

2018

GROUNDWATER MONITORING REPORT

FOR

FORMER DOWCRAFT FACILITY

NYSDEC SITE #907020

FALCONER, CHAUTAUQUA COUNTY, NEW YORK

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MAY 2018

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Former Dowcraft Site**

APPENDICES

APPENDIX A – GROUNDWATER ANALYTICAL RESULTS

ACRONYM LIST

C&S	C&S ENGINEERS, INC.
JCC	JAMESTOWN CONTAINER COMPANIES
SITE	FORMER DOWCRAFT FACILITY
TCE	TRICHLOROETHENE
IRM	INTERIM REMEDIAL MEASURES
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ROD	RECORD OF DECISION
CRA	CONESTOGA-ROVERS & ASSOCIATES
RI	REMEDIAL INVESTIGATION
SCO	SOIL CLEANUP OBJECTIVES
SVOC	SEMI-VOLATILE ORGANIC COMPOUNDS
VOC	VOLATILE ORGANIC COMPOUNDS
NYSDOH	NEW YORK STATE DEPARTMENT OF HEALTH

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1 INTRODUCTION

C&S Engineers, Inc. (C&S) has prepared this Groundwater Monitoring Report on behalf of Jamestown Container Companies (JCC) for the former Dowcraft facility (the Site).

1.1 Background and Site Description

The Dowcraft Site is located at 65 South Dow Street in Falconer, New York and occupies approximately 2.2 acres of land situated immediately east of South Dow Street and approximately 100 feet south of the Chadakoin River (Site). The Jamestown Container manufacturing building is situated between the Site and the Chadakoin River.

The property was first developed in 1890 as a woolen mill until 1939 when it was converted into a factory which manufactured steel partitions used for offices. As part of this manufacturing process, a vapor degreaser was used which included the use of chemicals such as trichloroethene (TCE). This work continued until 1999 when the facility was closed, a portion of the Site was demolished, and the property was sold to JCC.

Figure 1 presents present and historic site features.

The Site was the subject of environmental investigations in the early 1990s, at which time contaminated groundwater was discovered on site. An interim remedial measure (IRM) was subsequently put in place in 1994 which consisted of groundwater extraction and treatment. In 2000, the use of additional groundwater remediation technologies was approved by the NYSDEC which involved in-situ chemical oxidation of TCE through the injection of potassium permanganate into the overburden groundwater. In 2003, a Record of Decision (ROD) was approved that selected the following remedy:

-) In-situ groundwater treatment through chemical oxidation, by injection of potassium permanganate dissolved in water, through existing well points into the shallow overburden groundwater table;
-) Overburden groundwater monitoring to verify the effectiveness of the treatment;
-) Institutional controls to prevent the use of groundwater as a source of potable water; and
-) Annual certification to NYSDEC to certify that institutional controls remain in place.

Conestoga-Rovers & Associates (CRA) conducted nine injection treatments between May 2000 and July 2006, totaling 21,500 pounds of potassium permanganate.

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Previous injection treatments were successful in oxidizing some TCE; however, the concentrations of TCE in the source area remain high.

1.2 Project Objectives

As stated in the 2003 ROD, the remedial goals selected for this Site are:

- _) Treat the source area of groundwater contamination by oxidative de-chlorination of the contaminants in place;
- _) Prevent exposure of human receptors to contaminated groundwater in the sand and gravel unit under Site;
- _) Prevent or mitigate, to the maximum extent practicable, COC migration via groundwater so that releases from the underlying sand and gravel unit to the Chadakoin River do not exceed applicable standards, criteria and guidance.

To help satisfy these project objectives, periodic groundwater sampling is required. Additionally, the New York State Department of Health (NYSDOH) requested the performance of soil vapor sampling to evaluate potential impacts to air quality by the contamination underlying the Site. This report describes the results from the recent groundwater sampling event that occurred on April 25 and 26, 2016.

2 SUBSURFACE CONDITIONS

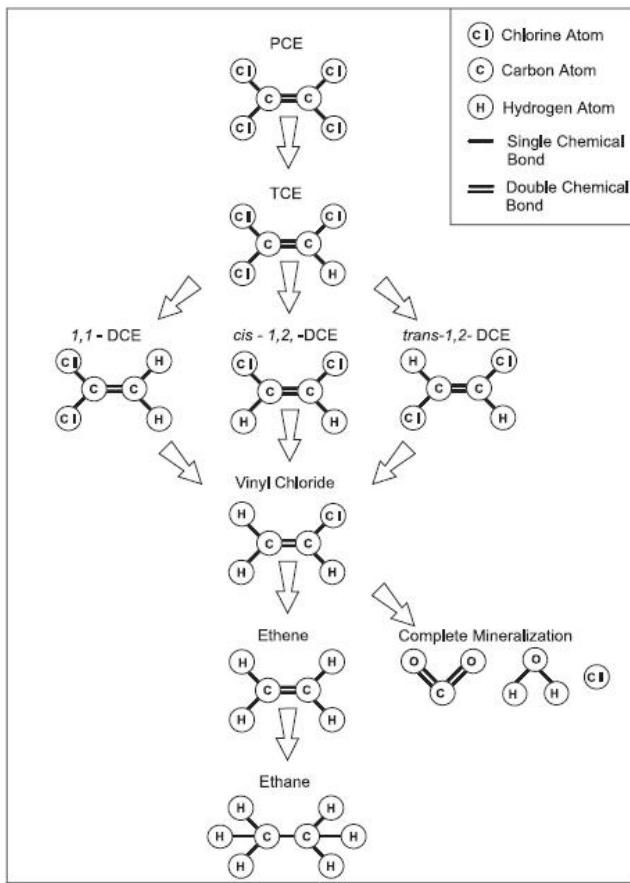
2.1 Contaminants of Concern

Chlorinated solvents, primarily, trichloroethene (TCE) and its daughter compounds, were identified as the contaminants of concern (COC) for this Site. TCE is a man-made volatile organic compound used for degreasing metal and electronic parts. Remedial considerations for TCE include its low solubility value and heavy molecular weight. TCE is in a class of chemicals called dense non-aqueous phase liquids (DNAPL) that sink through the water column until they encounter an impermeable barrier.

Groundwater contaminant plumes with TCE can undergo a process of reductive dechlorination, during which chlorine atoms are stripped from TCE and daughter compounds are produced. The rate of dechlorination can vary based on:

- _) Amount of TCE in the subsurface;
- _) Amount of organic material; and
- _) Type and concentration of electron acceptors available in the system.

The process of TCE reductive dechlorination is shown below:



2.2 Geology and Hydrogeology

Site geology consists of fill material overlying two sand/gravel layers separated by a silt/clay lens. Fill material consists of a mixed matrix of sand, cinders, silt, gravel, brick, concrete, coal, slag and metal. The fill unit ranges in thickness from 2 to over 14 feet with an average thickness of 8 feet.

The upper sand/gravel layer ranges from 10 to 20 feet in thickness. Underlying the upper sand/gravel layer is a silt/clay lens that ranges from 4 to 8 feet in thickness. The lower sand/gravel layer is 10 to 18 feet thick. Underlying the lower sand layer is a second silt/clay layer that starts approximately 43 feet below ground surface (BGS). This unit is estimated to be 60 feet in thickness according to regional geology.

The average depth to groundwater is 10 feet BGS within the upper sand/gravel layer. Groundwater flow within the upper sand/gravel layer is to the north-northeast at approximately 2.7 feet per year. **Figure 2** shows the inferred groundwater flow direction in the upper sand/gravel layer. The silt/clay layer overlying the lower sand/gravel layer is acting as an aquitard for deeper groundwater and is creating a semi-confined aquifer.

2.3 Extent of Contamination

According to previous environmental reports, the area of former degreaser pit (area of groundwater monitoring wells PW-3 and PW-3R) is a likely source area for the COC plume. The plume originates from the degreaser area and has affected groundwater in the upper and lower sand/gravel layers. The plume extends from the degreaser area to the north, under the JCC building and up to the area of the Chadakoin River. This is an area of approximately one acre. The rate of movement is approximately 2 to 3 feet per year to the north.

3 MAY 208 GROUNDWATER MONITORING

3.1 Field Sampling Program

3.1.1 Monitoring Well Array

The Site contains a total of 23 monitoring wells installed in November 1990, November 1991, and April 1992. The monitoring wells below have been shown to be directly within the contaminant plume.

ESI - 1	ESI - 11
ESI - 2	ESI - 12
ESI - 3	ESI - 13R
ESI - 6	PW - 1
ESI - 7	PW - 3R
ESI - 10	

It should be noted that PW-2 has been previously sampled by other consultants; however, during groundwater monitoring conducted by C&S on July 2, 2013, PW-2 could not be developed and sampled because piping was located in the well that could not be removed. Monitoring well ESI - 6 is located within six feet of PW-2 and was developed and sampled as a substitute for PW-2.

3.1.2 Groundwater Sampling

The following groundwater sampling events have been conducted by C&S.

July 2, 2013 Baseline Monitoring

October 21, 22 and 29, 2014 Pre-treatment

April 21 and 22, 2015 1st Post-treatment

November 2 and 3, 2015 2nd Post-treatment

April 25 and 26, 2016 3rd Post-treatment

October 20 and 21, 2016 4th Post-treatment

June 7 and 8, 2017 5th Post-treatment

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May 7 and 8, 2018

6th Post-treatment
(1st Annual Sample
Event under OM&M)

The groundwater monitoring activities included the collection of depth-to-water measurements at each monitoring well and the collection of groundwater samples for laboratory analysis.

Groundwater sampling was conducted in accordance with the U.S. Environmental Protection Agency (USEPA) low flow sample procedure. All equipment used for well purging and sampling was thoroughly washed with tap water and laboratory detergent, Alconox, prior to and after use.

3.1.3 Water Level Monitoring

Prior to purging and sampling each monitoring well was measured with an electronic water level indicator used to measure depth to water and total depth of each well. Measurements were referenced to the top of the well casing. All water levels and total depth measurements were taken to the nearest 0.01 foot.

3.1.4 Well Purging

Water quality parameters were tracked as groundwater was removed from monitoring wells. A Monsoon pump was used to purge monitoring wells until water quality parameters (temperature, specific conductivity, pH, oxygen reduction potential dissolved oxygen and turbidity) were stabilized. **Table 4** presents field water quality parameter data. Purge water was transferred into five-gallon buckets. Collected purge water was treated through an activated carbon system prior to discharge on the ground surface.

3.1.5 Groundwater Sample Collection and Analysis

Samples were collected from each well immediately after water quality parameters were stabilized. Samples were collected from polyethylene tubing into appropriate sample jars. The sample containers were chemically preserved by the laboratory prior to the field activities. Samples collected for volatile organics analysis were overfilled to form a convex meniscus and, after collection, the sample container was inverted to check for the presence of air bubbles in the sample. All samples were placed in coolers on ice to maintain samples at 4 degrees Celsius. A chain-of-custody manifest was completed on-site and accompanied the samples to the lab. Samples were analyzed for:

Parameter	EPA Method
Volatile Organic Compounds	8260C

3.2 Groundwater Results

3.2.1 Laboratory Analysis

Samples were received by Alpha Analytical Labs on May 7-8, 2018. The following presents observations associated with the samples:

- _) The lab confirmed that samples were obtained intact
- _) On ice and cooler temperature was acceptable
- _) Chain-of-custody was filled out with all pertinent information
- _) No discrepancy with sample ID and chain-of-custody
- _) Samples were received within holding times
- _) VOA sample vials did not have headspace or bubble is < 6mm in diameter
- _) Sample bottles were completely filled

3.2.2 Groundwater Elevations

Groundwater elevations are provided in **Table 1** and shown on **Figure 2**. These elevations show that groundwater is generally flowing to the north and east.

3.2.3 Groundwater Analytical Results

Four out of the eleven wells that were sampled contained groundwater that exceeded water quality standard for TCE (5 ug/L). Analytical results for TCE in these wells ranged from 7.3 ug/L to 450 ug/L. Other chlorinated compounds, including TCE daughter compounds (cis-1,2-dichloroethene, trans-1,2-dichloroethane and vinyl chloride) were detected in five of the eleven wells. Analytical results for daughter compounds in these wells ranged from 1.3 ug/L to 507 ug/L. The highest concentration of cis-1,2-Dichloroethene was detected in ESI-6 (480 ug/L). Vinyl chloride was detected in one well, PW-3R, at 110 ug/L.

The analytical results are summarized in **Table 2**. The June 2018 analytical results are presented on **Figure 3**. The groundwater results were compared to NYSDEC T.O.G.S 1.1.1 Ambient Water Quality Standards.

4 TREATMENT EFFECTIVENESS

Potassium permanganate was used to treat TCE and other chlorinated volatile organic compounds within a plume that extends adjacent and partially underneath the JCC building. Two methods were implemented in treating the contaminated groundwater. The first method included the injection of a solution of potassium permanganate in ten borings. The second method included the placement of potassium permanganate cylinders as a treatment adjacent to PW-3R and installation of cylinders in monitoring wells inside the main JCC building. Treatment was applied on December 1 through 9, 2014. After sampling was completed on April 2016, potassium permanganate cylinders were placed in ESI-2 and ESI-6. Three cylinders were placed in each monitoring well.

Table 3 presents a comparison of total VOC concentrations from each monitoring well and the percent change from pre-treatment and post-treatment groundwater monitoring.

Out of eleven monitoring wells, ten wells show significant decreases, over 50%, in TCE and other chlorinated compounds. Continued decreases of TCE and other chlorinated compounds were observed in wells on the outside of the contaminant plume (ESI-1, ESI-7 and ESI-13R) and inside the JCC building (ESI-10, ESI-11 and ESI-12). No TCE or other chlorinated compounds were detected above NYS T.O.G.S in samples from within the JCC building. PW-3R shows a significant reduction in TCE, DCE and vinyl chloride from the June 2017 sample event.

One well showed a slight rebound of chlorinated compounds from the December 2014 treatment event. ESI-2 still contains elevated levels of TCE and daughter compounds. Elevated concentrations were observed in sampling events conducted from April 2015 through October 2016. The reason for this observation is not clear, although a possible explanation is the injections caused the migration of groundwater with higher concentrations towards certain monitoring wells, or the ISCO materials may have increased the mobilization of contaminants that may have adhered to soil particles. However, these monitoring wells have increased levels of daughter compounds of TCE, indicating that reductive de-chlorination of TCE is taking place as a result of the potassium permanganate treatment.

ESI-2 shows a trend in chlorinated contaminants back to pre-treatment levels, indicating that this area is still in the process of reductive de-chlorination.

4.1 Groundwater Monitoring Recommendations

The sixth round of post-treatment sampling suggests that the potassium permanganate injections/cylinders and natural attenuation appear to be effective in treating the groundwater contaminants in many wells. As outlined in the OM&M Work Plan, C&S will continue to annually monitor groundwater for the next four years. The next submittal is the annual Periodic Review Report due in November 2018.

TABLES

**TABLE 1: GROUNDWATER MONITORING
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

May 2018

<i>Monitoring Well</i>	<i>Depth to Water</i>	<i>Boring Depth</i>	<i>Casing Elevation</i>	<i>Groundwater Elevation</i>
ESI-1	8.5	15	1264.17	1255.67
ESI-2	9.75	13.8	1264.6	1254.85
ESI-3	8.72	14.2	1264.89	1256.17
ESI-6	10	13.75	1264.66	1254.66
ESI-7	9.25	14	1264.93	1255.68
ESI-10	9.8	14.95	1265.08	1255.28
ESI-11	9.5	15.6	1265.09	1255.59
ESI-12	9.25	15.1	1264.95	1255.7
ESI-13R	8.9	15.2	1263.31	1254.41
PW-1	8.63	19.6	1264.6	1255.97
PW-3R	9.35	36.4	1265.04	1255.69

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

Location ID	ESI-1	ESI-2												
Sample Matrix	WG													
Date Sampled	12/02/2014	04/21/2015	11/03/2015	04/25/2016	10/20/2016	06/07/2017	05/07/2018	12/02/2014	04/22/2015	11/03/2015	04/25/2016	10/21/2016	06/08/2017	05/08/2018
Units	ug/l													
NYSDEC Groundwater Standards & Guidance Values														
1,1,1-Trichloroethane	5.0 ug/l	--	U	--										
1,1-Dichloroethane	5.0 ug/l	--	U	--										
1,1-Dichloroethene	5.0 ug/l	--	U	--	U,*	--	U	--	U	--	U	--	U	--
1,2-Dichlorobenzene	3.0 ug/l	--	U	--										
1,2-Dichloroethane	0.6 ug/l	--	U	--										
1,3-Dichlorobenzene	3.0 ug/l	--	U	--										
1,4-Dichlorobenzene	3.0 ug/l	--	U	--										
Bromoform	50.0 ug/l	--	U	--										
Dibromochloromethane	50.0 ug/l	--	U	--										
Acetone	50.0 ug/l	--	U	--										
Benzene	1.0 ug/l	--	U	--										
Carbon Tetrachloride	5.0 ug/l	--	U	--										
Chlorobenzene	5.0 ug/l	--	U	--										
Chloroform	7.0 ug/l	--	U	--										
Cis-1,2-Dichloroethylene	5.0 ug/l	--	U	4.4	--	U	--	U	--	U	540	E	740	4400
Ethylbenzene	5.0 ug/l	--	U	--										
Methylene Chloride	5.0 ug/l	--	U	7.9	J	--								
Tetrachloroethylene (PCE)	5.0 ug/l	--	U	0.48	J	--								
Toluene	5.0 ug/l	--	U	--										
Trans-1,2-Dichloroethene	5.0 ug/l	--	U	4.5	--	19								
Trichloroethylene (TCE)	5.0 ug/l	8.9	15	12	4.89	6.52	3.68	4.40	130	E	110	1100	E	1260
Vinyl Chloride	2.0 ug/l	--	U	320	289	--								
Xylenes	5.0 ug/l	--	U	--										

WELL CAP DAMAGED, SAMPLE NOT COLLECTED.

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

Location ID	ESI-3	ESI-6													
Sample Matrix	WG														
Date Sampled	10/21/2014	04/22/2015	11/02/2015	04/25/2016	10/20/2016	06/07/2017	05/08/2018	10/29/2014	04/22/2015	11/02/2015	04/25/2016	10/21/2016	06/08/2017	05/08/2018	
Units	ug/l														
NYSDEC Groundwater Standards & Guidance Values															
1,1,1-Trichloroethane	5.0 ug/l	--	U	--											
1,1-Dichloroethane	5.0 ug/l	--	U	--											
1,1-Dichloroethene	5.0 ug/l	--	U	--	U,*	--	U	--	U	--	U	1.6	3.9	--	
1,2-Dichlorobenzene	3.0 ug/l	--	U	--											
1,2-Dichloroethane	0.6 ug/l	--	U	--											
1,3-Dichlorobenzene	3.0 ug/l	--	U	--											
1,4-Dichlorobenzene	3.0 ug/l	--	U	--											
Bromoform	50.0 ug/l	--	U	--											
Dibromochloromethane	50.0 ug/l	--	U	--											
Acetone	50.0 ug/l	--	U	2.4											
Benzene	1.0 ug/l	--	U	--											
Carbon Tetrachloride	5.0 ug/l	--	U	--											
Chlorobenzene	5.0 ug/l	--	U	--											
Chloroform	7.0 ug/l	--	U	--											
Cis-1,2-Dichloroethylene	5.0 ug/l	--	U	--	U	--	U	1.40	J	--	U	210	E	1100	
Ethylbenzene	5.0 ug/l	--	U	--											
Methylene Chloride	5.0 ug/l	--	U	10	J	--									
Tetrachloroethylene (PCE)	5.0 ug/l	--	U	1.1	5.8	--									
Toluene	5.0 ug/l	--	U	1.4											
Trans-1,2-Dichloroethene	5.0 ug/l	--	U	2.2	4.0	--									
Trichloroethylene (TCE)	5.0 ug/l	4.8	2.5	4.8	1.06	J	6.99	--	U	0.3	U	200	E	810	
Vinyl Chloride	2.0 ug/l	--	U	160	E	100									
Xylenes	5.0 ug/l	--	U	*^	68	21.7	--								

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

NYSDEC Groundwater Standards & Guidance Values	Location ID	ESI-7	ESI-7	ESI-7	ESI-7	ESI-7	ESI-7	ESI-10	ESI-10	ESI-10	ESI-10	ESI-10	ESI-10	ESI-10	
	Sample Matrix	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	
	Date Sampled	10/21/2014	04/21/2015	11/02/2015	04/25/2016	10/20/2016	06/08/2017	05/07/2018	10/29/2014	04/21/2015	11/03/2015	04/26/2016	10/20/2016	06/07/2017	05/07/2018
	Units	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
1,1,1-Trichloroethane	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
1,1-Dichloroethane	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
1,1-Dichloroethene	5.0 ug/l	--	U	--	U,*	--	U	--	U	--	U	--	U	--	
1,2-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
1,2-Dichloroethane	0.6 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
1,3-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
1,4-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Bromoform	50.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Dibromochloromethane	50.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Acetone	50.0 ug/l	--	U	--	U	--	U	6.89	J	10.10	--	U	--	3.01	
Benzene	1.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Carbon Tetrachloride	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Chlorobenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Chloroform	7.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Cis-1,2-Dichloroethylene	5.0 ug/l	78	25	12	8.30	24.5	5.15	30	240	E	--	U	--	U	
Ethylbenzene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Methylene Chloride	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Tetrachloroethylene (PCE)	5.0 ug/l	0.39	J	--	U	--	U	--	U	--	U	--	U	--	
Toluene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Trans-1,2-Dichloroethene	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	
Trichloroethylene (TCE)	5.0 ug/l	150	E	78	57	42.9	106	21.1	52	62	--	U	--	U	
Vinyl Chloride	2.0 ug/l	--	U	--	U	--	U	--	U	--	U	37	--	U,*	
Xylenes	5.0 ug/l	--	U	--	U	--	U	--	U	--	U	--	U	--	

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

Location ID Sample Matrix	ESI-11	ESI-11	ESI-11	ESI-11	ESI-11	ESI-11	ESI-11	ESI-12							
	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	
	Date Sampled	10/29/2014	04/21/2015	11/03/2015	04/26/2016	10/20/2016	06/07/2017	05/07/2018	10/22/2014	04/21/2015	11/03/2015	04/26/2016	10/21/2016	06/07/2017	05/08/2018
	Units	ug/l													
NYSDEC Groundwater Standards & Guidance Values															
1,1,1-Trichloroethane	5.0 ug/l	--	U	--											
1,1-Dichloroethane	5.0 ug/l	--	U	--											
1,1-Dichloroethene	5.0 ug/l	--	U	--	U,*	--	U	--	U	--	U	--	UM	--	
1,2-Dichlorobenzene	3.0 ug/l	--	U	--											
1,2-Dichloroethane	0.6 ug/l	--	U	--											
1,3-Dichlorobenzene	3.0 ug/l	--	U	--											
1,4-Dichlorobenzene	3.0 ug/l	--	U	--											
Bromoform	50.0 ug/l	--	U	--	U	--	U	--	U	4.78	--	U	--	U	
Dibromochloromethane	50.0 ug/l	--	U	--	U	--	U	--	U	1.09	--	U	--	U	
Acetone	50.0 ug/l	--	U	3.9	J	7.0	J	32.4	--	U	2.6	J	--	U	
Benzene	1.0 ug/l	--	U	--											
Carbon Tetrachloride	5.0 ug/l	--	U,*	--	U	--									
Chlorobenzene	5.0 ug/l	--	U	--											
Chloroform	7.0 ug/l	--	U	--											
Cis-1,2-Dichloroethylene	5.0 ug/l	76	--	U	--	U	--	U	--	U	71	1.2	--	U	
Ethylbenzene	5.0 ug/l	--	U	--	UM	--									
Methylene Chloride	5.0 ug/l	--	U	--											
Tetrachloroethylene (PCE)	5.0 ug/l	--	U	--	U	--	U	--	U	0.48	J	0.54	J	--	
Toluene	5.0 ug/l	--	U	--											
Trans-1,2-Dichloroethene	5.0 ug/l	2.0	--	U	--	UM									
Trichloroethylene (TCE)	5.0 ug/l	55	--	U	--	U	--	U	--	U	140	E	10	--	
Vinyl Chloride	2.0 ug/l	24	--	U	--	UM									
Xylenes	5.0 ug/l	--	U	--											

TABLE 2: GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

NYSDEC Groundwater Standards & Guidance Values	Location ID	ESI-13R	PW-1													
	Sample Matrix	WG														
	Date Sampled	10/21/2014	04/21/2015	11/02/2015	04/25/2016	10/20/2016	06/07/2017	05/08/2018	10/21/2014	04/21/2015	11/02/2015	04/25/2016	10/20/2016	06/08/2017	05/08/2018	
	Units	ug/l														
1,1,1-Trichloroethane	5.0 ug/l	--	U													
1,1-Dichloroethane	5.0 ug/l	--	U													
1,1-Dichloroethene	5.0 ug/l	--	U	--	U,*	--	U									
1,2-Dichlorobenzene	3.0 ug/l	--	U													
1,2-Dichloroethane	0.6 ug/l	--	U													
1,3-Dichlorobenzene	3.0 ug/l	--	U													
1,4-Dichlorobenzene	3.0 ug/l	--	U													
Bromoform	50.0 ug/l	--	U													
Dibromochloromethane	50.0 ug/l	--	U													
Acetone	50.0 ug/l	--	U													
Benzene	1.0 ug/l	--	U													
Carbon Tetrachloride	5.0 ug/l	--	U													
Chlorobenzene	5.0 ug/l	--	U													
Chloroform	7.0 ug/l	--	U													
Cis-1,2-Dichloroethylene	5.0 ug/l	18	18	8.3	7.51	9.41	--	U	1.3	J	1.9	8.8	2.4	5.03	7.14	3.88
Ethylbenzene	5.0 ug/l	--	U													
Methylene Chloride	5.0 ug/l	--	U													
Tetrachloroethylene (PCE)	5.0 ug/l	--	U													
Toluene	5.0 ug/l	--	U													
Trans-1,2-Dichloroethene	5.0 ug/l	--	U													
Trichloroethylene (TCE)	5.0 ug/l	22	46	19	21.0	13.1	7.37	7.3	15	3.3	11	6.96	22.1	8.39	0.84	
Vinyl Chloride	2.0 ug/l	--	U													
Xylenes	5.0 ug/l	--	U													

**TABLE 2: GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

NYSDEC Groundwater Standards & Guidance Values	Location ID	PW-3R						
	Sample Matrix	WG						
	Date Sampled	10/29/2014	04/22/2015	11/03/2015	04/26/2016	10/21/2016	06/08/2017	05/08/2018
	Units	ug/l						
1,1,1-Trichloroethane	5.0 ug/l	--	U	--	U	--	U	--
1,1-Dichloroethane	5.0 ug/l	5.1	4.0	--	U	--	U	--
1,1-Dichloroethene	5.0 ug/l	--	U	--	U	--	U	--
1,2-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--
1,2-Dichloroethane	0.6 ug/l	--	U	--	U	--	U	--
1,3-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--
1,4-Dichlorobenzene	3.0 ug/l	--	U	--	U	--	U	--
Bromoform	50.0 ug/l	--	U	--	U	--	U	--
Dibromochloromethane	50.0 ug/l	--	U	--	U	--	U	--
Acetone	50.0 ug/l	12	16	--	U	11.3	J	12.3
Benzene	1.0 ug/l	0.61	J	0.53	J	--	U	--
Carbon Tetrachloride	5.0 ug/l	--	U,*	--	U	--	U	--
Chlorobenzene	5.0 ug/l	--	U	--	U	--	U	--
Chloroform	7.0 ug/l	--	U	--	U	--	U	--
Cis-1,2-Dichloroethylene	5.0 ug/l	21	1.6	140	242	1450	1,990	70
Ethylbenzene	5.0 ug/l	--	U	--	U	--	U	--
Methylene Chloride	5.0 ug/l	--	U	--	U	--	U	--
Tetrachloroethylene (PCE)	5.0 ug/l	--	U	--	U	--	U	--
Toluene	5.0 ug/l	8.1		6.9	8.0	J	4.90	--
Trans-1,2-Dichloroethene	5.0 ug/l	39	--	U	--	U	--	U
Trichloroethylene (TCE)	5.0 ug/l	0.79	J	--	U	17.2	84.4	229
Vinyl Chloride	2.0 ug/l	1800	E	120	E	790	^,F1	134
Xylenes	5.0 ug/l	2.3		1.1	J	--	U	1.1
								J

TABLE NOTES

WG - Groundwater
ug/l - micrograms per liter
S.U. - Standard Unit

Qualifier Key

J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.
NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

I - The lower value for the two columns has been reported due to obvious interference.

G - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.

A - Spectra identified as "Aldol Condensation Product".

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

F - Denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is required, such as personal exposure assessment.

RE - Analytical results are from sample re-extraction.

R - Analytical results are from sample re-analysis.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

U - Not detected at the reported detection limit for the sample.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

S - Analytical results are from modified screening analysis.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

* - Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.

< - Analyzed for but not detected at or above the quantitation limit

1 - Indicates data from primary column used for QC calculation.

**TABLE 3: CHANGE IN TOTAL VOC CONCENTRATIONS
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

Monitoring Well	Total VOC Concentration (ug/L)							Percent Change Oct. 2014 to May 2018
	Oct-14	Apr-15	Nov-15	Apr-16	Oct-16	Apr-17	May-18	
ESI-1	8.9	19.4	12	4.89	6.52	3.68	4.4	-50.56%
ESI-2	816.08	987.9	6,151	6,839	895	--	957	17.27%
ESI-3	4.8	2.5	4.8	1.06	8.39	0	0.3	-100%
ESI-6	575.22	2,020	3,281.70	1,267.70	1,697.10	612	49.1	-91.46%
ESI-7	208.39	103	69	51.2	137.36	36.35	82	-60.65%
ESI-10 ¹	352.11	8.5	5.9	7.16	7.11	3.01	0.94	-99.73%
ESI-11 ¹	157	3.9	7	32.4	0	5.87	2.6	-98.34%
ESI-12 ¹	221.48	11.74	5.6	5.85	5.85	14.2	3	-98.65%
ESI-13R	40	64	27.3	28.51	28.28	7.37	8.6	-78.50%
PW-1	16.9	12.1	13.4	11.99	29.24	20.36	0.84	-95.0%
PW-3R	2,609.30	147.71	938	409.4	2285.4	3090.2	199	-92.37%

¹ Only bromoform and dibromochloromethane was detected in the sample and results were below NYSDEC standards.

**TABLE 4: FIELD PARAMETER SUMMARY
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

Well ID	Date	Time	Temp. (°C)	pH (s.u.)	ORP (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
ESI-3	5/7/2018	8:44:41	11.31	7.02	31	1.17	202	12.22
		8:45:11	10.51	7.06	47	1.21	85.8	12.45
		8:45:41	10.18	7.08	56	1.23	36.8	12.1
		8:46:11	10	7.1	63	1.23	25.1	11.72
		8:46:41	9.9	7.1	69	1.24	19.9	11.39
		8:47:11	9.82	7.11	73	1.24	15.7	11.11
		8:47:41	9.9	7.12	77	1.23	14.7	10.81
		8:48:11	10.12	7.12	79	1.24	13.4	10.45
		8:48:41	10.33	7.12	82	1.23	13.5	10.25
		8:49:11	10.51	7.12	84	1.23	12.9	10.1
		8:49:41	10.63	7.12	85	1.23	11.8	10.03
		8:50:11	10.69	7.13	87	1.23	10.6	10.07
		8:50:41	10.71	7.12	89	1.23	9.52	10.09
		8:51:11	10.75	7.13	90	1.23	8.41	10.06
PW-1	5/7/2018	9:55:41	12.61	7.11	68	1.28	148	8.36
		9:56:11	12.63	7.1	68	1.28	148	8.33
		9:56:41	12.61	7.1	69	1.28	147	8.32
		9:57:11	12.61	7.09	69	1.28	145	8.31
		9:57:41	12.61	7.09	70	1.28	143	8.29
		9:58:11	12.6	7.09	70	1.28	141	8.28
		9:58:41	12.58	7.08	70	1.28	138	8.28
		9:59:11	12.58	7.08	71	1.28	132	8.29
		9:59:41	12.58	7.08	71	1.28	134	8.29
		10:00:11	12.6	7.08	71	1.28	132	8.26
		10:00:41	12.63	7.08	71	1.28	128	8.26
		10:01:11	12.61	7.08	71	1.28	129	8.26
		10:01:41	12.58	7.08	71	1.28	126	8.25
		10:02:11	12.57	7.08	72	1.28	119	8.25
		10:02:41	12.56	7.08	72	1.27	121	8.24
		10:03:11	12.53	7.08	72	1.27	121	8.24
		10:03:41	12.51	7.08	72	1.27	120	8.24
		10:04:11	12.55	7.08	72	1.28	120	8.23
		10:04:41	12.6	7.08	72	1.28	116	8.21
		10:05:11	12.64	7.08	72	1.27	117	8.21
		10:05:41	12.65	7.08	72	1.27	116	8.06
		10:06:11	12.65	7.08	72	1.27	115	8.06
ESI-12	5/7/2018	10:48:38	16.22	7.88	432	0.965	133	7.16
		10:49:08	15.59	7.8	452	0.961	118	6.46
		10:49:38	15.14	7.74	463	0.968	102	6.34
		10:50:08	14.85	7.7	471	0.973	94.4	6.28
		10:50:38	14.64	7.66	478	0.978	88.5	6.26
		10:51:08	14.42	7.63	484	0.983	80	6.33
		10:51:38	14.28	7.6	490	0.988	74.1	6.36
		10:52:08	14.15	7.58	495	0.991	68.9	6.37
		10:52:38	14.07	7.55	499	0.994	63.4	6.38
		10:53:08	14.01	7.53	503	0.997	57.4	6.39
		10:53:38	13.93	7.51	507	0.999	57	6.4
		10:54:08	13.88	7.5	511	1	49.5	6.41
		10:54:38	13.7	7.34	522	1.01	49.3	6.47
		10:55:08	13.65	7.38	522	1.01	38.4	6.52
		10:55:38	13.7	7.42	522	1.01	33.1	6.46
		10:56:08	13.7	7.42	522	1.01	38.3	6.47
		10:56:38	13.69	7.42	524	1.01	38.1	6.46
		10:57:08	13.69	7.25	537	1.01	39.5	6.45
		10:57:38	13.7	7.16	544	1.01	39	6.44
		10:58:08	13.72	7.13	548	1.02	38.1	6.42
ESI-11	5/7/2018	11:26:16	17.89	8.35	455	0.997	631	7.83
		11:26:46	16.49	7.98	533	1.07	573	2.44
		11:27:16	16.27	7.85	550	1.07	497	1.45
		11:27:46	15.73	7.76	562	1.08	391	1.16
		11:28:16	15.34	7.71	571	1.07	339	0.93
		11:28:46	15.07	7.66	577	1.07	285	0.82
		11:29:16	14.93	7.62	581	1.06	252	0.79
		11:29:46	14.82	7.58	584	1.05	222	0.8
		11:30:16	14.73	7.55	587	1.03	192	0.8
		11:30:46	14.69	7.53	589	1.02	176	0.79
		11:31:16	14.63	7.5	591	1.02	165	0.77
		11:31:46	14.6	7.47	592	1.01	154	0.76
		11:32:16	14.58	7.45	593	1	141	0.75
		11:32:46	14.54	7.43	594	1	130	0.74
		11:33:16	14.5	7.31	601	0.996	117	0.73
		11:33:46	14.5	7.28	602	0.993	106	0.71
		11:34:16	14.48	7.25	603	0.99	96.5	0.71
		11:34:46	14.47	7.23	604	0.987	93.4	0.7

**TABLE 4: FIELD PARAMETER SUMMARY
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

Well ID	Date	Time	Temp. (°C)	pH (s.u.)	ORP (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
ESI-10	5/7/2018	11:35:16	14.42	7.2	605	0.986	92.6	0.7
		11:35:46	14.43	7.18	606	0.984	87.1	0.7
		11:36:16	14.44	7.16	607	0.982	79.4	0.7
		11:36:46	14.42	7.14	608	0.98	76	0.69
		11:37:16	14.41	7.12	609	0.98	74	0.69
		11:37:46	14.4	7.1	610	0.979	70.2	0.69
		11:38:16	14.39	7.09	611	0.977	64.9	0.69
		11:38:46	14.46	7.06	612	0.976	68.3	0.68
		11:39:16	14.49	7.06	612	0.975	61.8	0.68
		11:39:46	14.49	7.06	612	0.974	51.1	0.68
		11:40:16	14.52	6.96	617	0.973	52.9	0.67
		11:40:46	14.55	6.95	617	0.973	56.7	0.66
ESI-1	5/7/2018	12:22:27	17.77	8.03	458	0.801	826	4.14
		12:22:57	16.63	7.74	529	0.805	832	1.73
		12:23:27	16.01	7.55	565	0.809	806	1.17
		12:23:57	15.51	7.43	587	0.813	737	1
		12:24:27	15.21	7.33	602	0.816	621	0.91
		12:24:57	14.97	7.25	613	0.819	506	0.84
		12:25:27	14.75	7.17	621	0.824	422	0.8
		12:25:57	14.65	7.11	628	0.826	365	0.76
		12:26:27	14.55	7.05	634	0.828	320	0.73
		12:26:57	14.52	7	638	0.829	280	0.7
		12:27:27	14.42	6.95	642	0.833	245	0.67
		12:27:57	14.34	6.9	646	0.835	217	0.69
		12:28:27	14.3	6.86	649	0.839	188	0.81
		12:28:57	14.28	6.82	652	0.841	168	0.83
		12:29:27	14.25	6.79	654	0.843	156	0.83
		12:29:57	14.19	6.76	656	0.845	144	0.83
		12:30:27	14.17	6.73	657	0.847	133	0.82
		12:30:57	14.15	6.7	659	0.849	124	0.81
		12:31:27	14.14	6.68	660	0.851	115	0.81
		12:31:57	14.15	6.65	661	0.852	108	0.8
		12:32:27	14.11	6.63	662	0.854	101	0.79
		12:32:57	14.09	6.61	662	0.856	94.7	0.78
		12:33:27	14.03	6.59	663	0.859	86	0.78
		12:33:57	14.05	6.57	664	0.861	80.4	0.77
		12:34:27	14.01	6.55	664	0.864	74.2	0.76
		12:34:57	14.02	6.54	664	0.867	73	0.75
		12:35:27	14.01	6.53	664	0.87	70	0.75
		12:35:57	14.02	6.52	664	0.873	64.6	0.74
		12:36:27	14.01	6.51	664	0.874	60.9	0.73
ESI-7	5/7/2018	14:01:55	12.96	7.37	479	0.84	502	7.36
		14:02:25	13.13	7.37	479	0.839	487	7.18
		14:02:55	13.28	7.36	479	0.837	479	7.03
		14:03:25	13.43	7.36	479	0.836	461	6.9
		14:03:55	13.56	7.35	479	0.835	470	6.79
		14:04:25	13.68	7.35	479	0.835	462	6.71
		14:04:55	13.8	7.35	479	0.835	452	6.64
		14:05:25	13.92	7.34	479	0.834	449	6.56
		14:05:55	14.04	7.34	479	0.834	436	6.5
		14:06:25	14.15	7.34	479	0.834	444	6.43
		14:06:55	14.26	7.33	478	0.834	433	6.36
		14:07:25	14.36	7.33	478	0.834	431	6.31
		14:07:55	14.46	7.33	478	0.834	428	6.26
		14:08:25	14.57	7.33	478	0.834	427	6.21
		14:08:55	14.66	7.32	478	0.834	425	6.17
		14:09:25	14.76	7.32	478	0.834	419	6.12
		14:09:55	14.86	7.32	478	0.834	416	6.08
		14:10:25	14.95	7.31	478	0.834	408	6.03
		14:10:55	15.05	7.31	477	0.834	404	5.98
		14:11:25	15.14	7.31	477	0.834	413	5.93
		14:11:55	15.23	7.31	477	0.834	401	5.88

**TABLE 4: FIELD PARAMETER SUMMARY
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

Well ID	Date	Time	Temp. (°C)	pH (s.u.)	ORP (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
ESI-13R	5/8/2018	14:41:48	15.78	7.66	442	0.696	110	8.21
		14:42:18	15.7	7.64	445	0.694	94.8	8.21
		14:42:48	15.62	7.62	448	0.694	92.3	8.22
		14:43:18	15.53	7.6	451	0.694	77.9	8.26
		14:43:48	15.53	7.59	453	0.693	68.8	8.26
		14:44:18	15.54	7.57	455	0.693	59.8	8.26
		14:44:48	15.54	7.55	458	0.693	53.7	8.27
		14:45:18	15.57	7.54	459	0.692	50.1	8.28
		14:45:48	15.58	7.53	461	0.691	45.5	8.28
		14:46:18	15.62	7.51	463	0.69	39.7	8.28
		14:46:48	15.63	7.5	464	0.688	39.8	8.28
		14:47:18	15.61	7.47	466	0.687	37.3	8.26
ESI-13R	5/8/2018	10:16:48	11.72	7.22	453	0.699	201	7.84
		10:17:18	11.76	7.21	453	0.699	189	7.83
		10:17:48	11.8	7.21	453	0.7	180	7.82
		10:18:18	11.83	7.21	453	0.7	173	7.82
		10:18:48	11.86	7.2	453	0.7	164	7.81
		10:19:18	11.89	7.2	453	0.701	155	7.82
		10:19:48	11.93	7.19	452	0.7	155	7.79
		10:20:18	11.94	7.19	452	0.7	146	7.8
		10:20:48	11.98	7.19	452	0.699	147	7.77
		10:21:18	11.99	7.19	452	0.699	134	7.8
		10:21:48	12	7.18	452	0.699	132	7.82
		10:22:18	12.06	7.18	452	0.698	131	7.78
		10:22:48	12.05	7.18	452	0.698	124	7.78
		10:23:18	12.06	7.18	451	0.697	112	7.77
		10:23:48	12.08	7.17	451	0.698	109	7.75
		10:24:18	12.13	7.17	451	0.697	102	7.75
		10:24:48	12.17	7.15	452	0.696	105	7.7
		10:25:18	12.17	7.14	452	0.698	99.3	7.74
		10:25:48	12.24	7.14	453	0.697	100	7.72
		10:26:18	12.38	7.13	453	0.695	22.9	7.7
ESI-6	5/8/2018	11:03:14	12.18	7.55	598	1.24	98.5	1.22
		11:03:44	12.16	7.54	598	1.24	89.4	1.21
		11:04:14	12.17	7.53	598	1.23	81.1	1.21
		11:04:44	12.15	7.51	598	1.23	71.7	1.19
		11:05:14	12.1	7.5	599	1.23	69.5	1.19
		11:05:44	12.11	7.49	598	1.23	64.7	1.18
		11:06:14	12.11	7.48	598	1.23	57.6	1.18
		11:06:44	12.13	7.47	597	1.23	54.5	1.18
		11:07:14	12.14	7.45	597	1.23	49.9	1.17
		11:07:44	12.14	7.44	597	1.23	46.5	1.17
		11:08:14	12.1	7.44	597	1.23	44	1.17
		11:08:44	12.13	7.42	597	1.23	41.6	1.17
		11:09:14	12.16	7.41	597	1.23	39.4	1.17
		11:09:44	12.15	7.39	598	1.23	38	1.17
		11:10:14	12.18	7.37	598	1.23	36.7	1.17
		11:10:44	12.19	7.35	599	1.23	36.4	1.17
		11:11:14	12.14	7.34	599	1.23	35.3	1.17
		11:11:44	12.17	7.32	599	1.23	35.3	1.17
		11:12:14	12.2	7.31	600	1.23	34.9	1.17
		11:12:44	12.17	7.29	600	1.23	35.2	1.17
		11:13:14	12.22	7.27	601	1.23	35.2	1.17
ESI-2	5/8/2018	11:42:15	15.98	8.46	556	1.23	575	1.92
		11:42:45	15.34	8.32	575	1.23	497	1.85
		11:43:15	15.17	8.22	587	1.24	426	1.81
		11:43:45	14.87	8.15	594	1.24	382	1.91
		11:44:15	14.68	8.08	599	1.24	343	2.01
		11:44:45	14.46	8.03	602	1.24	304	2.14
		11:45:15	14.23	8	604	1.24	252	2.35
		11:45:45	14.05	7.96	606	1.24	214	2.77
		11:46:15	13.86	7.93	607	1.24	185	2.93
		11:46:45	13.7	7.9	607	1.24	164	3.05
		11:47:15	13.62	7.88	608	1.24	143	3.12
		11:47:45	13.47	7.85	608	1.24	128	3.2
		11:48:15	13.38	7.83	608	1.24	113	3.26
		11:48:45	13.38	7.81	608	1.24	102	3.3
		11:49:15	13.33	7.78	608	1.25	91.5	3.34
		11:49:45	13.27	7.76	608	1.25	83.5	3.39
		11:50:15	13.27	7.74	607	1.25	76.1	3.41
		11:50:45	13.23	7.72	607	1.25	68.8	3.44
		11:51:15	13.24	7.7	607	1.25	63.4	3.47
		11:51:45	13.21	7.68	606	1.25	58.9	3.5
		11:52:15	13.23	7.66	605	1.25	53.7	3.53

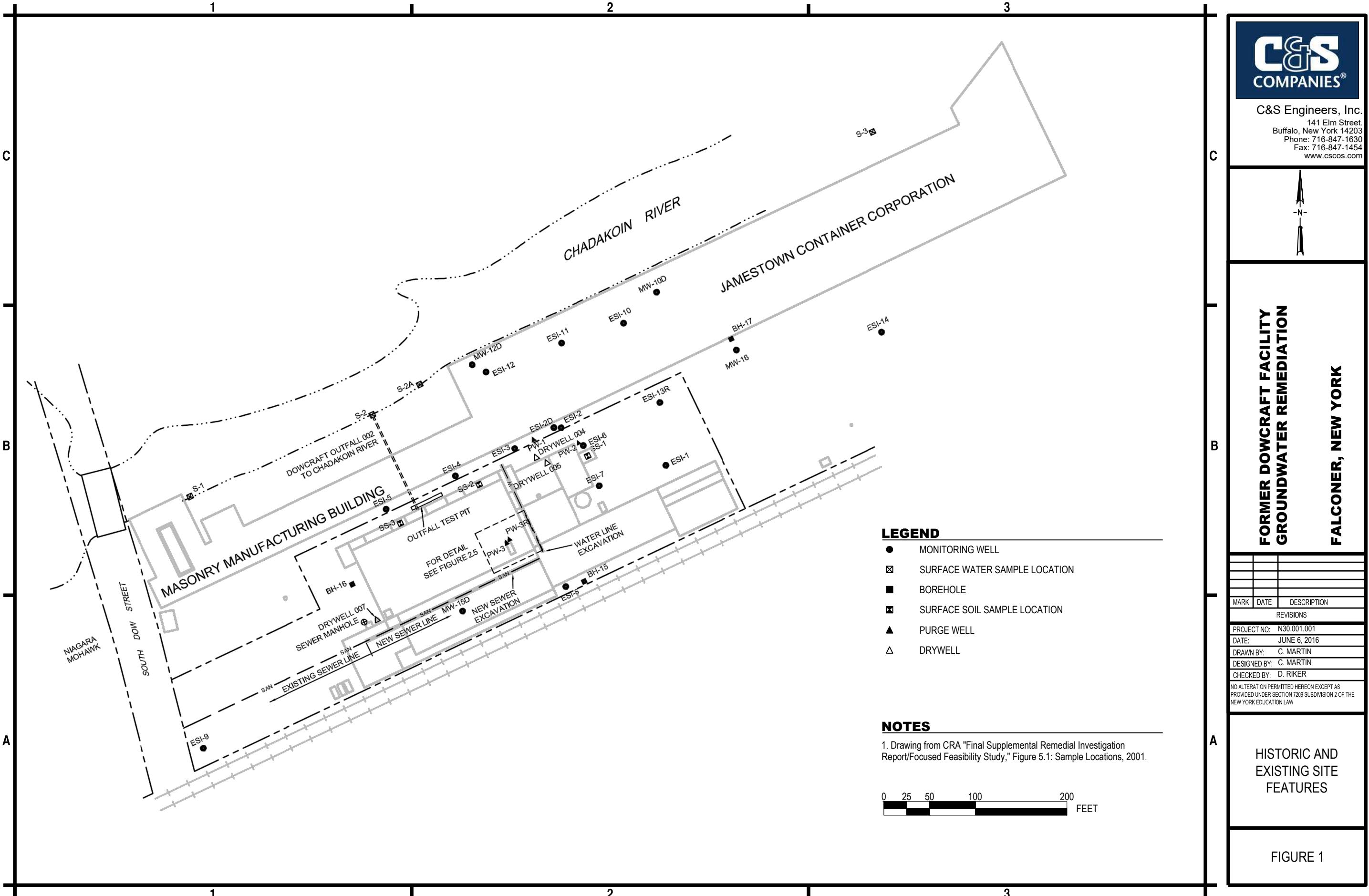
**TABLE 4: FIELD PARAMETER SUMMARY
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK**

Well ID	Date	Time	Temp. (°C)	pH (s.u.)	ORP (mV)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
PW-3R	5/8/2018	11:52:45	13.24	7.64	605	1.25	50	3.55
		11:53:15	13.23	7.63	604	1.25	46	3.56
		11:53:45	13.17	7.61	604	1.25	42.6	3.59
		11:54:15	13.19	7.6	604	1.25	39.9	3.61
		11:54:45	13.18	7.58	603	1.25	38.7	3.63
		11:55:15	13.18	7.57	602	1.25	35.9	3.65
		11:55:45	13.16	7.55	602	1.25	34.1	3.67
		11:56:15	13.15	7.53	602	1.25	32.1	3.69
PW-3R	5/8/2018	12:51:33	11.5	6.95	-53	1.67	78.4	1.8
		12:52:03	11.49	6.93	-53	1.68	76.4	1.79
		12:52:33	11.45	6.92	-53	1.68	75.5	1.78
		12:53:03	11.43	6.89	-52	1.68	70.6	1.78
		12:53:33	11.45	6.92	-54	1.68	70.4	1.77
		12:54:03	11.38	6.91	-55	1.67	68	1.77
		12:54:33	11.38	6.9	-55	1.67	68.3	1.76
		12:55:03	11.36	6.9	-55	1.67	71.4	1.76
		12:55:33	11.36	6.9	-56	1.68	68.4	1.75
		12:56:03	11.35	6.9	-57	1.68	68.5	1.74
		12:56:33	11.32	6.9	-57	1.68	65.1	1.74
		12:57:03	11.24	6.9	-57	1.68	72.1	1.74
		12:57:33	11.43	6.92	-59	1.68	71.5	1.71
		12:58:03	11.7	6.92	-59	1.67	79.1	1.68
		12:58:33	11.83	6.91	-60	1.67	81	1.67
		12:59:03	11.89	6.91	-60	1.67	84	1.66
		12:59:33	11.88	6.91	-60	1.67	87.6	1.66
		13:00:03	11.91	6.9	-61	1.66	89.1	1.66

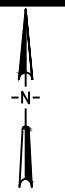
Notes:

mV	Millivolts
mS/cm	Milliseimemens per centimeter
s.u.	Standard Unit
mg/L	Milligrams per Liter
NTU	Nephelometric Turbidity Unit

FIGURES



C&S Engineers, Inc.
141 Elm Street,
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com



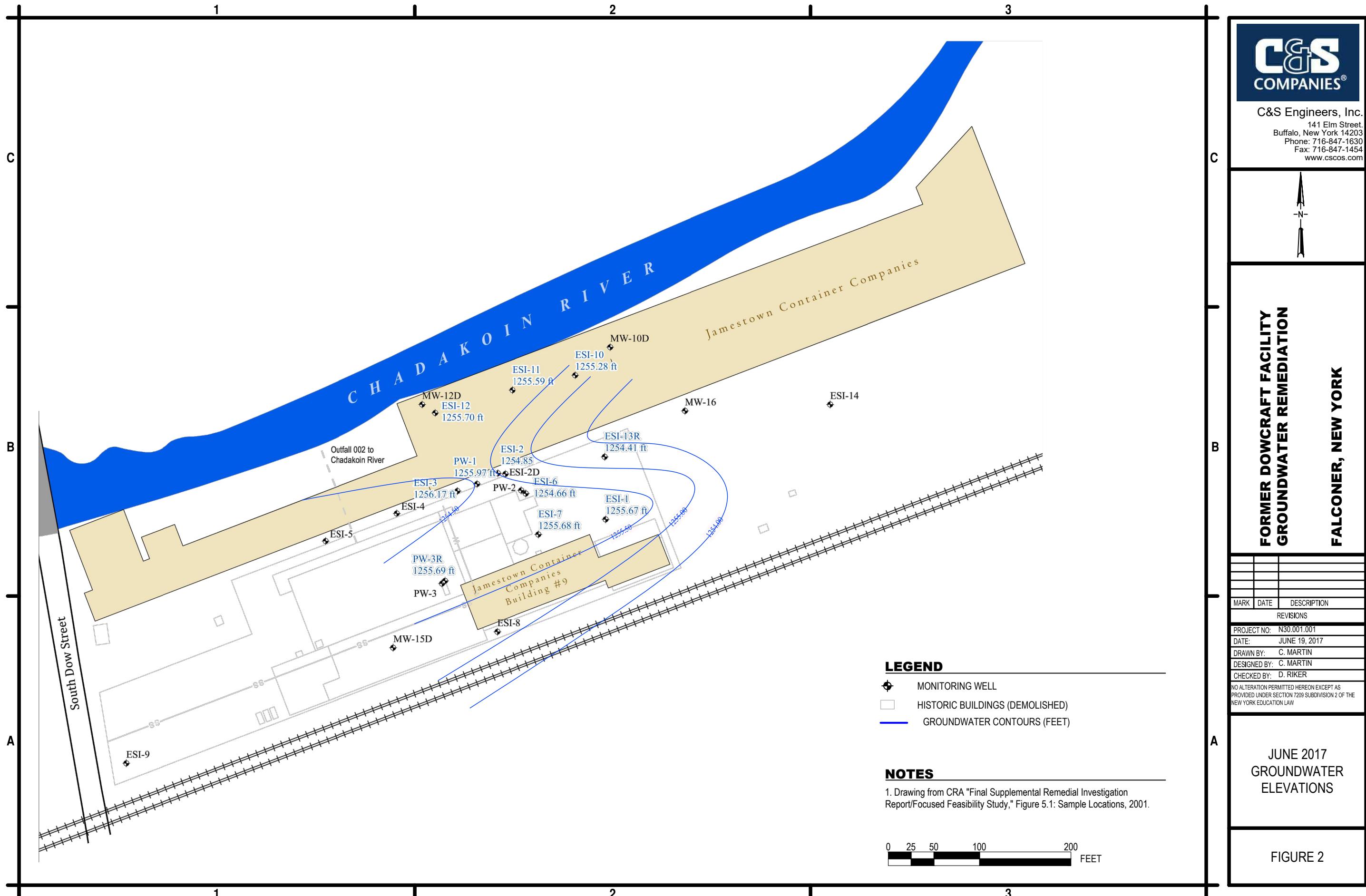
FORMER DOWCRAFT FACILITY GROUNDWATER REMEDIATION

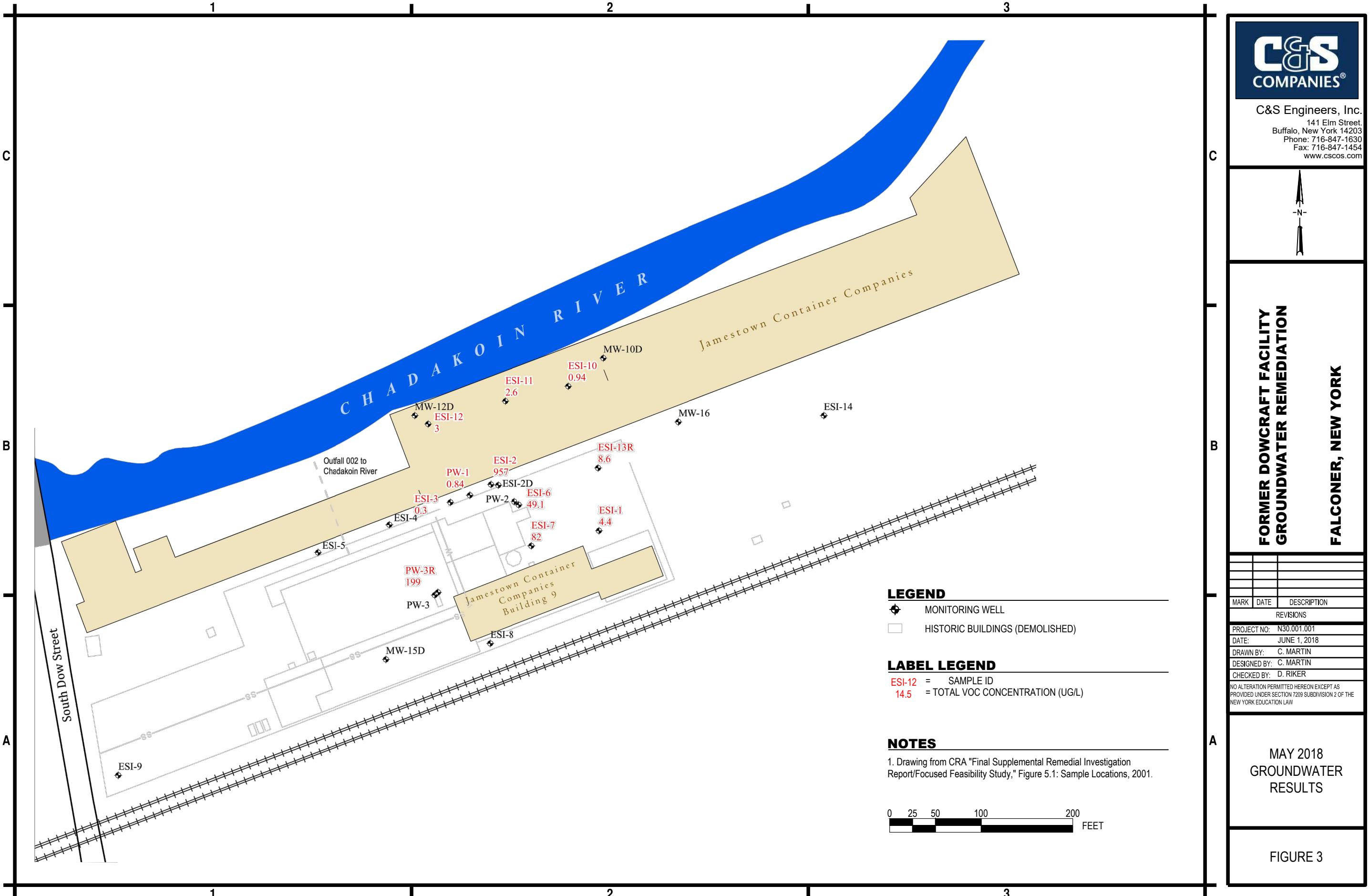
FALCONER, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO:	N30.001.001	
DATE:	JUNE 6, 2016	
DRAWN BY:	C. MARTIN	
DESIGNED BY:	C. MARTIN	
CHECKED BY:	D. RIKER	
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

HISTORIC AND
EXISTING SITE
FEATURES

FIGURE 1





APPENDICES

APPENDIX A

**GROUNDWATER ANALYTICAL
RESULTS**



ANALYTICAL REPORT

Lab Number:	L1816596
Client:	C&S Companies 141 Elm Street, Suite 100 Buffalo, NY 14203
ATTN:	Cody Martin
Phone:	(716) 847-1630
Project Name:	JAMESTOWN CONTAINER
Project Number:	N30001001
Report Date:	05/15/18

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1816596-01	ESI-3-050718	WATER	14 DEMING DRIVE	05/07/18 10:50	05/08/18
L1816596-02	PW-1-050718	WATER	14 DEMING DRIVE	05/07/18 12:00	05/08/18
L1816596-03	ESI-12-050718	WATER	14 DEMING DRIVE	05/07/18 12:55	05/08/18
L1816596-04	ESI-11-050718	WATER	14 DEMING DRIVE	05/07/18 13:40	05/08/18
L1816596-05	ESI-10-050718	WATER	14 DEMING DRIVE	05/07/18 14:40	05/08/18
L1816596-06	ESI-1-050718	WATER	14 DEMING DRIVE	05/07/18 16:15	05/08/18
L1816596-07	ESI-7-050718	WATER	14 DEMING DRIVE	05/07/18 04:50	05/08/18
L1816596-08	DUP-050718	WATER	14 DEMING DRIVE	05/07/18 12:10	05/08/18
L1816596-09	ESI-13R-050818	WATER	14 DEMING DRIVE	05/08/18 10:15	05/08/18
L1816596-10	ESI-6-050818	WATER	14 DEMING DRIVE	05/08/18 11:10	05/08/18
L1816596-11	ESI-2-050818	WATER	14 DEMING DRIVE	05/08/18 11:55	05/08/18
L1816596-12	PW-3R-050818	WATER	14 DEMING DRIVE	05/08/18 13:00	05/08/18
L1816596-13	TRIP BLANK	WATER	14 DEMING DRIVE	05/08/18 12:00	05/08/18

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1816596-04: The collection date and time on the chain of custody was 07-MAY-18 13:40; however, the collection date/time on the container label was 07-MAY-18 13:45. At the client's request, the collection date/time is reported as 07-MAY-18 13:40.

L1816596-10: The collection date was obtained from the container labels.

Volatile Organics

The WG1115382-6/-7 MS/MSD recoveries, performed on L1816596-10, are below the acceptance criteria for trans-1,3-dichloropropene (0%/0%), vinyl chloride (0%/0%), trans-1,2-dichloroethene (0%/0%) and styrene (0%/0%) due to the concentrations of these compounds falling below the reported detection limits.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Melissa Cripps

Title: Technical Director/Representative

Date: 05/15/18

ORGANICS



VOLATILES



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-01
 Client ID: ESI-3-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 10:50
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 17:35
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.30	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-01
 Client ID: ESI-3-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 10:50
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	93		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-02
 Client ID: PW-1-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 12:00
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 18:03
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.84		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-02
 Client ID: PW-1-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 12:00
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	93		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-03
 Client ID: ESI-12-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 12:55
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 18:30
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-03
 Client ID: ESI-12-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 12:55
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.0	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	94		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-04
 Client ID: ESI-11-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 13:40
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 18:58
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-04
 Client ID: ESI-11-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 13:40
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	92		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-05
 Client ID: ESI-10-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 14:40
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 19:26
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	0.94	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-05
 Client ID: ESI-10-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 14:40
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	95		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-06
 Client ID: ESI-1-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 16:15
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 19:54
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	4.4	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-06
 Client ID: ESI-1-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 16:15
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	95		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-07
 Client ID: ESI-7-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 04:50
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 20:22
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.30	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	52		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-07
 Client ID: ESI-7-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 04:50
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	30		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	92		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-08
 Client ID: DUP-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 12:10
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 20:01
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.82		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-08
 Client ID: DUP-050718
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/07/18 12:10
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-09
 Client ID: ESI-13R-050818
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 10:15
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 20:26
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	7.3		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-09
 Client ID: ESI-13R-050818
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 10:15
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	1.3	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-10
 Client ID: ESI-6-050818
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 11:10
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/12/18 16:11
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	1.4	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	40	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-10
 Client ID: ESI-6-050818
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 11:10
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	5.3		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.4	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID:	L1816596-11	D	Date Collected:	05/08/18 11:55
Client ID:	ESI-2-050818		Date Received:	05/08/18
Sample Location:	14 DEMING DRIVE		Field Prep:	Not Specified

Sample Depth:

Matrix:	Water
Analytical Method:	1,8260C
Analytical Date:	05/11/18 21:42
Analyst:	NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	12	3.5	5	
1,1-Dichloroethane	ND	ug/l	12	3.5	5	
Chloroform	ND	ug/l	12	3.5	5	
Carbon tetrachloride	ND	ug/l	2.5	0.67	5	
1,2-Dichloropropane	ND	ug/l	5.0	0.68	5	
Dibromochloromethane	ND	ug/l	2.5	0.74	5	
1,1,2-Trichloroethane	ND	ug/l	7.5	2.5	5	
Tetrachloroethene	ND	ug/l	2.5	0.90	5	
Chlorobenzene	ND	ug/l	12	3.5	5	
Trichlorofluoromethane	ND	ug/l	12	3.5	5	
1,2-Dichloroethane	ND	ug/l	2.5	0.66	5	
1,1,1-Trichloroethane	ND	ug/l	12	3.5	5	
Bromodichloromethane	ND	ug/l	2.5	0.96	5	
trans-1,3-Dichloropropene	ND	ug/l	2.5	0.82	5	
cis-1,3-Dichloropropene	ND	ug/l	2.5	0.72	5	
Bromoform	ND	ug/l	10	3.2	5	
1,1,2,2-Tetrachloroethane	ND	ug/l	2.5	0.84	5	
Benzene	ND	ug/l	2.5	0.80	5	
Toluene	ND	ug/l	12	3.5	5	
Ethylbenzene	ND	ug/l	12	3.5	5	
Chloromethane	ND	ug/l	12	3.5	5	
Bromomethane	ND	ug/l	12	3.5	5	
Vinyl chloride	ND	ug/l	5.0	0.36	5	
Chloroethane	ND	ug/l	12	3.5	5	
1,1-Dichloroethene	ND	ug/l	2.5	0.84	5	
trans-1,2-Dichloroethene	27	ug/l	12	3.5	5	
Trichloroethene	450	ug/l	2.5	0.88	5	
1,2-Dichlorobenzene	ND	ug/l	12	3.5	5	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID:	L1816596-11	D	Date Collected:	05/08/18 11:55
Client ID:	ESI-2-050818		Date Received:	05/08/18
Sample Location:	14 DEMING DRIVE		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	480		ug/l	12	3.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	ND		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
Methyl Acetate	ND		ug/l	10	1.2	5
Cyclohexane	ND		ug/l	50	1.4	5
1,4-Dioxane	ND		ug/l	1200	300	5
Freon-113	ND		ug/l	12	3.5	5
Methyl cyclohexane	ND		ug/l	50	2.0	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	103		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-12
 Client ID: PW-3R-050818
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 13:00
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 20:52
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	0.16	J	ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	4.6		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	110		ug/l	1.0	0.07	1
Chloroethane	1.5	J	ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	2.2	J	ug/l	2.5	0.70	1
Trichloroethene	2.1		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-12
 Client ID: PW-3R-050818
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 13:00
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.1	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	70		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	9.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	104		70-130

Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID: L1816596-13
 Client ID: TRIP BLANK
 Sample Location: 14 DEMING DRIVE

Date Collected: 05/08/18 12:00
 Date Received: 05/08/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 05/11/18 21:17
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	1	
Chloroform	ND	ug/l	2.5	0.70	1	
Carbon tetrachloride	ND	ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	1	
Dibromochloromethane	ND	ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	1	
Tetrachloroethene	ND	ug/l	0.50	0.18	1	
Chlorobenzene	ND	ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	1	
Bromodichloromethane	ND	ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	1	
Bromoform	ND	ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	1	
Benzene	ND	ug/l	0.50	0.16	1	
Toluene	ND	ug/l	2.5	0.70	1	
Ethylbenzene	ND	ug/l	2.5	0.70	1	
Chloromethane	ND	ug/l	2.5	0.70	1	
Bromomethane	ND	ug/l	2.5	0.70	1	
Vinyl chloride	ND	ug/l	1.0	0.07	1	
Chloroethane	ND	ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1	
Trichloroethene	ND	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1	



Project Name: JAMESTOWN CONTAINER

Lab Number: L1816596

Project Number: N30001001

Report Date: 05/15/18

SAMPLE RESULTS

Lab ID:	L1816596-13	Date Collected:	05/08/18 12:00
Client ID:	TRIP BLANK	Date Received:	05/08/18
Sample Location:	14 DEMING DRIVE	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	102		70-130

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/11/18 11:05
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1115056-5					
Methylene chloride	ND	ug/l	2.5	0.70	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	
Chloroform	ND	ug/l	2.5	0.70	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	2.5	0.70	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
Bromoform	ND	ug/l	2.0	0.65	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	2.5	0.70	
Ethylbenzene	ND	ug/l	2.5	0.70	
Chloromethane	ND	ug/l	2.5	0.70	
Bromomethane	ND	ug/l	2.5	0.70	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	2.5	0.70	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	



Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/11/18 11:05
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1115056-5					
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70	
Methyl tert butyl ether	ND	ug/l	2.5	0.70	
p/m-Xylene	ND	ug/l	2.5	0.70	
o-Xylene	ND	ug/l	2.5	0.70	
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Styrene	ND	ug/l	2.5	0.70	
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	1.0	
2-Butanone	ND	ug/l	5.0	1.9	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	
2-Hexanone	ND	ug/l	5.0	1.0	
Bromochloromethane	ND	ug/l	2.5	0.70	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	
Isopropylbenzene	ND	ug/l	2.5	0.70	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70	
Methyl Acetate	ND	ug/l	2.0	0.23	
Cyclohexane	ND	ug/l	10	0.27	
1,4-Dioxane	ND	ug/l	250	61.	
Freon-113	ND	ug/l	2.5	0.70	
Methyl cyclohexane	ND	ug/l	10	0.40	

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/11/18 11:05
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07			Batch: WG1115056-5		

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	95		70-130

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/11/18 14:32
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08-09,11-13 Batch: WG1115250-5					
Methylene chloride	ND	ug/l	2.5	0.70	
1,1-Dichloroethane	ND	ug/l	2.5	0.70	
Chloroform	ND	ug/l	2.5	0.70	
Carbon tetrachloride	ND	ug/l	0.50	0.13	
1,2-Dichloropropane	ND	ug/l	1.0	0.14	
Dibromochloromethane	ND	ug/l	0.50	0.15	
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50	
Tetrachloroethene	ND	ug/l	0.50	0.18	
Chlorobenzene	ND	ug/l	2.5	0.70	
Trichlorofluoromethane	ND	ug/l	2.5	0.70	
1,2-Dichloroethane	ND	ug/l	0.50	0.13	
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70	
Bromodichloromethane	ND	ug/l	0.50	0.19	
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16	
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14	
Bromoform	ND	ug/l	2.0	0.65	
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17	
Benzene	ND	ug/l	0.50	0.16	
Toluene	ND	ug/l	2.5	0.70	
Ethylbenzene	ND	ug/l	2.5	0.70	
Chloromethane	ND	ug/l	2.5	0.70	
Bromomethane	ND	ug/l	2.5	0.70	
Vinyl chloride	ND	ug/l	1.0	0.07	
Chloroethane	ND	ug/l	2.5	0.70	
1,1-Dichloroethene	ND	ug/l	0.50	0.17	
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Trichloroethene	ND	ug/l	0.50	0.18	
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/11/18 14:32
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08-09,11-13 Batch: WG1115250-5					
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70	
Methyl tert butyl ether	ND	ug/l	2.5	0.70	
p/m-Xylene	ND	ug/l	2.5	0.70	
o-Xylene	ND	ug/l	2.5	0.70	
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	
Styrene	ND	ug/l	2.5	0.70	
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	
Acetone	ND	ug/l	5.0	1.5	
Carbon disulfide	ND	ug/l	5.0	1.0	
2-Butanone	ND	ug/l	5.0	1.9	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	
2-Hexanone	ND	ug/l	5.0	1.0	
Bromochloromethane	ND	ug/l	2.5	0.70	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	
Isopropylbenzene	ND	ug/l	2.5	0.70	
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70	
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70	
Methyl Acetate	ND	ug/l	2.0	0.23	
Cyclohexane	ND	ug/l	10	0.27	
1,4-Dioxane	ND	ug/l	250	61.	
Freon-113	ND	ug/l	2.5	0.70	
Methyl cyclohexane	ND	ug/l	10	0.40	

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/11/18 14:32
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08-09,11-13 Batch: WG1115250-5					

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/18 08:27
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1115382-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/18 08:27
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1115382-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/18 08:27
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	10	Batch:	WG1115382-5		

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1115056-3 WG1115056-4								
Methylene chloride	97		91		70-130	6		20
1,1-Dichloroethane	100		95		70-130	5		20
Chloroform	90		85		70-130	6		20
Carbon tetrachloride	87		81		63-132	7		20
1,2-Dichloropropane	100		96		70-130	4		20
Dibromochloromethane	93		89		63-130	4		20
1,1,2-Trichloroethane	100		95		70-130	5		20
Tetrachloroethene	87		80		70-130	8		20
Chlorobenzene	94		89		75-130	5		20
Trichlorofluoromethane	88		79		62-150	11		20
1,2-Dichloroethane	90		86		70-130	5		20
1,1,1-Trichloroethane	89		84		67-130	6		20
Bromodichloromethane	88		82		67-130	7		20
trans-1,3-Dichloropropene	100		90		70-130	11		20
cis-1,3-Dichloropropene	91		87		70-130	4		20
Bromoform	94		92		54-136	2		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	89		84		70-130	6		20
Toluene	97		89		70-130	9		20
Ethylbenzene	94		88		70-130	7		20
Chloromethane	100		92		64-130	8		20
Bromomethane	48		45		39-139	6		20
Vinyl chloride	70		64		55-140	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1115056-3 WG1115056-4								
Chloroethane	85		75		55-138	13		20
1,1-Dichloroethene	91		85		61-145	7		20
trans-1,2-Dichloroethene	94		88		70-130	7		20
Trichloroethene	86		78		70-130	10		20
1,2-Dichlorobenzene	94		92		70-130	2		20
1,3-Dichlorobenzene	94		89		70-130	5		20
1,4-Dichlorobenzene	93		90		70-130	3		20
Methyl tert butyl ether	95		92		63-130	3		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	91		85		70-130	7		20
Styrene	140	Q	130		70-130	7		20
Dichlorodifluoromethane	65		59		36-147	10		20
Acetone	130		130		58-148	0		20
Carbon disulfide	94		86		51-130	9		20
2-Butanone	130		130		63-138	0		20
4-Methyl-2-pentanone	120		110		59-130	9		20
2-Hexanone	100		100		57-130	0		20
Bromochloromethane	87		82		70-130	6		20
1,2-Dibromoethane	94		91		70-130	3		20
1,2-Dibromo-3-chloropropane	99		93		41-144	6		20
Isopropylbenzene	98		93		70-130	5		20
1,2,3-Trichlorobenzene	77		77		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS		LCSD		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	Limits				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1115056-3 WG1115056-4									
1,2,4-Trichlorobenzene	80		78		70-130	3			20
Methyl Acetate	130		130		70-130	0			20
Cyclohexane	110		100		70-130	10			20
1,4-Dioxane	190	Q	152		56-162	22	Q		20
Freon-113	93		85		70-130	9			20
Methyl cyclohexane	91		84		70-130	8			20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	94		94		70-130
Toluene-d8	101		99		70-130
4-Bromofluorobenzene	97		99		70-130
Dibromofluoromethane	92		93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09,11-13 Batch: WG1115250-3 WG1115250-4								
Methylene chloride	92		89		70-130	3		20
1,1-Dichloroethane	91		88		70-130	3		20
Chloroform	90		87		70-130	3		20
Carbon tetrachloride	92		88		63-132	4		20
1,2-Dichloropropane	90		89		70-130	1		20
Dibromochloromethane	86		83		63-130	4		20
1,1,2-Trichloroethane	90		88		70-130	2		20
Tetrachloroethene	96		89		70-130	8		20
Chlorobenzene	90		85		75-130	6		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	94		92		70-130	2		20
1,1,1-Trichloroethane	95		90		67-130	5		20
Bromodichloromethane	90		87		67-130	3		20
trans-1,3-Dichloropropene	88		85		70-130	3		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	83		86		54-136	4		20
1,1,2,2-Tetrachloroethane	86		87		67-130	1		20
Benzene	94		90		70-130	4		20
Toluene	88		83		70-130	6		20
Ethylbenzene	90		86		70-130	5		20
Chloromethane	88		82		64-130	7		20
Bromomethane	73		72		39-139	1		20
Vinyl chloride	88		84		55-140	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09,11-13 Batch: WG1115250-3 WG1115250-4								
Chloroethane	87		86		55-138	1		20
1,1-Dichloroethene	95		90		61-145	5		20
trans-1,2-Dichloroethene	92		88		70-130	4		20
Trichloroethene	97		93		70-130	4		20
1,2-Dichlorobenzene	83		83		70-130	0		20
1,3-Dichlorobenzene	85		83		70-130	2		20
1,4-Dichlorobenzene	84		82		70-130	2		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	89		87		70-130	2		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	110		100		36-147	10		20
Acetone	99		100		58-148	1		20
Carbon disulfide	96		89		51-130	8		20
2-Butanone	96		110		63-138	14		20
4-Methyl-2-pentanone	93		94		59-130	1		20
2-Hexanone	90		92		57-130	2		20
Bromochloromethane	96		92		70-130	4		20
1,2-Dibromoethane	88		87		70-130	1		20
1,2-Dibromo-3-chloropropane	87		92		41-144	6		20
Isopropylbenzene	88		85		70-130	3		20
1,2,3-Trichlorobenzene	86		86		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09,11-13 Batch: WG1115250-3 WG1115250-4								
1,2,4-Trichlorobenzene	84		82		70-130	2		20
Methyl Acetate	95		100		70-130	5		20
Cyclohexane	100		98		70-130	2		20
1,4-Dioxane	104		148		56-162	35	Q	20
Freon-113	110		99		70-130	11		20
Methyl cyclohexane	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		100		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1115382-3 WG1115382-4								
Methylene chloride	97		96		70-130	1		20
1,1-Dichloroethane	100		98		70-130	2		20
Chloroform	99		97		70-130	2		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	96		97		70-130	1		20
Dibromochloromethane	92		92		63-130	0		20
1,1,2-Trichloroethane	99		100		70-130	1		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	100		97		75-130	3		20
Trichlorofluoromethane	93		96		62-150	3		20
1,2-Dichloroethane	98		100		70-130	2		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	94		96		67-130	2		20
trans-1,3-Dichloropropene	99		98		70-130	1		20
cis-1,3-Dichloropropene	97		97		70-130	0		20
Bromoform	87		89		54-136	2		20
1,1,2,2-Tetrachloroethane	97		100		67-130	3		20
Benzene	100		98		70-130	2		20
Toluene	100		97		70-130	3		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	100		96		64-130	4		20
Bromomethane	120		130		39-139	8		20
Vinyl chloride	98		99		55-140	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1115382-3 WG1115382-4								
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	95		94		61-145	1		20
trans-1,2-Dichloroethene	100		97		70-130	3		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	99		97		70-130	2		20
1,4-Dichlorobenzene	97		97		70-130	0		20
Methyl tert butyl ether	95		100		63-130	5		20
p/m-Xylene	110		100		70-130	10		20
o-Xylene	105		100		70-130	5		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	94		96		36-147	2		20
Acetone	120		100		58-148	18		20
Carbon disulfide	110		96		51-130	14		20
2-Butanone	100		110		63-138	10		20
4-Methyl-2-pentanone	100		100		59-130	0		20
2-Hexanone	100		100		57-130	0		20
Bromochloromethane	99		100		70-130	1		20
1,2-Dibromoethane	98		98		70-130	0		20
1,2-Dibromo-3-chloropropane	88		93		41-144	6		20
Isopropylbenzene	110	Q	99	Q	70-130	11		20
1,2,3-Trichlorobenzene	160	Q	190	Q	70-130	17		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	<i>LCS</i> %Recovery	Qual	<i>LCSD</i> %Recovery	Qual	%Recovery Limits	RPD	Qual	<i>RPD</i> Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1115382-3 WG1115382-4								
1,2,4-Trichlorobenzene	110		120		70-130	9		20
Methyl Acetate	100		110		70-130	10		20
Cyclohexane	100		96		70-130	4		20
1,4-Dioxane	118		132		56-162	11		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	110		96		70-130	14		20

Surrogate	<i>LCS</i> %Recovery	Qual	<i>LCSD</i> %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		106		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	101		100		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1115382-6 WG1115382-7 QC Sample: L1816596-10 Client ID: ESI-6-050818												
Methylene chloride	ND	10	10	100		10	100		70-130	0		20
1,1-Dichloroethane	ND	10	11	110		10	100		70-130	10		20
Chloroform	ND	10	11	110		10	100		70-130	10		20
Carbon tetrachloride	ND	10	11	110		10	100		63-132	10		20
1,2-Dichloropropane	ND	10	10	100		10	100		70-130	0		20
Dibromochloromethane	ND	10	9.0	90		9.0	90		63-130	0		20
1,1,2-Trichloroethane	ND	10	10	100		10	100		70-130	0		20
Tetrachloroethene	1.4	10	12	106		11	96		70-130	9		20
Chlorobenzene	ND	10	10	100		10	100		75-130	0		20
Trichlorofluoromethane	ND	10	11	110		11	110		62-150	0		20
1,2-Dichloroethane	ND	10	11	110		10	100		70-130	10		20
1,1,1-Trichloroethane	ND	10	11	110		11	110		67-130	0		20
Bromodichloromethane	ND	10	10	100		10	100		67-130	0		20
trans-1,3-Dichloropropene	ND	10	ND	0	Q	ND	0	Q	70-130	NC		20
cis-1,3-Dichloropropene	ND	10	0.46J	5	Q	0.15J	2	Q	70-130	102	Q	20
Bromoform	ND	10	9.0	90		8.9	89		54-136	1		20
1,1,2,2-Tetrachloroethane	ND	10	9.9	99		9.8	98		67-130	1		20
Benzene	ND	10	11	110		10	100		70-130	10		20
Toluene	ND	10	8.7	87		8.7	87		70-130	0		20
Ethylbenzene	ND	10	9.1	91		9.0	90		70-130	1		20
Chloromethane	ND	10	13	130		12	120		64-130	8		20
Bromomethane	ND	10	12	120		13	130		39-139	8		20
Vinyl chloride	ND	10	ND	0	Q	ND	0	Q	55-140	NC		20

Matrix Spike Analysis
Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1115382-6 WG1115382-7 QC Sample: L1816596-10 Client ID: ESI-6-050818												
Chloroethane	ND	10	11	110		11	110		55-138	0		20
1,1-Dichloroethene	ND	10	7.8	78		6.8	68		61-145	14		20
trans-1,2-Dichloroethene	ND	10	ND	0	Q	ND	0	Q	70-130	NC		20
Trichloroethene	40	10	80	400	Q	75	350	Q	70-130	6		20
1,2-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,3-Dichlorobenzene	ND	10	10	100		9.8	98		70-130	2		20
1,4-Dichlorobenzene	ND	10	9.8	98		9.8	98		70-130	0		20
Methyl tert butyl ether	ND	10	9.9	99		9.9	99		63-130	0		20
p/m-Xylene	ND	20	4.6	23	Q	5.5	28	Q	70-130	18		20
o-Xylene	ND	20	6.2	31	Q	8.7	44	Q	70-130	34	Q	20
cis-1,2-Dichloroethene	5.3	10	24	187	Q	21	157	Q	70-130	13		20
Styrene	ND	20	ND	0	Q	ND	0	Q	70-130	NC		20
Dichlorodifluoromethane	ND	10	11	110		10	100		36-147	10		20
Acetone	2.4J	10	13	130		13	130		58-148	0		20
Carbon disulfide	ND	10	10	100		9.6	96		51-130	4		20
2-Butanone	ND	10	10	100		11	110		63-138	10		20
4-Methyl-2-pentanone	ND	10	9.2	92		8.9	89		59-130	3		20
2-Hexanone	ND	10	9.1	91		8.4	84		57-130	8		20
Bromochloromethane	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromoethane	ND	10	9.9	99		10	100		70-130	1		20
1,2-Dibromo-3-chloropropane	ND	10	8.2	82		8.5	85		41-144	4		20
Isopropylbenzene	ND	10	9.2	92		8.9	89		70-130	3		20
1,2,3-Trichlorobenzene	ND	10	15	150	Q	15	150	Q	70-130	0		20

Matrix Spike Analysis
Batch Quality Control

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1115382-6 WG1115382-7 QC Sample: L1816596-10 Client ID: ESI-6-050818												
1,2,4-Trichlorobenzene	ND	10	11	110		11	110		70-130	0		20
Methyl Acetate	ND	10	9.5	95		9.4	94		70-130	1		20
Cyclohexane	ND	10	10	100		9.4J	94		70-130	6		20
1,4-Dioxane	ND	500	470	94		600	120		56-162	24	Q	20
Freon-113	ND	10	11	110		10	100		70-130	10		20
Methyl cyclohexane	ND	10	9.9J	99		9.0J	90		70-130	10		20

Surrogate	MS	MS		MSD	MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	106			105			70-130
4-Bromofluorobenzene	97			98			70-130
Dibromofluoromethane	101			101			70-130
Toluene-d8	98			98			70-130

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1816596-01A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-01B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-01C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-02A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-02B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-02C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-03A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-03B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-03C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-04A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-04B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-04C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-05A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-05B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-05C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-06A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-06B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-06C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-07A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-07B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-07C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-08A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-08B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1816596-08C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-09A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-09B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-09C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10A1	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10A2	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10B1	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10B2	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10C1	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-10C2	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-11A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-11B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-11C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-12A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-12B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-12C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-13A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1816596-13B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: JAMESTOWN CONTAINER
Project Number: N30001001

Lab Number: L1816596
Report Date: 05/15/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

- Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.
- Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.
- Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.
- Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.
- Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A - Spectra identified as "Aldol Condensation Product".
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers



Project Name: JAMESTOWN CONTAINER
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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: JAMESTOWN CONTAINER
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Lab Number: L1816596
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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO₃-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO₃-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO₄-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT, Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA ANALYTICAL	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page <i>1 of 2</i>	Date Rec'd in Lab <i>5/9/18</i>	ALPHA Job # <i>1616596</i>
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information		Billing Information	
		Project Name: <i>Jamestown Container</i>	<input type="checkbox"/> ASP-A	<input checked="" type="checkbox"/> ASP-B	<input checked="" type="checkbox"/> Same as Client Info
		Project Location: <i>14 Deming Drive</i>	<input checked="" type="checkbox"/> EQuIS (1 File)	<input type="checkbox"/> EQuIS (4 File)	PO# <i>N30001001</i>
Client Information		Project # <i>N30001001</i>	<input type="checkbox"/> Other		
Client: <i>ESI Engineers</i>		(Use Project name as Project #) <input type="checkbox"/>	Regulatory Requirement		Disposal Site Information
Address: <i>414 E 4th St</i>		Project Manager: <i>Cody Martin</i>	<input checked="" type="checkbox"/> NY TOGS	<input checked="" type="checkbox"/> NY Part 375	Please identify below location of applicable disposal facilities.
Phone: <i>716-955-3021</i>		ALPHAQuote #:	<input type="checkbox"/> AWQ Standards	<input type="checkbox"/> NY CP-51	
Fax:		Turn-Around Time	<input type="checkbox"/> NY Restricted Use	<input type="checkbox"/> Other	Disposal Facility:
Email: <i>cmartin@cccs.com</i>		Standard <input checked="" type="checkbox"/>	<input type="checkbox"/> NY Unrestricted Use	<input type="checkbox"/> NYC Sewer Discharge	<input type="checkbox"/> NJ
		Rush (only if pre approved) <input type="checkbox"/>	# of Days:	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> NY
These samples have been previously analyzed by Alpha <input type="checkbox"/>		ANALYSIS		Sample Filtration	
Other project specific requirements/comments:				<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do <i>(Please Specify below)</i>	
Please specify Metals or TAL.				<input type="checkbox"/> Sample Specific Comments	
ALPHA Lab ID (Lab Use Only) <i>16596-01</i>	Sample ID	Collection		Sampler's Initials <i>DOC</i>	Total Volume <i>8260 VOC</i>
		Date	Time		
		<i>5/7/18</i>	<i>10:50</i>		
		<i>5/7/18</i>	<i>12:00</i>		
		<i>5/7/18</i>	<i>12:55</i>		
		<i>5/7/18</i>	<i>13:40</i>		
		<i>5/7/18</i>	<i>14:40</i>		
		<i>5/7/18</i>	<i>16:15</i>		
		<i>5/7/18</i>	<i>4:50</i>		
		<i>5/7/18</i>	<i>12:15</i>		
		<i>5/8/18</i>	<i>10:15</i>		
<i>5/8/18</i>	<i>11:15</i>				
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Container Type <i>A</i>	MS/MSD <i>9</i>	
			Preservative <i>B</i>	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
Relinquished By: <i>Janey</i>		Date/Time: <i>5/8/18 10:45</i>	Received By: <i>Ad</i>	Date/Time: <i>5/8/18 10:45</i>	
		<i>5/9/18 16:45</i>	<i>CJ</i>	<i>5/9/18 01:10</i>	

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd. TEL: 508-822-9300 FAX: 508-822-3288		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 2 of 2	Date Rec'd in Lab 5/9/18	ALPHA Job # L1816596									
Client Information Client: <i>CJ's Enginerec</i> Address: <i>14 Elm St</i> Phone: <i>716-955-3021</i> Fax: Email: <i>cmarlin@algonet.com</i>		Project Information Project Name: <i>Jonestown Container</i> Project Location: <i>14 Deming Drive</i> Project # <i>N30 cont cont</i> (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input checked="" type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO# <i>N30.001.001</i>									
				Regulatory Requirement <input checked="" type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input checked="" type="checkbox"/> NY <input type="checkbox"/> Other									
		Turn-Around Time Standard <input checked="" type="checkbox"/> Rush (if pre approved) <input type="checkbox"/> Due Date: # of Days:		ANALYSIS <i>8268 VOC</i>		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)									
						Sample Specific Comments <i>3</i> <i>5</i>									
Please specify Metals or TAL.															
ALPHA Lab ID (Lab Use Only) 16596-11 -12 -13	Sample ID <i>ESI-2-050818</i> <i>DW-3R-050818</i> <i>TRIP BLANK</i>	Collection <table border="1"> <tr> <th>Date</th> <th>Time</th> </tr> <tr> <td><i>5/8/18</i></td> <td><i>11:55</i></td> </tr> <tr> <td><i>5/8/18</i></td> <td><i>13:00</i></td> </tr> <tr> <td><i>5/8/18</i></td> <td><i>12:00</i></td> </tr> </table>		Date	Time	<i>5/8/18</i>	<i>11:55</i>	<i>5/8/18</i>	<i>13:00</i>	<i>5/8/18</i>	<i>12:00</i>	Sampler's Initials <i>WG CM A</i> <i>WG EM X</i> <i>WG CM X</i>	Container Type <i>A</i>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
		Date	Time												
		<i>5/8/18</i>	<i>11:55</i>												
		<i>5/8/18</i>	<i>13:00</i>												
<i>5/8/18</i>	<i>12:00</i>														
Preservative <i>B</i>															
Relinquished By: <i>John Marlin</i> <i>CJ's Enginerec</i>		Date/Time <i>5/8/18 16:45</i> <i>5/8/18 16:45</i>													
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015											
Form No: 01-25 HC (rev. 30-Sept-2013)															