isopropylbenzene	0.0500	0.0534		mg/L		107	80 - 120
Methyl acetate	0.100	0.0843		mg/L		84	45 - 158
Methylcyclohexane	0.0500	0.0609		mg/L		122	85 - 122
Methylene Chloride	0.0500	0.0520		mg/L		104	80 - 120
4-Methyl-2-pentanone	0.250	0.220		mg/L		88	76 - 124
Methyl tert-butyl ether	0.0500	0.0480		mg/L		96	80 - 120
Naphthalene	0.0500	0.0443		mg/L		89	59 - 140
Styrene	0.0500	0.0566		mg/L		113	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0473		mg/L		95	80 - 120
Tetrachloroethene	0.0500	0.0510		mg/L		102	80 - 121
Toluene	0.0500	0.0506		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0506		mg/L		101	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0491		mg/L		98	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0481		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120
1,1,2-Trichloroethane	0.0500	0.0465		mg/L		93	80 - 120
Trichloroethene	0.0500	0.0530		mg/L		106	80 - 120
Trichlorofluoromethane	0.0500	0.0583		mg/L		117	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0599		mg/L		120	79 - 124
Vinyl chloride	0.0500	0.0529		mg/L		106	71 - 128
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCS 680-540411/4

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
1,2-Dichloroethane-d4 (Surr)	93		73 - 131
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 680-540411/5

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
Acetone	0.250	0.231		mg/L		92	70 - 135	0	30
Benzene	0.0500	0.0486		mg/L		97	80 - 120	2	20
Bromodichloromethane	0.0500	0.0522		mg/L		104	80 - 120	1	20
Bromoform	0.0500	0.0521		mg/L		104	74 - 126	2	20
Bromomethane	0.0500	0.0500		mg/L		100	62 - 130	1	20
2-Butanone	0.250	0.216		mg/L		87	80 - 131	0	20
Carbon disulfide	0.0500	0.0512		mg/L		102	80 - 120	0	20
Carbon tetrachloride	0.0500	0.0538		mg/L		108	76 - 123	2	20
Chlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
Chloroethane	0.0500	0.0503		mg/L		101	66 - 135	1	20
Chloroform	0.0500	0.0513		mg/L		103	80 - 120	1	20
Chloromethane	0.0500	0.0485		mg/L		97	69 - 131	0	30
cis-1,2-Dichloroethene	0.0500	0.0505		mg/L		101	80 - 120	1	20
cis-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 120	1	20
Cyclohexane	0.0500	0.0561		mg/L		112	80 - 120	1	20
Dibromochloromethane	0.0500	0.0488		mg/L		98	80 - 121	1	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134	2	20
1,2-Dibromoethane	0.0500	0.0459		mg/L		92	80 - 120	1	20
1,2-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0512		mg/L		102	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0623		mg/L		125	47 - 155	2	40
1,1-Dichloroethane	0.0500	0.0507		mg/L		101	80 - 120	3	20
1,2-Dichloroethane	0.0500	0.0511		mg/L		102	80 - 120	2	50
1,1-Dichloroethene	0.0500	0.0527		mg/L		105	76 - 120	1	20
1,2-Dichloropropane	0.0500	0.0529		mg/L		106	80 - 120	0	20
Ethylbenzene	0.0500	0.0529		mg/L		106	80 - 120	0	20
2-Hexanone	0.250	0.209		mg/L		84	74 - 127	2	20
Isopropylbenzene	0.0500	0.0529		mg/L		106	80 - 120	1	20
Methyl acetate	0.100	0.0843		mg/L		84	45 - 158	0	20
Methylcyclohexane	0.0500	0.0601		mg/L		120	85 - 122	1	20
Methylene Chloride	0.0500	0.0521		mg/L		104	80 - 120	0	20
4-Methyl-2-pentanone	0.250	0.223		mg/L		89	76 - 124	2	20
Methyl tert-butyl ether	0.0500	0.0476		mg/L		95	80 - 120	1	20
Naphthalene	0.0500	0.0442		mg/L		88	59 - 140	0	20
Styrene	0.0500	0.0567		mg/L		113	80 - 120	0	20
1,1,1,2-Tetrachloroethane	0.0500	0.0478		mg/L		96	80 - 120	1	20
Tetrachloroethene	0.0500	0.0516		mg/L		103	80 - 121	1	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCSD 680-540411/5

Matrix: Water

Analysis Batch: 540411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.0500	0.0505		mg/L		101	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0509		mg/L		102	80 - 120	0	20
trans-1,3-Dichloropropene	0.0500	0.0492		mg/L		98	80 - 120	0	30
1,2,4-Trichlorobenzene	0.0500	0.0485		mg/L		97	68 - 128	1	20
1,1,1-Trichloroethane	0.0500	0.0525		mg/L		105	80 - 120	0	20
1,1,2-Trichloroethane	0.0500	0.0458		mg/L		92	80 - 120	2	20
Trichloroethene	0.0500	0.0532		mg/L		106	80 - 120	0	20
Trichlorofluoromethane	0.0500	0.0582		mg/L		116	60 - 141	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0587		mg/L		117	79 - 124	2	20
Vinyl chloride	0.0500	0.0530		mg/L		106	71 - 128	0	20
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
1,2-Dichloroethane-d4 (Surr)	92		73 - 131
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: MB 680-540519/8

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Benzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Bromoform	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Bromomethane	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
2-Butanone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/24/18 12:01	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Chloroethane	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
Chloroform	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Chloromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: MB 680-540519/8

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
2-Hexanone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/24/18 12:01	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/24/18 12:01	1
Naphthalene	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
Styrene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Toluene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/24/18 12:01	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/24/18 12:01	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/24/18 12:01	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		80 - 120		09/24/18 12:01	1
Dibromofluoromethane (Surr)	96		80 - 122		09/24/18 12:01	1
1,2-Dichloroethane-d4 (Surr)	90		73 - 131		09/24/18 12:01	1
Toluene-d8 (Surr)	103		80 - 120		09/24/18 12:01	1

Lab Sample ID: LCS 680-540519/4

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.242		mg/L		97	70 - 135
Benzene	0.0500	0.0487		mg/L		97	80 - 120
Bromodichloromethane	0.0500	0.0536		mg/L		107	80 - 120
Bromoform	0.0500	0.0546		mg/L		109	74 - 126
Bromomethane	0.0500	0.0487		mg/L		97	62 - 130
2-Butanone	0.250	0.224		mg/L		90	80 - 131
Carbon disulfide	0.0500	0.0505		mg/L		101	80 - 120
Carbon tetrachloride	0.0500	0.0566		mg/L		113	76 - 123
Chlorobenzene	0.0500	0.0510		mg/L		102	80 - 120
Chloroethane	0.0500	0.0492		mg/L		98	66 - 135
Chloroform	0.0500	0.0523		mg/L		105	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCS 680-540519/4

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	0.0500	0.0475		mg/L		95	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0504		mg/L		101	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0511		mg/L		102	80 - 120
Cyclohexane	0.0500	0.0543		mg/L		109	80 - 120
Dibromochloromethane	0.0500	0.0507		mg/L		101	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134
1,2-Dibromoethane	0.0500	0.0486		mg/L		97	80 - 120
1,2-Dichlorobenzene	0.0500	0.0498		mg/L		100	80 - 120
1,3-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0491		mg/L		98	80 - 120
Dichlorodifluoromethane	0.0500	0.0574		mg/L		115	47 - 155
1,1-Dichloroethane	0.0500	0.0506		mg/L		101	80 - 120
1,2-Dichloroethane	0.0500	0.0540		mg/L		108	80 - 120
1,1-Dichloroethene	0.0500	0.0524		mg/L		105	76 - 120
1,2-Dichloropropane	0.0500	0.0530		mg/L		106	80 - 120
Ethylbenzene	0.0500	0.0528		mg/L		106	80 - 120
2-Hexanone	0.250	0.217		mg/L		87	74 - 127
Isopropylbenzene	0.0500	0.0536		mg/L		107	80 - 120
Methyl acetate	0.100	0.0882		mg/L		88	45 - 158
Methylcyclohexane	0.0500	0.0576		mg/L		115	85 - 122
Methylene Chloride	0.0500	0.0519		mg/L		104	80 - 120
4-Methyl-2-pentanone	0.250	0.233		mg/L		93	76 - 124
Methyl tert-butyl ether	0.0500	0.0499		mg/L		100	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0560		mg/L		112	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0476		mg/L		95	80 - 120
Tetrachloroethene	0.0500	0.0526		mg/L		105	80 - 121
Toluene	0.0500	0.0507		mg/L		101	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0507		mg/L		101	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0514		mg/L		103	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0479		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0543		mg/L		109	80 - 120
1,1,2-Trichloroethane	0.0500	0.0478		mg/L		96	80 - 120
Trichloroethene	0.0500	0.0537		mg/L		107	80 - 120
Trichlorofluoromethane	0.0500	0.0583		mg/L		117	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0573		mg/L		115	79 - 124
Vinyl chloride	0.0500	0.0511		mg/L		102	71 - 128
Xylenes, Total	0.100	0.106		mg/L		106	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	102		80 - 122
1,2-Dichloroethane-d4 (Surr)	96		73 - 131
Toluene-d8 (Surr)	99		80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCSD 680-540519/5

Matrix: Water

Analysis Batch: 540519

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.229		mg/L		92	70 - 135	5	30
Benzene	0.0500	0.0482		mg/L		96	80 - 120	1	20
Bromodichloromethane	0.0500	0.0525		mg/L		105	80 - 120	2	20
Bromoform	0.0500	0.0522		mg/L		104	74 - 126	5	20
Bromomethane	0.0500	0.0491		mg/L		98	62 - 130	1	20
2-Butanone	0.250	0.217		mg/L		87	80 - 131	3	20
Carbon disulfide	0.0500	0.0502		mg/L		100	80 - 120	1	20
Carbon tetrachloride	0.0500	0.0560		mg/L		112	76 - 123	1	20
Chlorobenzene	0.0500	0.0499		mg/L		100	80 - 120	2	20
Chloroethane	0.0500	0.0485		mg/L		97	66 - 135	1	20
Chloroform	0.0500	0.0517		mg/L		103	80 - 120	1	20
Chloromethane	0.0500	0.0475		mg/L		95	69 - 131	0	30
cis-1,2-Dichloroethene	0.0500	0.0503		mg/L		101	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0497		mg/L		99	80 - 120	3	20
Cyclohexane	0.0500	0.0545		mg/L		109	80 - 120	0	20
Dibromochloromethane	0.0500	0.0492		mg/L		98	80 - 121	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0475		mg/L		95	71 - 134	2	20
1,2-Dibromoethane	0.0500	0.0457		mg/L		91	80 - 120	6	20
1,2-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	1	20
1,3-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120	0	20
1,4-Dichlorobenzene	0.0500	0.0500		mg/L		100	80 - 120	2	20
Dichlorodifluoromethane	0.0500	0.0589		mg/L		118	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0502		mg/L		100	80 - 120	1	20
1,2-Dichloroethane	0.0500	0.0528		mg/L		106	80 - 120	2	50
1,1-Dichloroethene	0.0500	0.0526		mg/L		105	76 - 120	0	20
1,2-Dichloropropane	0.0500	0.0512		mg/L		102	80 - 120	3	20
Ethylbenzene	0.0500	0.0517		mg/L		103	80 - 120	2	20
2-Hexanone	0.250	0.211		mg/L		85	74 - 127	3	20
Isopropylbenzene	0.0500	0.0527		mg/L		105	80 - 120	2	20
Methyl acetate	0.100	0.0837		mg/L		84	45 - 158	5	20
Methylcyclohexane	0.0500	0.0587		mg/L		117	85 - 122	2	20
Methylene Chloride	0.0500	0.0503		mg/L		101	80 - 120	3	20
4-Methyl-2-pentanone	0.250	0.222		mg/L		89	76 - 124	5	20
Methyl tert-butyl ether	0.0500	0.0478		mg/L		96	80 - 120	4	20
Naphthalene	0.0500	0.0441		mg/L		88	59 - 140	1	20
Styrene	0.0500	0.0546		mg/L		109	80 - 120	2	20
1,1,2,2-Tetrachloroethane	0.0500	0.0452		mg/L		90	80 - 120	5	20
Tetrachloroethene	0.0500	0.0525		mg/L		105	80 - 121	0	20
Toluene	0.0500	0.0500		mg/L		100	80 - 113	1	20
trans-1,2-Dichloroethene	0.0500	0.0512		mg/L		102	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0490		mg/L		98	80 - 120	5	30
1,2,4-Trichlorobenzene	0.0500	0.0486		mg/L		97	68 - 128	2	20
1,1,1-Trichloroethane	0.0500	0.0536		mg/L		107	80 - 120	1	20
1,1,2-Trichloroethane	0.0500	0.0456		mg/L		91	80 - 120	5	20
Trichloroethene	0.0500	0.0530		mg/L		106	80 - 120	1	20
Trichlorofluoromethane	0.0500	0.0588		mg/L		118	60 - 141	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0584		mg/L		117	79 - 124	2	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCSD 680-540519/5

Matrix: Water

Analysis Batch: 540519

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	0.0519		mg/L		104	71 - 128	2	20
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	101		80 - 122
1,2-Dichloroethane-d4 (Surr)	95		73 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: MB 680-540656/9

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Benzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromodichloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromoform	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Bromomethane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
2-Butanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Carbon disulfide	0.0020	U	0.0020		mg/L			09/25/18 10:56	1
Carbon tetrachloride	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chloroethane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Chloroform	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Chloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
cis-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
cis-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Cyclohexane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Dibromochloromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dibromo-3-Chloropropane	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
1,2-Dibromoethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,3-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,4-Dichlorobenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Dichlorodifluoromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1-Dichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2-Dichloropropane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Ethylbenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
2-Hexanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Isopropylbenzene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Methyl acetate	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Methylcyclohexane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Methylene Chloride	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
4-Methyl-2-pentanone	0.010	U	0.010		mg/L			09/25/18 10:56	1
Methyl tert-butyl ether	0.010	U	0.010		mg/L			09/25/18 10:56	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: MB 680-540656/9

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
Styrene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2,2-Tetrachloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Tetrachloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Toluene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
trans-1,2-Dichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
trans-1,3-Dichloropropene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,2,4-Trichlorobenzene	0.0050	U	0.0050		mg/L			09/25/18 10:56	1
1,1,1-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2-Trichloroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Trichloroethene	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Trichlorofluoromethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Vinyl chloride	0.0010	U	0.0010		mg/L			09/25/18 10:56	1
Xylenes, Total	0.0010	U	0.0010		mg/L			09/25/18 10:56	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	99		80 - 120		09/25/18 10:56	1
Dibromofluoromethane (Surr)	96		80 - 122		09/25/18 10:56	1
1,2-Dichloroethane-d4 (Surr)	89		73 - 131		09/25/18 10:56	1
Toluene-d8 (Surr)	103		80 - 120		09/25/18 10:56	1

Lab Sample ID: LCS 680-540656/5

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acetone	0.250	0.220		mg/L		88	70 - 135
Benzene	0.0500	0.0476		mg/L		95	80 - 120
Bromodichloromethane	0.0500	0.0517		mg/L		103	80 - 120
Bromoform	0.0500	0.0536		mg/L		107	74 - 126
Bromomethane	0.0500	0.0460		mg/L		92	62 - 130
2-Butanone	0.250	0.206		mg/L		83	80 - 131
Carbon disulfide	0.0500	0.0509		mg/L		102	80 - 120
Carbon tetrachloride	0.0500	0.0552		mg/L		110	76 - 123
Chlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
Chloroethane	0.0500	0.0489		mg/L		98	66 - 135
Chloroform	0.0500	0.0497		mg/L		99	80 - 120
Chloromethane	0.0500	0.0468		mg/L		94	69 - 131
cis-1,2-Dichloroethene	0.0500	0.0492		mg/L		98	80 - 120
cis-1,3-Dichloropropene	0.0500	0.0499		mg/L		100	80 - 120
Cyclohexane	0.0500	0.0579		mg/L		116	80 - 120
Dibromochloromethane	0.0500	0.0489		mg/L		98	80 - 121
1,2-Dibromo-3-Chloropropane	0.0500	0.0482		mg/L		96	71 - 134
1,2-Dibromoethane	0.0500	0.0454		mg/L		91	80 - 120
1,2-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120
1,3-Dichlorobenzene	0.0500	0.0502		mg/L		100	80 - 120
1,4-Dichlorobenzene	0.0500	0.0487		mg/L		97	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCS 680-540656/5

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.0648		mg/L		130	47 - 155
1,1-Dichloroethane	0.0500	0.0492		mg/L		98	80 - 120
1,2-Dichloroethane	0.0500	0.0500		mg/L		100	80 - 120
1,1-Dichloroethene	0.0500	0.0529		mg/L		106	76 - 120
1,2-Dichloropropane	0.0500	0.0505		mg/L		101	80 - 120
Ethylbenzene	0.0500	0.0524		mg/L		105	80 - 120
2-Hexanone	0.250	0.204		mg/L		82	74 - 127
Isopropylbenzene	0.0500	0.0526		mg/L		105	80 - 120
Methyl acetate	0.100	0.0803		mg/L		80	45 - 158
Methylcyclohexane	0.0500	0.0622	*	mg/L		124	85 - 122
Methylene Chloride	0.0500	0.0494		mg/L		99	80 - 120
4-Methyl-2-pentanone	0.250	0.216		mg/L		86	76 - 124
Methyl tert-butyl ether	0.0500	0.0469		mg/L		94	80 - 120
Naphthalene	0.0500	0.0438		mg/L		88	59 - 140
Styrene	0.0500	0.0552		mg/L		110	80 - 120
1,1,2,2-Tetrachloroethane	0.0500	0.0459		mg/L		92	80 - 120
Tetrachloroethene	0.0500	0.0514		mg/L		103	80 - 121
Toluene	0.0500	0.0498		mg/L		100	80 - 113
trans-1,2-Dichloroethene	0.0500	0.0492		mg/L		98	80 - 120
trans-1,3-Dichloropropene	0.0500	0.0488		mg/L		98	80 - 120
1,2,4-Trichlorobenzene	0.0500	0.0479		mg/L		96	68 - 128
1,1,1-Trichloroethane	0.0500	0.0531		mg/L		106	80 - 120
1,1,2-Trichloroethane	0.0500	0.0458		mg/L		92	80 - 120
Trichloroethene	0.0500	0.0526		mg/L		105	80 - 120
Trichlorofluoromethane	0.0500	0.0598		mg/L		120	60 - 141
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0594		mg/L		119	79 - 124
Vinyl chloride	0.0500	0.0528		mg/L		106	71 - 128
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		80 - 122
1,2-Dichloroethane-d4 (Surr)	90		73 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Acetone	0.250	0.236		mg/L		94	70 - 135	7	30
Benzene	0.0500	0.0476		mg/L		95	80 - 120	0	20
Bromodichloromethane	0.0500	0.0523		mg/L		105	80 - 120	1	20
Bromoform	0.0500	0.0550		mg/L		110	74 - 126	3	20
Bromomethane	0.0500	0.0460		mg/L		92	62 - 130	0	20
2-Butanone	0.250	0.221		mg/L		88	80 - 131	7	20
Carbon disulfide	0.0500	0.0492		mg/L		98	80 - 120	3	20

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

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
Carbon tetrachloride	0.0500	0.0544		mg/L		109	76 - 123	1	20
Chlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	1	20
Chloroethane	0.0500	0.0480		mg/L		96	66 - 135	2	20
Chloroform	0.0500	0.0505		mg/L		101	80 - 120	2	20
Chloromethane	0.0500	0.0463		mg/L		93	69 - 131	1	30
cis-1,2-Dichloroethene	0.0500	0.0493		mg/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	0.0500	0.0501		mg/L		100	80 - 120	0	20
Cyclohexane	0.0500	0.0566		mg/L		113	80 - 120	2	20
Dibromochloromethane	0.0500	0.0501		mg/L		100	80 - 121	2	20
1,2-Dibromo-3-Chloropropane	0.0500	0.0503		mg/L		101	71 - 134	4	20
1,2-Dibromoethane	0.0500	0.0476		mg/L		95	80 - 120	5	20
1,2-Dichlorobenzene	0.0500	0.0506		mg/L		101	80 - 120	0	20
1,3-Dichlorobenzene	0.0500	0.0507		mg/L		101	80 - 120	1	20
1,4-Dichlorobenzene	0.0500	0.0501		mg/L		100	80 - 120	3	20
Dichlorodifluoromethane	0.0500	0.0630		mg/L		126	47 - 155	3	40
1,1-Dichloroethane	0.0500	0.0495		mg/L		99	80 - 120	1	20
1,2-Dichloroethane	0.0500	0.0515		mg/L		103	80 - 120	3	50
1,1-Dichloroethene	0.0500	0.0514		mg/L		103	76 - 120	3	20
1,2-Dichloropropane	0.0500	0.0517		mg/L		103	80 - 120	2	20
Ethylbenzene	0.0500	0.0519		mg/L		104	80 - 120	1	20
2-Hexanone	0.250	0.215		mg/L		86	74 - 127	5	20
Isopropylbenzene	0.0500	0.0522		mg/L		104	80 - 120	1	20
Methyl acetate	0.100	0.0870		mg/L		87	45 - 158	8	20
Methylcyclohexane	0.0500	0.0602		mg/L		120	85 - 122	3	20
Methylene Chloride	0.0500	0.0492		mg/L		98	80 - 120	1	20
4-Methyl-2-pentanone	0.250	0.233		mg/L		93	76 - 124	8	20
Methyl tert-butyl ether	0.0500	0.0481		mg/L		96	80 - 120	3	20
Naphthalene	0.0500	0.0458		mg/L		92	59 - 140	4	20
Styrene	0.0500	0.0559		mg/L		112	80 - 120	1	20
1,1,1,2-Tetrachloroethane	0.0500	0.0472		mg/L		94	80 - 120	3	20
Tetrachloroethene	0.0500	0.0514		mg/L		103	80 - 121	0	20
Toluene	0.0500	0.0495		mg/L		99	80 - 113	0	20
trans-1,2-Dichloroethene	0.0500	0.0494		mg/L		99	80 - 120	1	20
trans-1,3-Dichloropropene	0.0500	0.0505		mg/L		101	80 - 120	3	30
1,2,4-Trichlorobenzene	0.0500	0.0494		mg/L		99	68 - 128	3	20
1,1,1-Trichloroethane	0.0500	0.0527		mg/L		105	80 - 120	1	20
1,1,2-Trichloroethane	0.0500	0.0473		mg/L		95	80 - 120	3	20
Trichloroethene	0.0500	0.0516		mg/L		103	80 - 120	2	20
Trichlorofluoromethane	0.0500	0.0592		mg/L		118	60 - 141	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0599		mg/L		120	79 - 124	1	20
Vinyl chloride	0.0500	0.0516		mg/L		103	71 - 128	2	20
Xylenes, Total	0.100	0.104		mg/L		104	80 - 120	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		80 - 122
1,2-Dichloroethane-d4 (Surr)	94		73 - 131

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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

Lab Sample ID: LCSD 680-540656/6

Matrix: Water

Analysis Batch: 540656

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

<i>Surrogate</i>	<i>LCSD</i> <i>%Recovery</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Limits</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120

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QC Association Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

GC/MS VOA

Analysis Batch: 540258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-37	Trip Blank	Total/NA	Water	8260B	
MB 680-540258/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540258/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540258/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-32	WMW-1	Total/NA	Water	8260B	
680-157969-33	WMW-2	Total/NA	Water	8260B	
680-157969-34	YMW-1	Total/NA	Water	8260B	
680-157969-35	YMW-4	Total/NA	Water	8260B	
MB 680-540411/10	Method Blank	Total/NA	Water	8260B	
LCS 680-540411/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540411/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-36	YMW-19	Total/NA	Water	8260B	
MB 680-540519/8	Method Blank	Total/NA	Water	8260B	
LCS 680-540519/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540519/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 540656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-36	YMW-19	Total/NA	Water	8260B	
MB 680-540656/9	Method Blank	Total/NA	Water	8260B	
LCS 680-540656/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-540656/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

Client Sample ID: WMW-1

Date Collected: 09/10/18 14:36

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-32

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 14:22	Y1S	TAL SAV

Client Sample ID: WMW-2

Date Collected: 09/10/18 14:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 13:57	Y1S	TAL SAV

Client Sample ID: YMW-1

Date Collected: 09/10/18 15:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-34

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	540411	09/22/18 15:36	Y1S	TAL SAV

Client Sample ID: YMW-4

Date Collected: 09/10/18 16:50

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540411	09/22/18 13:33	Y1S	TAL SAV

Client Sample ID: YMW-19

Date Collected: 09/10/18 16:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-36

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540519	09/24/18 16:56	Y1S	TAL SAV
Total/NA	Analysis	8260B		5	540656	09/25/18 17:07	EMA	TAL SAV

Client Sample ID: Trip Blank

Date Collected: 09/10/18 00:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-37

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	540258	09/21/18 11:56	JLK	TAL SAV

Laboratory References:

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

TestAmerica Savannah

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-9

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-9

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
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: 680-157969-10
Client Project/Site: EarthCon - SECHEM

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

Attn: Rachel Odzer



Authorized for release by:
9/25/2018 4:29:52 PM
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



LINKS

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Case Narrative

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Job ID: 680-157969-10

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Giant Cement

Project: EarthCon - SECHEM

Report Number: 680-157969-10

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 9/14/2018 7:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 4.0° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WMW-1 (680-157969-32), WMW-2 (680-157969-33), YMW-1 (680-157969-34), YMW-4 (680-157969-35), YMW-19 (680-157969-36) and Trip Blank (680-157969-37) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 09/21/2018, 09/22/2018 and 09/24/2018.

1,4-Dioxane was detected in method blank MB 310-216453/19 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample YMW-1 (680-157969-34)[10X] 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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-157969-32	WMW-1	Water	09/10/18 14:36	09/14/18 07:00
680-157969-33	WMW-2	Water	09/10/18 14:10	09/14/18 07:00
680-157969-34	YMW-1	Water	09/10/18 15:55	09/14/18 07:00
680-157969-35	YMW-4	Water	09/10/18 16:50	09/14/18 07:00
680-157969-36	YMW-19	Water	09/10/18 16:55	09/14/18 07:00
680-157969-37	Trip Blank	Water	09/10/18 00:00	09/14/18 07:00

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Method Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Method	Method Description	Protocol	Laboratory
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CF
5030B	Purge and Trap	SW846	TAL CF

Protocol References:

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

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



Definitions/Glossary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: WMW-1

Lab Sample ID: 680-157969-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0013	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: WMW-2

Lab Sample ID: 680-157969-33

No Detections.

Client Sample ID: YMW-1

Lab Sample ID: 680-157969-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.11		0.010	0.0030	mg/L	10		8260B SIM	Total/NA

Client Sample ID: YMW-4

Lab Sample ID: 680-157969-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.014	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: YMW-19

Lab Sample ID: 680-157969-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.0092	B	0.0010	0.00030	mg/L	1		8260B SIM	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-37

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: WMW-1

Lab Sample ID: 680-157969-32

Date Collected: 09/10/18 14:36

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0013	B	0.0010	0.00030	mg/L			09/21/18 23:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/21/18 23:49	1
Dibromofluoromethane (Surr)	99		80 - 120					09/21/18 23:49	1
Toluene-d8 (Surr)	100		80 - 120					09/21/18 23:49	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: WMW-2

Lab Sample ID: 680-157969-33

Date Collected: 09/10/18 14:10

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00030	U	0.0010	0.00030	mg/L			09/22/18 00:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/22/18 00:13	1
Dibromofluoromethane (Surr)	101		80 - 120					09/22/18 00:13	1
Toluene-d8 (Surr)	101		80 - 120					09/22/18 00:13	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: YMW-1

Lab Sample ID: 680-157969-34

Date Collected: 09/10/18 15:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.11		0.010	0.0030	mg/L			09/24/18 20:12	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/22/18 00:37	1
4-Bromofluorobenzene (Surr)	100		80 - 120					09/24/18 20:12	10
Dibromofluoromethane (Surr)	101		80 - 120					09/22/18 00:37	1
Dibromofluoromethane (Surr)	101		80 - 120					09/24/18 20:12	10
Toluene-d8 (Surr)	100		80 - 120					09/22/18 00:37	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 20:12	10

Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: YMW-4
Date Collected: 09/10/18 16:50
Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-35
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.014	B	0.0010	0.00030	mg/L			09/22/18 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120					09/22/18 01:01	1
Dibromofluoromethane (Surr)	100		80 - 120					09/22/18 01:01	1
Toluene-d8 (Surr)	100		80 - 120					09/22/18 01:01	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: YMW-19

Lab Sample ID: 680-157969-36

Date Collected: 09/10/18 16:55

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.0092	B	0.0010	0.00030	mg/L			09/22/18 01:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120					09/22/18 01:25	1
Dibromofluoromethane (Surr)	102		80 - 120					09/22/18 01:25	1
Toluene-d8 (Surr)	100		80 - 120					09/22/18 01:25	1



Client Sample Results

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: Trip Blank

Lab Sample ID: 680-157969-37

Date Collected: 09/10/18 00:00

Matrix: Water

Date Received: 09/14/18 07:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.00030	U	0.0010	0.00030	mg/L			09/21/18 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/21/18 18:37	1
Dibromofluoromethane (Surr)	98		80 - 120					09/21/18 18:37	1
Toluene-d8 (Surr)	100		80 - 120					09/21/18 18:37	1



Surrogate Summary

Client: Giant Cement
 Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (80-120)	DBFM (80-120)	TOL (80-120)
680-157969-32	WMW-1	101	99	100
680-157969-33	WMW-2	101	101	101
680-157969-34	YMW-1	100	101	100
680-157969-34	YMW-1	100	101	99
680-157969-35	YMW-4	102	100	100
680-157969-36	YMW-19	103	102	100
680-157969-37	Trip Blank	100	98	100
LCS 310-216453/20	Lab Control Sample	100	98	100
LCS 310-216588/6	Lab Control Sample	100	99	99
LCSD 310-216453/21	Lab Control Sample Dup	99	98	100
LCSD 310-216588/7	Lab Control Sample Dup	100	98	99
MB 310-216453/19	Method Blank	100	98	100
MB 310-216588/5	Method Blank	101	98	99

Surrogate Legend

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

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

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

Lab Sample ID: MB 310-216453/19

Matrix: Water

Analysis Batch: 216453

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	0.000401	J	0.0010	0.00030	mg/L			09/21/18 17:01	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					09/21/18 17:01	1
Dibromofluoromethane (Surr)	98		80 - 120					09/21/18 17:01	1
Toluene-d8 (Surr)	100		80 - 120					09/21/18 17:01	1

Lab Sample ID: LCS 310-216453/20

Matrix: Water

Analysis Batch: 216453

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	0.00400	0.00325		mg/L		81	49 - 150
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		80 - 120				
Dibromofluoromethane (Surr)	98		80 - 120				
Toluene-d8 (Surr)	100		80 - 120				

Lab Sample ID: LCSD 310-216453/21

Matrix: Water

Analysis Batch: 216453

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
1,4-Dioxane	0.00400	0.00443		mg/L		111	49 - 150	31	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	98		80 - 120						
Toluene-d8 (Surr)	100		80 - 120						

Lab Sample ID: MB 310-216588/5

Matrix: Water

Analysis Batch: 216588

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	0.00030	U	0.0010	0.00030	mg/L			09/24/18 10:14	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					09/24/18 10:14	1
Dibromofluoromethane (Surr)	98		80 - 120					09/24/18 10:14	1
Toluene-d8 (Surr)	99		80 - 120					09/24/18 10:14	1

TestAmerica Savannah

QC Sample Results

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

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

Lab Sample ID: LCS 310-216588/6

Matrix: Water

Analysis Batch: 216588

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	0.00400	0.00348		mg/L		87	49 - 150
Surrogate							
	%Recovery	LCSD	LCSD Qualifier	Limits			
4-Bromofluorobenzene (Surr)	100			80 - 120			
Dibromofluoromethane (Surr)	99			80 - 120			
Toluene-d8 (Surr)	99			80 - 120			

Lab Sample ID: LCSD 310-216588/7

Matrix: Water

Analysis Batch: 216588

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
1,4-Dioxane	0.00400	0.00485		mg/L		121	49 - 150	33	35
Surrogate									
	%Recovery	LCSD	LCSD Qualifier	Limits					
4-Bromofluorobenzene (Surr)	100			80 - 120					
Dibromofluoromethane (Surr)	98			80 - 120					
Toluene-d8 (Surr)	99			80 - 120					

QC Association Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

GC/MS VOA

Analysis Batch: 216453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-32	WMW-1	Total/NA	Water	8260B SIM	
680-157969-33	WMW-2	Total/NA	Water	8260B SIM	
680-157969-34	YMW-1	Total/NA	Water	8260B SIM	
680-157969-35	YMW-4	Total/NA	Water	8260B SIM	
680-157969-36	YMW-19	Total/NA	Water	8260B SIM	
680-157969-37	Trip Blank	Total/NA	Water	8260B SIM	
MB 310-216453/19	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216453/20	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216453/21	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Analysis Batch: 216588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-157969-34	YMW-1	Total/NA	Water	8260B SIM	
MB 310-216588/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 310-216588/6	Lab Control Sample	Total/NA	Water	8260B SIM	
LCSD 310-216588/7	Lab Control Sample Dup	Total/NA	Water	8260B SIM	

Lab Chronicle

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Client Sample ID: WMW-1

Date Collected: 09/10/18 14:36

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-32

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/21/18 23:49	TRZ	TAL CF

Client Sample ID: WMW-2

Date Collected: 09/10/18 14:10

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/22/18 00:13	TRZ	TAL CF

Client Sample ID: YMW-1

Date Collected: 09/10/18 15:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-34

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/22/18 00:37	TRZ	TAL CF
Total/NA	Analysis	8260B SIM		10	216588	09/24/18 20:12	TRZ	TAL CF

Client Sample ID: YMW-4

Date Collected: 09/10/18 16:50

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/22/18 01:01	TRZ	TAL CF

Client Sample ID: YMW-19

Date Collected: 09/10/18 16:55

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-36

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/22/18 01:25	TRZ	TAL CF

Client Sample ID: Trip Blank

Date Collected: 09/10/18 00:00

Date Received: 09/14/18 07:00

Lab Sample ID: 680-157969-37

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B SIM		1	216453	09/21/18 18:37	TRZ	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

Chain of Custody Record

Client Information (Sub Contract Lab)		Lab Pkt: Lanier, Jerry A	Carrier Tracking No(s): 680-535475-2																																																																																						
Client Contact: Shipping/Receiving		E-Mail: jerry.lanier@testamericainc.com	Page: Page 2 of 3																																																																																						
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Florida	Job #: 680-157969-2																																																																																						
Address: 704 Enterprise Drive,		State of Origin: Georgia																																																																																							
City: Cedar Falls																																																																																									
State, Zip: IA, 50613																																																																																									
Phone: 319-277-2401(Tel) 319-277-2425(Fax)																																																																																									
Email:																																																																																									
Project Name: EarthCon - SEICHEM																																																																																									
Site:																																																																																									
Due Date Requested: 9/26/2018		Analysis Requested																																																																																							
TAT Requested (days):																																																																																									
PO #:		Perform MS/MSD (Yes or No)	Total Number of Containers																																																																																						
WO #:		Field Filtered Sample (Yes or No)																																																																																							
Project #: 68002623		8260B_SIM/5030B 1,4-Dioxane (Only)																																																																																							
SSOW#:																																																																																									
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		Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastel/oi, BT=Tissue, A=Air)	Preservation Code:																																																																																		
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WMW-1 (680-157969-32)	9/10/18	14:36 Eastern		Water																																																																																					
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L - EDA																																																																																									
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M - Hexane																																																																																									
N - None																																																																																									
O - AsNaO2																																																																																									
P - Na2O4S																																																																																									
Q - Na2SO3																																																																																									
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Special Instructions/Note:																																																																																									

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	
Unconfirmed	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2
Empty Kit Relinquished by:	Date:
Relinquished by: <i>V. [Signature]</i>	Date: 9-14-18 1526
Relinquished by:	Date/Time:
Relinquished by:	Date/Time:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:

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
Special Instructions/QC Requirements:	
Method of Shipment:	
Received by: <i>[Signature]</i>	Date/Time: 9-15-18 920
Received by:	Date/Time:
Received by:	Date/Time:
Cooler Temperature(s) °C and Other Remarks:	

Chain of Custody Record

Client Information (Sub Contract Lab)		Lab PM: Lamier, Jerry A	Carrier Tracking No(s):	COC No: 680-535475.3					
Client Contact: Shipping/Receiving		E-Mail: jerry.lamier@testamericainc.com	State of Origin: Georgia	Page: Page 3 of 3					
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): NELAP - Florida	Job #:	680-157969-2					
Address: 704 Enterprise Drive,		Due Date Requested: 9/26/2018	Preservation Codes:						
City: Cedar Falls		TAT Requested (days):	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:						
State, Zip: IA, 50613		PO #:	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)						
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:	Total Number of containers						
Email:		Project #:	Special Instructions/Note:						
EarthCon - SECHEM		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=BIASUE, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B SIM/5030B 1,4-Dioxane (Only)	Total Number of containers
WMW-2 (680-157969-33)	9/10/18	14:10 Eastern		Water		X	X	X	3
YMW-1 (680-157969-34)	9/10/18	15:55 Eastern		Water		X	X	X	3
YMW-4 (680-157969-35)	9/10/18	16:50 Eastern		Water		X	X	X	3
YMW-19 (680-157969-36)	9/10/18	16:55 Eastern		Water		X	X	X	3
Trip Blank (680-157969-37)	9/10/18	Eastern		Water		X	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. I

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) **Primary Deliverable Rank: 2**

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: **V. G. [Signature]** Date: **9-14-18 1524** Company: **TA**
 Relinquished by: _____ Date: _____ Company: _____
 Relinquished by: _____ Date: _____ Company: _____
 Custody Seals Intact: **Yes** Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks:

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:

Received by: **[Signature]** Date/Time: **9-15-18 9:20** Company: **TA/EE**
 Received by: _____ Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____
 Method of Shipment: _____

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-10

Login Number: 157969

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

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	

Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-10

Login Number: 157969

List Number: 2

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:39 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-10

Login Number: 157969

List Number: 3

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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



Login Sample Receipt Checklist

Client: Giant Cement

Job Number: 680-157969-10

Login Number: 157969

List Number: 4

Creator: Homolar, Dana J

List Source: TestAmerica Cedar Falls

List Creation: 09/17/18 09:43 AM

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

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

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	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	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	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
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	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	09-30-18 *
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

Laboratory: TestAmerica Cedar Falls

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

TestAmerica Savannah

Accreditation/Certification Summary

Client: Giant Cement
Project/Site: EarthCon - SECHEM

TestAmerica Job ID: 680-157969-10

Laboratory: TestAmerica Cedar Falls (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
AIHA-LAP, LLC	IHLAP		101044	11-01-18
Georgia	State Program	4	IA100001 (OR)	09-29-18
Illinois	NELAP	5	200024	11-29-18
Iowa	State Program	7	007	12-01-19
Kansas	NELAP	7	E-10341	01-31-19
Minnesota	NELAP	5	019-999-319	12-31-18
Minnesota (Petrofund)	State Program	1	3349	08-22-19
North Dakota	State Program	8	R-186	09-29-18
Oregon	NELAP	10	IA100001	09-29-18