



February 19, 2018

Juan Avila
AR15.COM, LLC
3021 Ridge Road Suite A-72
Rockwall, Texas 75032

Re: **Groundwater Sampling Report**
Former Griffin Technology Site
C835008

CC: **Todd Caffoe, NYSDEC**

Dear Mr. Avila:

Lu Engineers is pleased to submit this summary letter detailing the most recent groundwater sampling event conducted at the Former Griffin Technology Site on October 12, 2017. A Site Location Map is provided in the attached Figure 1.

Groundwater samples were collected via bailer sampling methods from eight (8) on-Site groundwater monitoring wells. One (1) well, OW-6/RW-2, was not sampled during this sampling event, consistent with past several rounds due to a well obstruction or broken stickup.

The following information was collected and recorded on field logs during the initial sampling round:

- Initial and final depth to water
- Total purged volume in gallons
- Total well depth
- Groundwater quality parameters:
 - pH
 - dissolved oxygen (DO)
 - turbidity
 - conductivity
 - oxidation reduction potential (ORP)

Groundwater field logs are included in Attachment A.

Groundwater samples were stored on ice and relinquished to TestAmerica Buffalo, an ELAP-certified laboratory, for volatile organic compounds (VOCs) analysis by EPA Method 8260 plus 30 Tentatively Identified Compounds (TICs).

Results

Analytical results for OW-1 continue to show concentration values below 6 NYCRR Part 703.5 Ambient Water Quality Standards (AWQS) for several constituents previously detected in exceedance of Part 703.5 AWQS. OW-9/MW-3 show a significant decrease in trichloroethene and non-detect for previously detected constituents.

Wells OW-2, OW-3, and OW-7 show a slight increase in several parameters, including cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (degradation products of trichloroethene [TCE]), from the November 2016 sampling

to October 2017. The observed increase in degradation products is presumably a result of TCE breakdown. Despite the slight increase in cis-1,2-DCE and vinyl chloride, chlorinated volatile organic compound (CVOC) concentrations in these wells (OW-2, OW-3, and OW-7) indicate an overall CVOC reduction with respect to previous sampling events.

Analytical results from monitoring wells OW-4 and OW-5 still indicate CVOCs in exceedance of Part 703.5 AWQS. However, a general decline in concentration with respect to the detected CVOCs has occurred since the initial monitoring events.

OW-8/MW-4 analytical results indicated an increase in TCE and a reduction in associated degradation products, specifically cis-1,2-DCE and vinyl chloride. Results from the next scheduled sampling event in 2018 will provide more information with respect to this finding.

The attached tables present analytical data and graphical trend analyses to compare most recent findings to results of prior years.

Figures 2-7 present TCE and its associated daughter product results along with groundwater contours from November 2016 and October 2017.

Conclusions and Recommendations

Lu Engineers recommends continued annual sampling to monitor the progress of TCE reduction at the Site. Although it does not appear that the lack of analytical data from OW-6/RW-2 is causing a data gap, it is recommended that this monitoring well be repaired for future access. No further action is recommended at this time.

If you have any questions, please contact us at 585-385-7417.

Sincerely,



Gregory L. Andrus, P.G., CHMM
Group Leader, Investigation/Remediation

Figure 1- Site Location Map

Figure 2- Trichloroethene Groundwater Results – October 2017

Figure 3- Trichloroethene Groundwater Results – November 2016

Figure 4- Trichloroethene Daughter Products Groundwater Results – October 2017

Figure 5- Trichloroethene Daughter Products Groundwater Results – November 2016

Figure 6- Groundwater Contours – November 2016

Figure 7- Groundwater Contours – October 2017

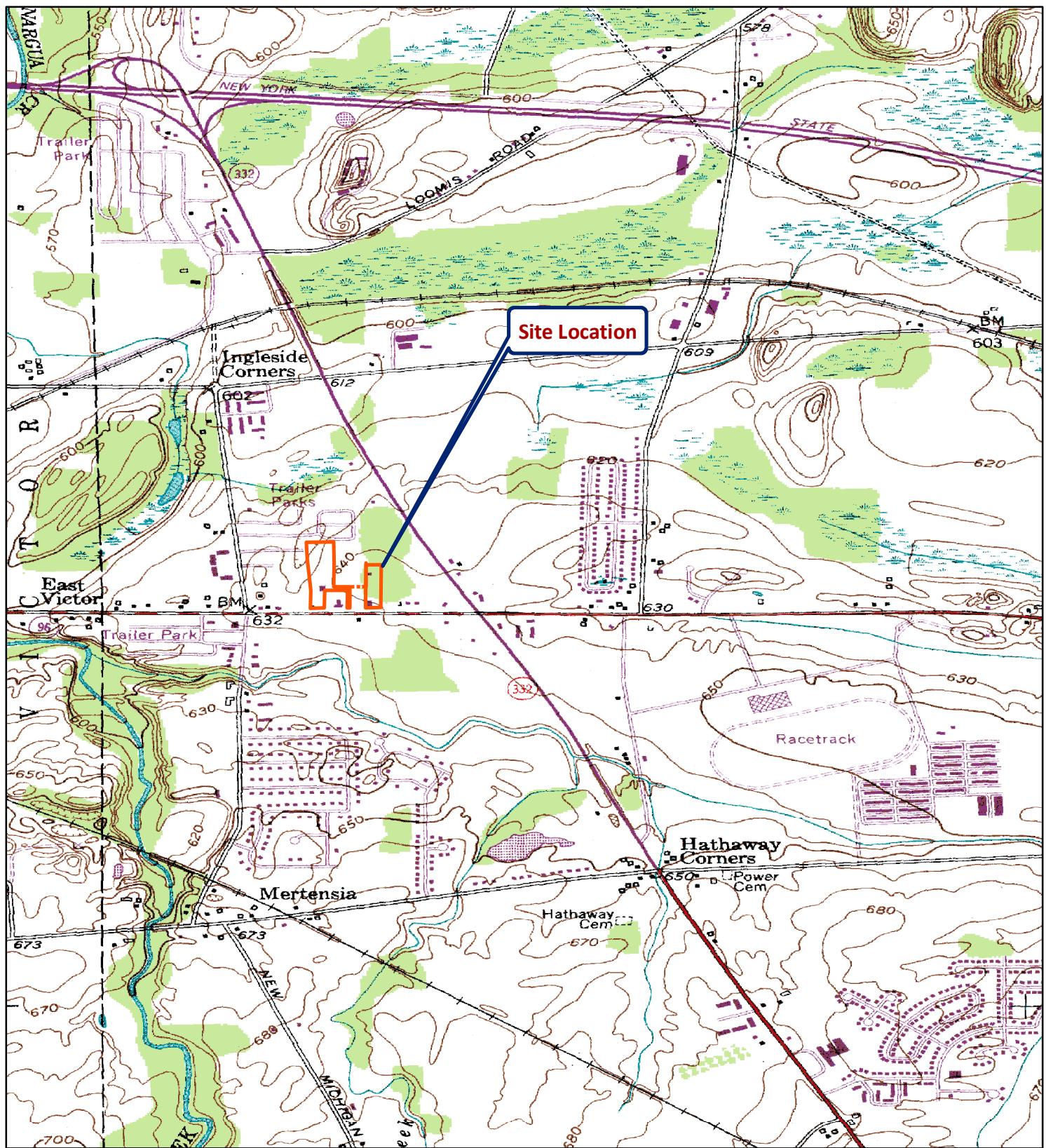
Table 1- Groundwater Sampling Results 2008-2017 and Trend Analyses

Attachment A- Groundwater Sampling Field Records

Attachment B- Analytical Report



Figures



1 inch = 2,000 feet

0 500 1,000 2,000 3,000 4,000
Feet



New York Quadrangle Location

FIGURE 1
SITE LOCATION PLAN

6132 AND 6162 ROUTE 96
FARMINGTON, NEW YORK

DATE: MARCH 2016
SCALE: AS NOTED
DRAWN/CHECKED: CSB/JB
DATA SOURCE: USGS DRG RASTER QUADRANGLES

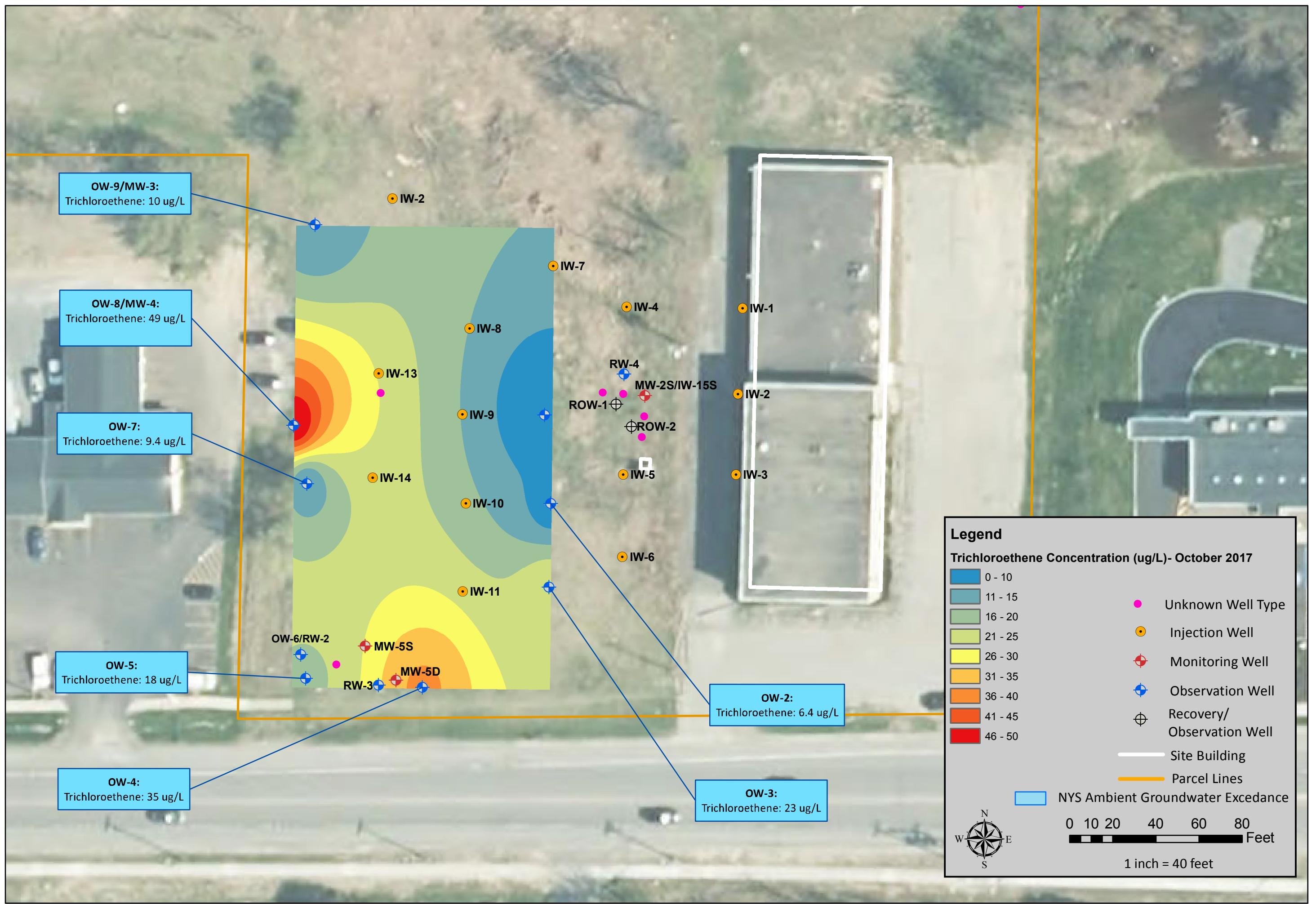


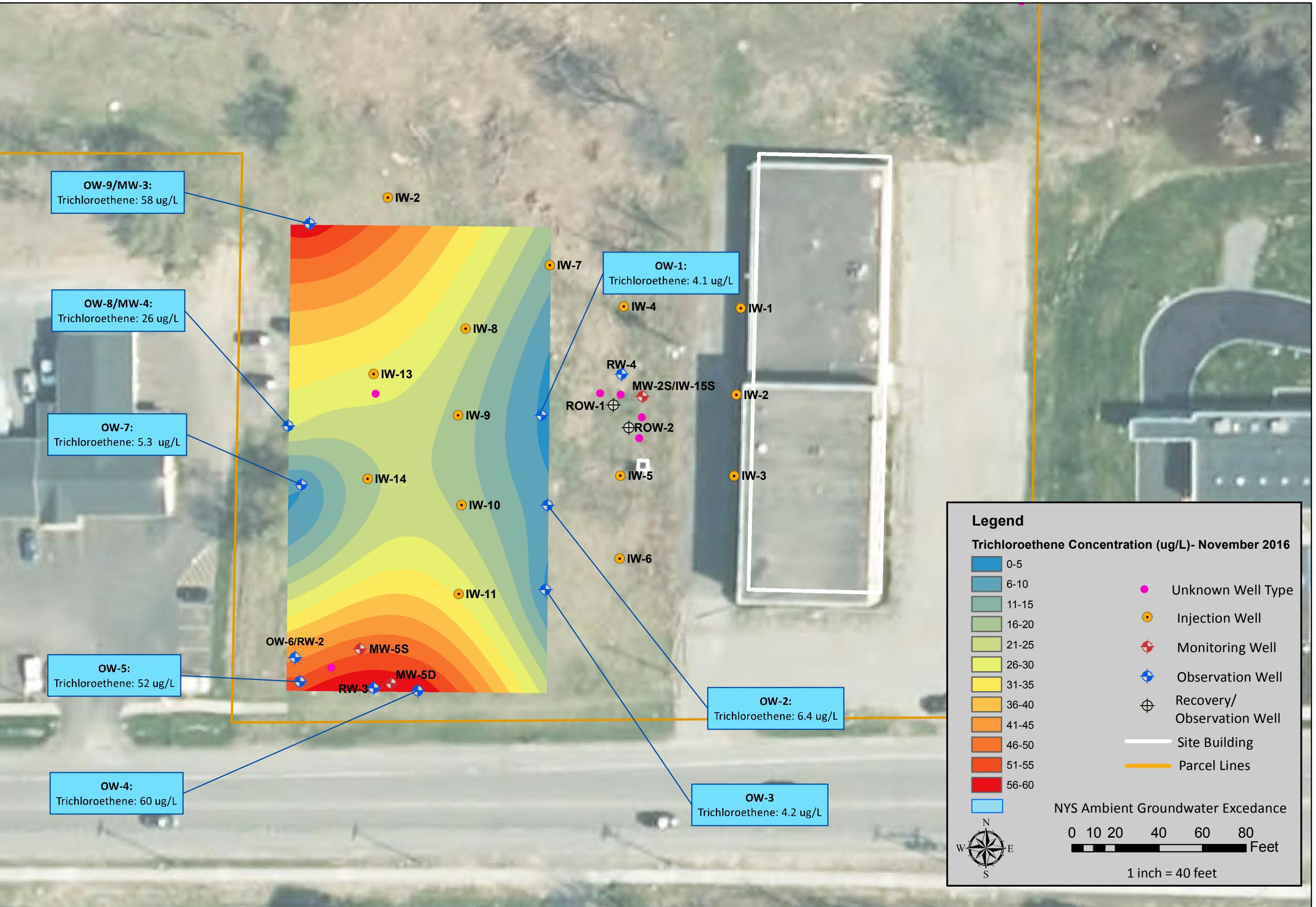
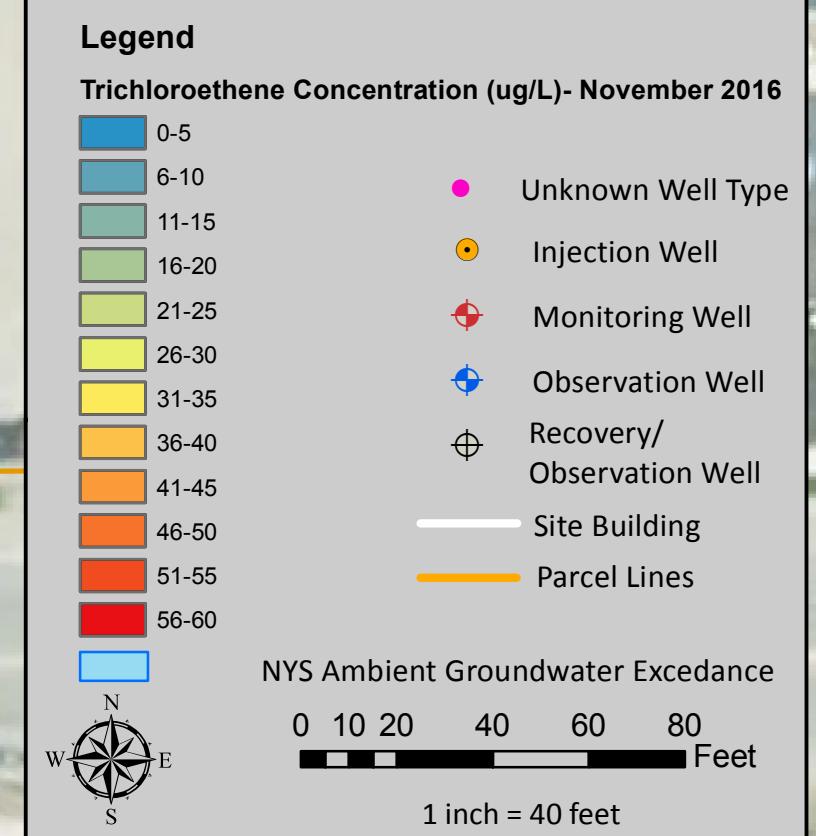
FIGURE 2
FORMER GRIFFIN TECHNOLOGY SITE
TRICHLOROETHENE GROUNDWATER RESULTS - OCTOBER 2017

6132 AND 6162 ROUTE 96, FARMINGTON, NEW YORK

DATE: DECEMBER 2017
 PROJECT NO.: 50322-01
 DRAWN/CHECKED: PRC/GLA
 DATA SOURCE: S&W FIGURE 2,
 NYS GIS CLEARINGHOUSE
 ORTHOMAGERY

FIGURE 3
FORMER GRIFFIN TECHNOLOGY SITE
TRICHLOROETHENE GROUNDWATER RESULTS - NOVEMBER 2016

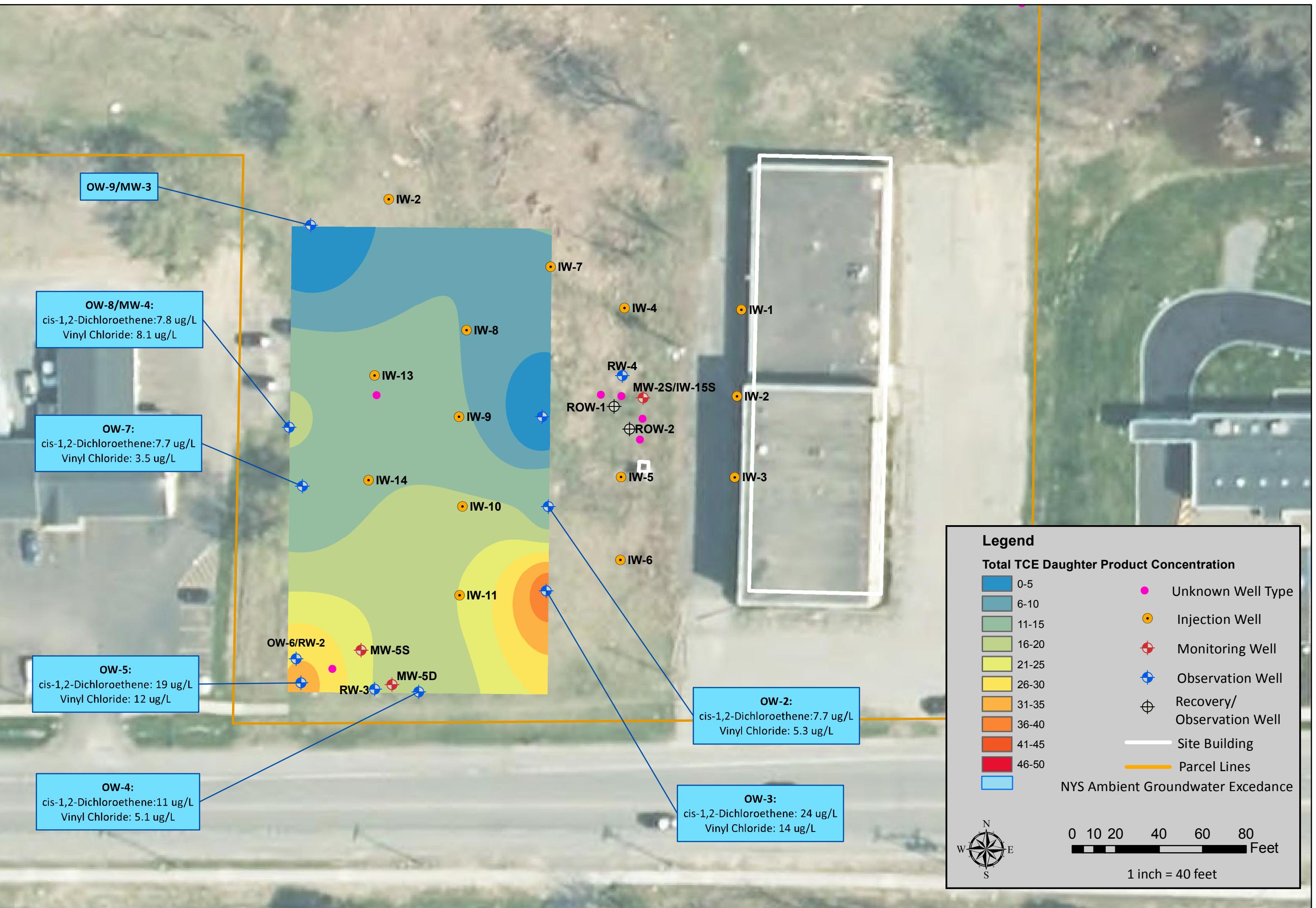
6132 AND 6162 ROUTE 96, FARMINGTON, NEW YORK



DATE: DECEMBER 2017
 PROJECT NO.: 50322-01
 DRAWN/CHECKED: PRC/GLA
 DATA SOURCE: S&W FIGURE 2,
 NYS GIS CLEARINGHOUSE
 ORTHOMAGERY

FIGURE 4
FORMER GRIFFIN TECHNOLOGY SITE
TRICHLOROETHENE DAUGHTER PRODUCTS GROUNDWATER RESULTS - OCTOBER 2017

6132 AND 6162 ROUTE 96, FARMINGTON, NEW YORK



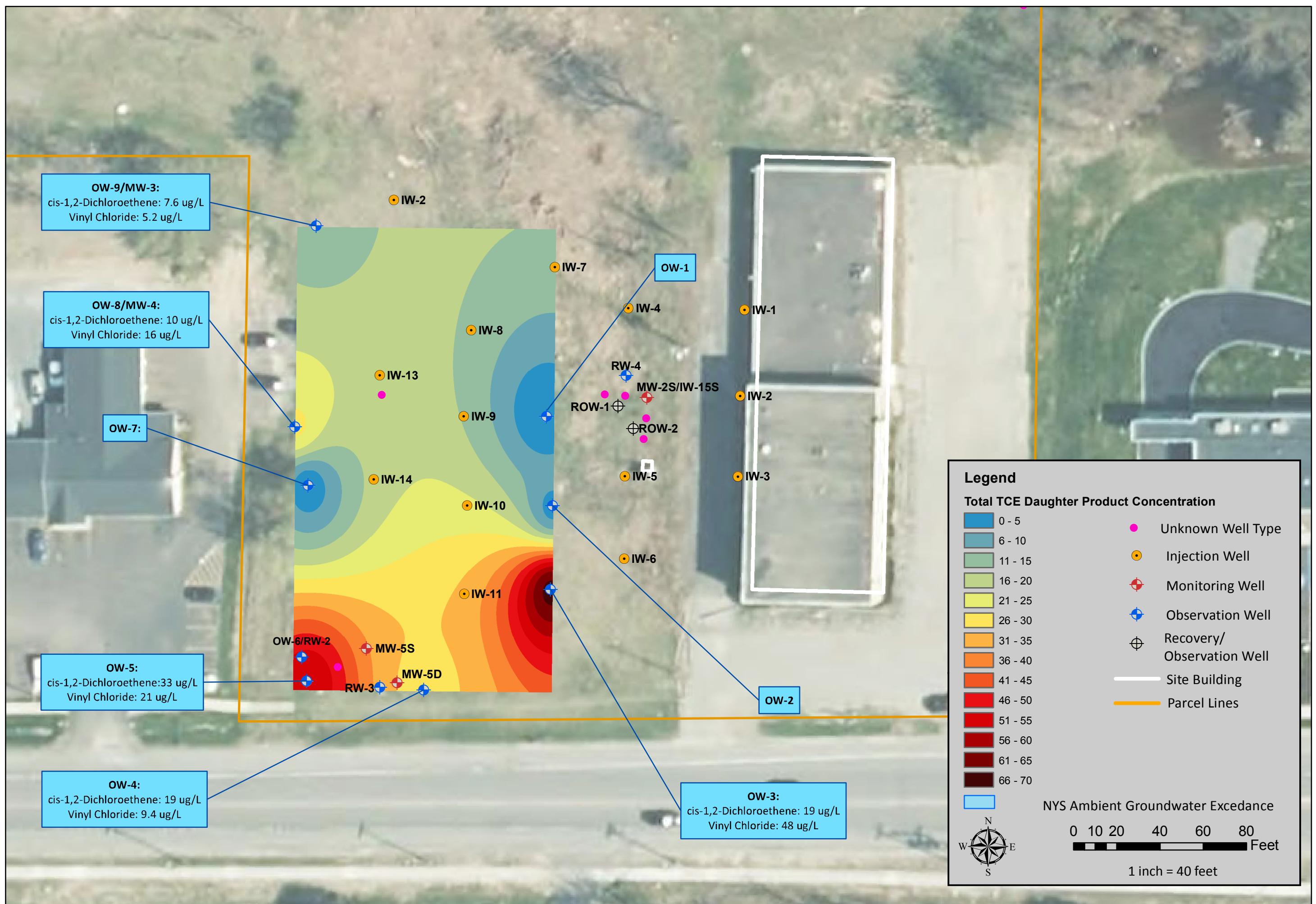


FIGURE 5
FORMER GRIFFIN TECHNOLOGY SITE
TRICHLOROETHENE DAUGHTER PRODUCTS GROUNDWATER RESULTS
NOVEMBER 2016

6132 AND 6162 ROUTE 96, FARMINGTON, NEW YORK

NSSIS CLEAKINGHOUSE
ORTHOIMAGERY

393 CLEAKINGHOUSE
THOIMAGERY

HOIMAGERY
SIS CLEARKHOUSE

IMAGERY
CLEARINGHOUSE

THE LEARNINGHOUSE
IMAGERY

EARINGHOUSE

RINGHOUSE

YHOUSE

HOUSE

USE

USE

E

10

1

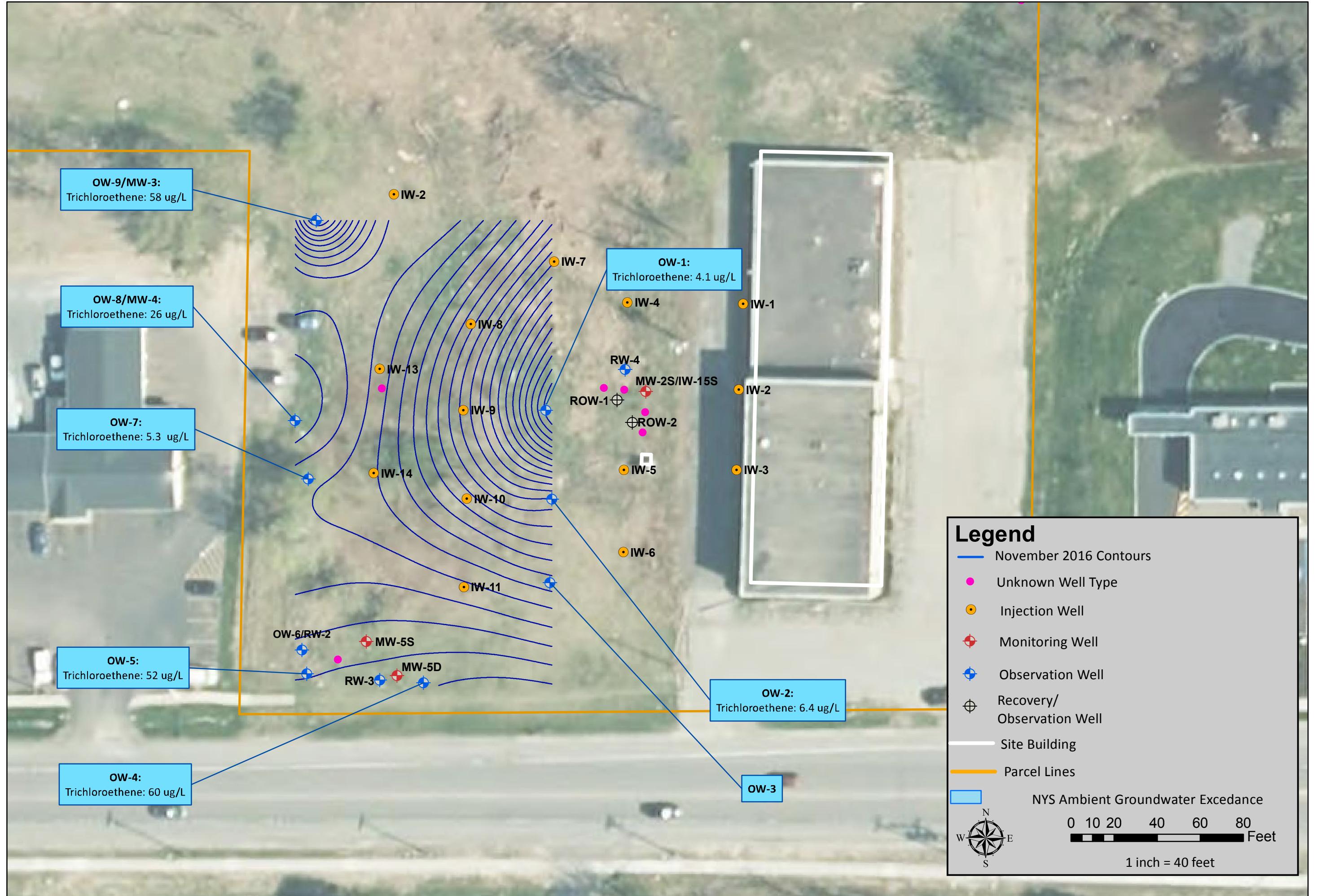
LU Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

FIGURE 6
FORMER GRIFFIN TECHNOLOGY SITE
GROUNDWATER CONTOURS - NOVEMBER 2016

6132 AND 6162 ROUTE 96, FARMINGTON, NEW YORK

Legend

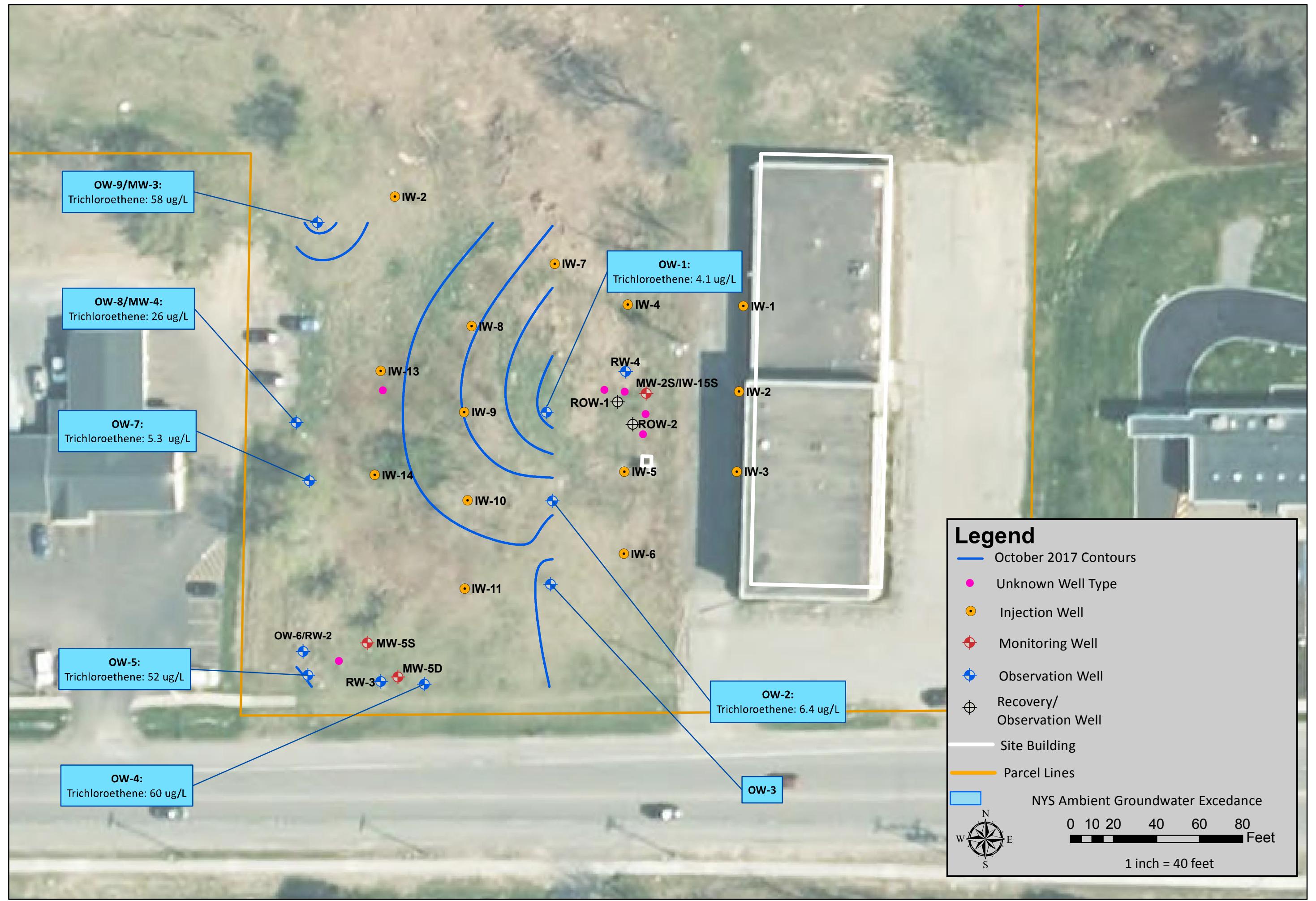
- November 2016 Contours
 - Unknown Well Type
 - Injection Well
 - Monitoring Well
 - Observation Well
 - ⊕ Recovery/
Observation Well
 - Site Building
 - Parcel Lines
 - NYS Ambient Groundwater Exceedance
- 0 10 20 40 60 80 Feet
 1 inch = 40 feet



DATE: DECEMBER 2017
PROJECT NO: 50322-01
DRAWN/CHECKED: PRC/GLA
DATA SOURCE: S&W FIGURE 2,
NYS GIS CLEARINGHOUSE
ORTHOIMAGERY

FIGURE 7
FORMER GRIFFIN TECHNOLOGY SITE
GROUNDWATER CONTOURS - OCTOBER 2017

6132 AND 6162 ROUTE 96, FARMINGTON, NEW YORK



Table

Former Griffin Technology Site
Groundwater Sampling Results
2008-2017

Table 1- Groundwater Results - VOCs

Detected Parameters ¹	NYS GW Std ²	OW-1								OW-2								OW-3										
		Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16
Acetone	50*	ND	3.5J	ND	ND	ND	ND	ND	ND	4.3J																		
1,1,1-Trichloroethane	5	ND	ND	11	ND	10	ND	ND	ND	ND	1.4	ND	3.6	ND	ND	ND	3.3	5.2	0.93J	3.2	1.1	1.2						
1,1-Dichloroethane	5	ND	ND	2	ND	1.5	ND	ND	ND	ND	ND	ND	2.7	ND	0.60J	ND	1.4	0.9J	3.1	2.4	3.4	2.6						
1,1-Dichloroethene	5	ND	ND	0.49J	ND	0.50J	ND	0.26J	ND	ND	0.36J	ND	ND															
cis-1,2-Dichloroethene	5	6.3	ND	62	3.3	65	ND	ND	1.1J	2.8	3.5	8.8	54	2.1	7.7	ND	47	31	22	69	19	24						
Methylene Chloride	5	5.2	ND	0.1	ND	ND	ND	ND	ND	ND	2.0JB	ND	ND	ND	ND	ND												
Trichloroethene	5	510	3.5	420	4.6	440	4.1	3.7	11	16	54	2.7	16	6.4	6.4	210	55	200	1.8	35	4.2	23						
Vinyl Chloride	2	ND	ND	19	ND	18	ND	ND	0.35J	0	5.7	55	1.2	5.3	ND	17	9.8	83	37	48	14							

BOLD

~ parameter detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

1 - Results presentend in ug/L or parts per billion (ppb)

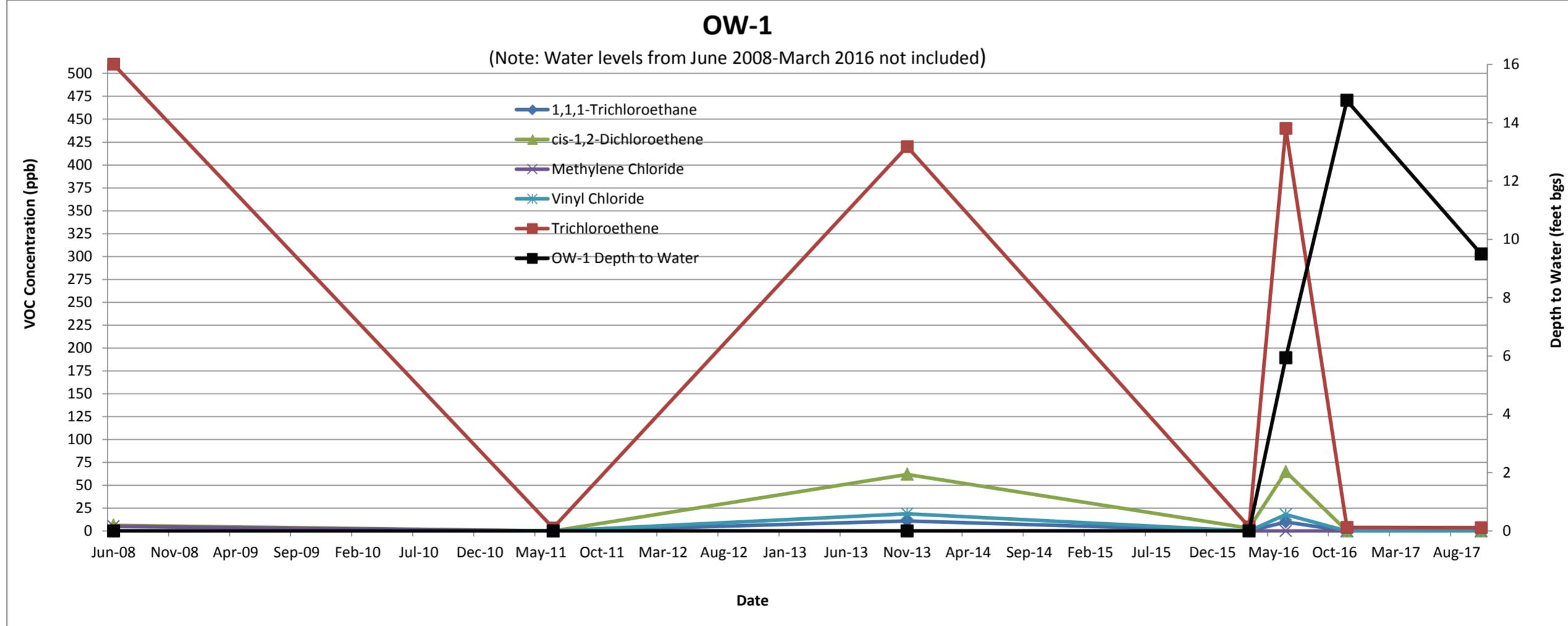
F1 - MS and/or MSD recovery is outside acceptance limits

*- NYSDEC guidance value

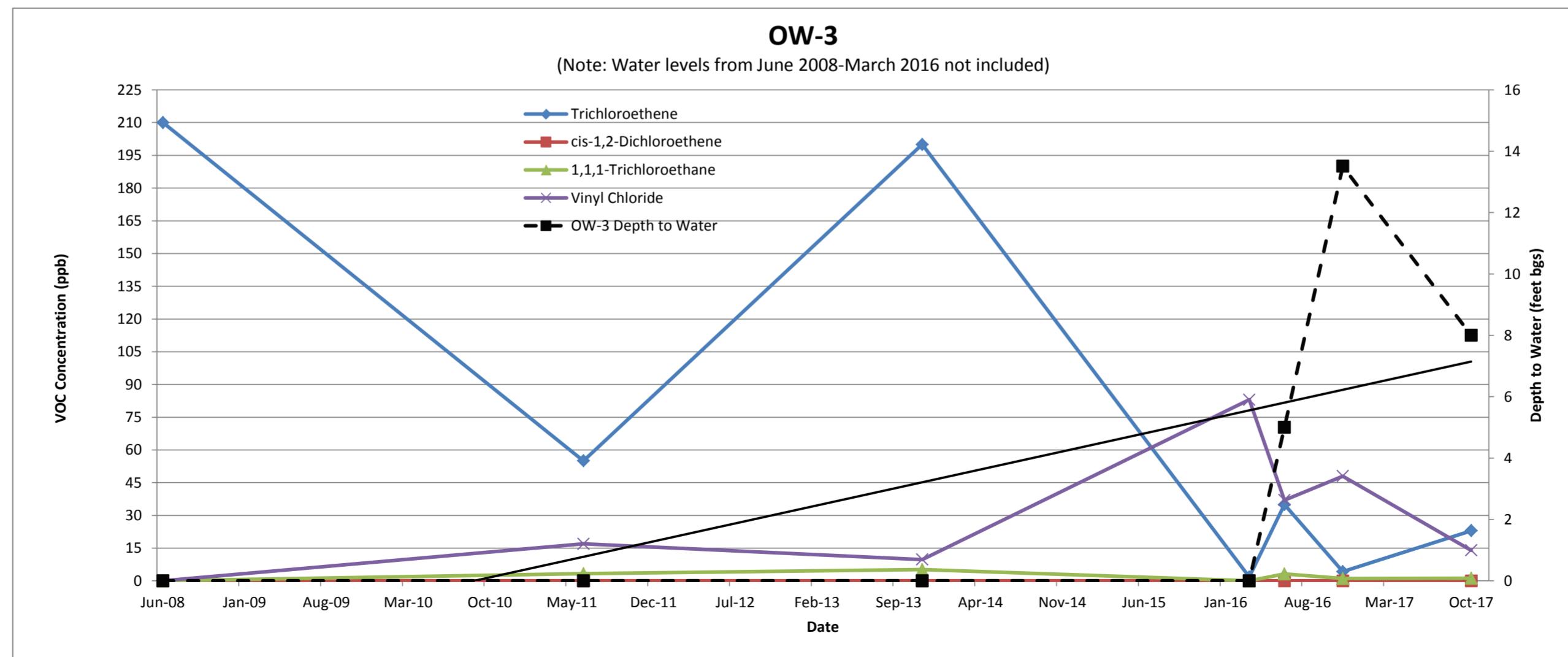
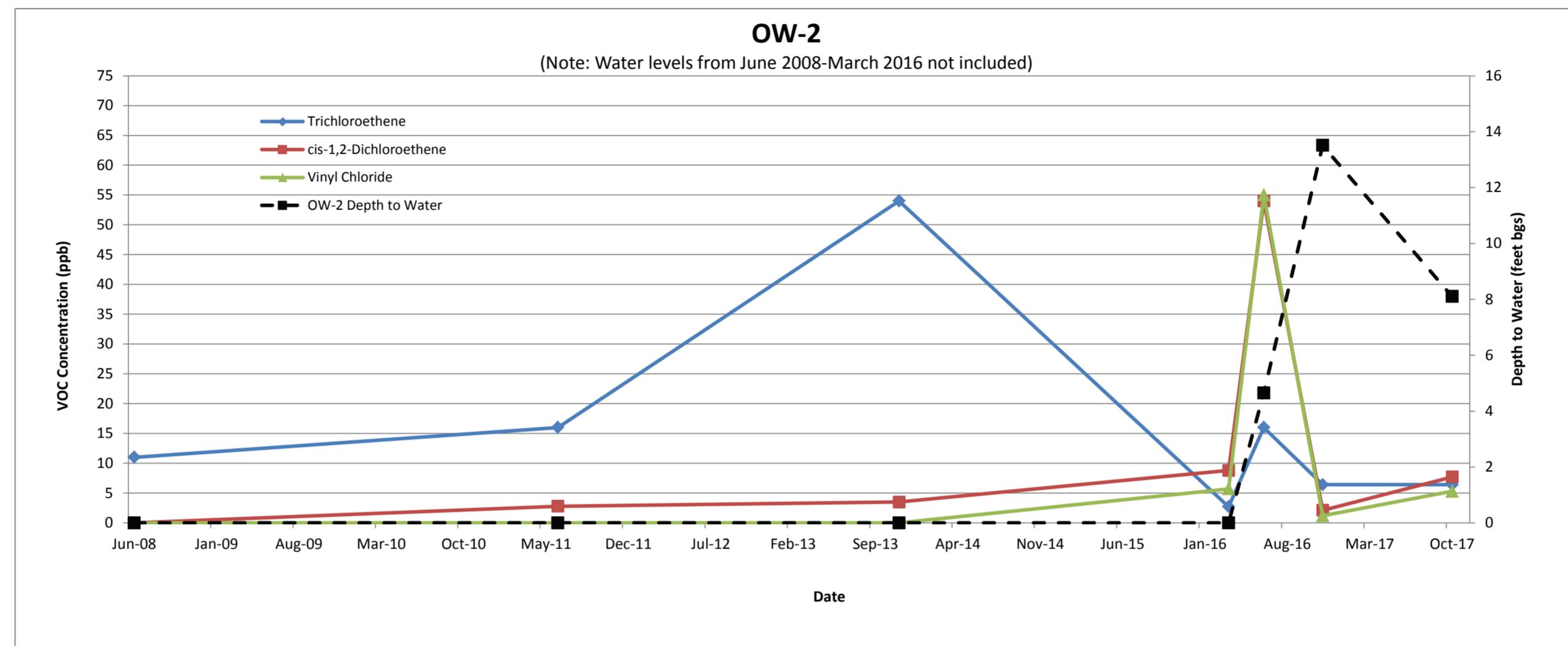
J- Result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value

ND - Parameter not detected

NS - Well/location not sampled



Former Griffin Technology Site
Groundwater Sampling Results
2008-2017



Former Griffin Technology Site
Groundwater Sampling Results
2008-2017

Table 1- Groundwater Results - VOCs

Detected Parameters ¹	NYS GW Std ²	OW-4							OW-5							OW-6/RW-2							
		Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	
Acetone	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9 J	ND	ND	ND	NS	NS	NS	NS	
1,1,1-Trichloroethane	5	ND	1.6	2	1.1	1.3	1.8	1.2	ND	1.7	1.6	1.3	1.3	1.5	ND	ND	1.2	3.4	NS	NS	NS	NS	
1,1-Dichloroethane	5	ND	ND	0.95 J	ND	0.61 J	0.70 J	0.87 J	ND	0.65	2.5	0.86 J	1.7	2.1	1.3	ND	ND	2.7	NS	NS	NS	NS	NS
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	0.56 J	NS	NS	NS	NS	NS
Chloroethane	-	ND	ND	ND	ND	ND	ND	0.52 J	ND	ND	ND	ND	ND	ND	0.47 J	ND	ND	ND	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	5	ND	8.3	23	11	16	19	11	ND	11	52	19	39	33	19	ND	7.7	67	NS	NS	NS	NS	NS
Methylene Chloride	5	ND	0.11 JB	ND	0.13	ND	NS	NS	NS	NS	NS												
Trichloroethene	5	67	40	54	41	41	60	35	120	57	57	39	44	52	18	120	30	100	NS	NS	NS	NS	NS
Vinyl Chloride	2	ND	2.3	9.9	1.4	8.5	9.4	5.1	ND	1.9	30	9.2	23	21	12	ND	1.5	33	NS	NS	NS	NS	NS

BOLD ~ parameter detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

1 - Results presentend in ug/L or parts per billion (ppb)

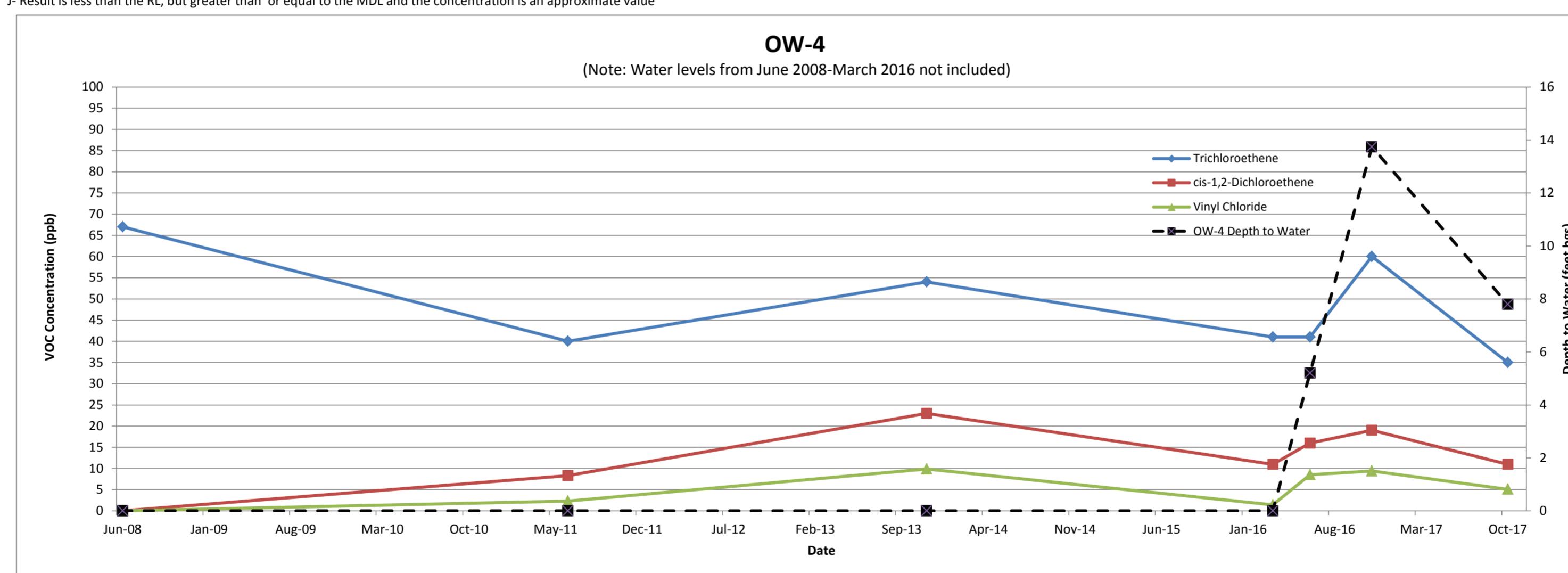
F1 - MS and/or MSD recovery is outside acceptance limits

*- NYSDEC guidance value

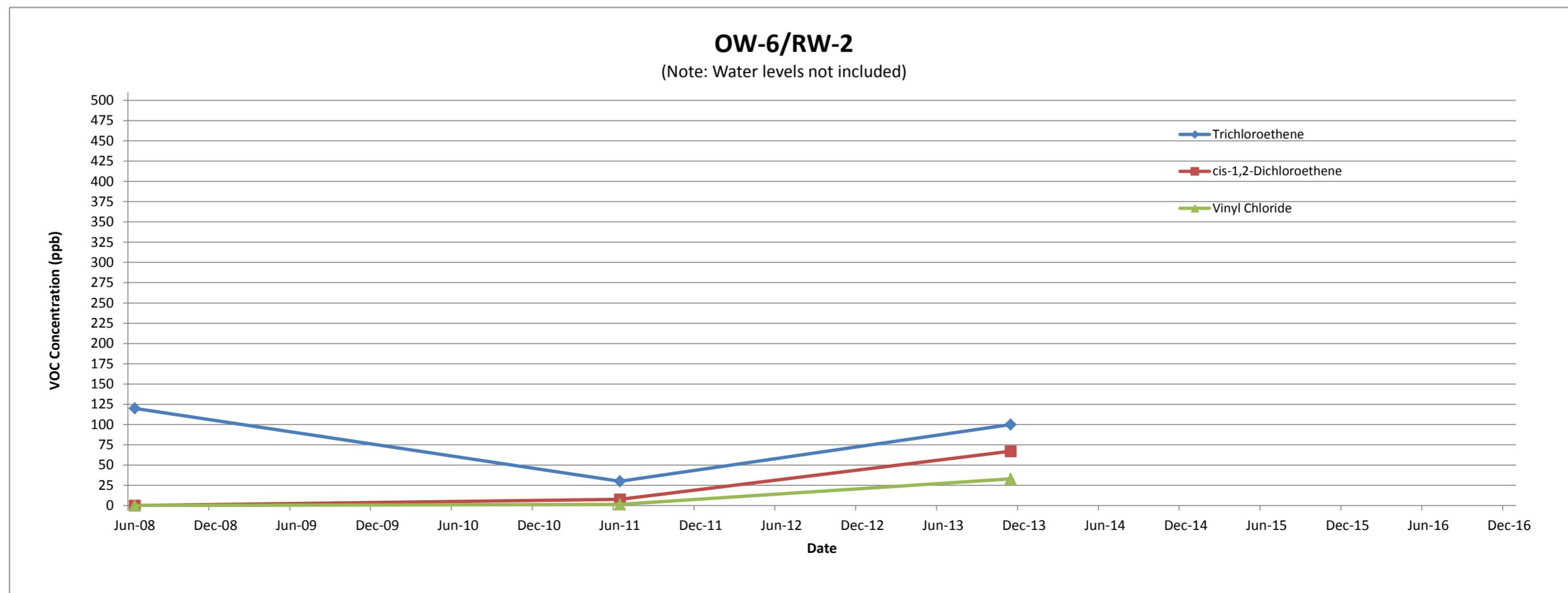
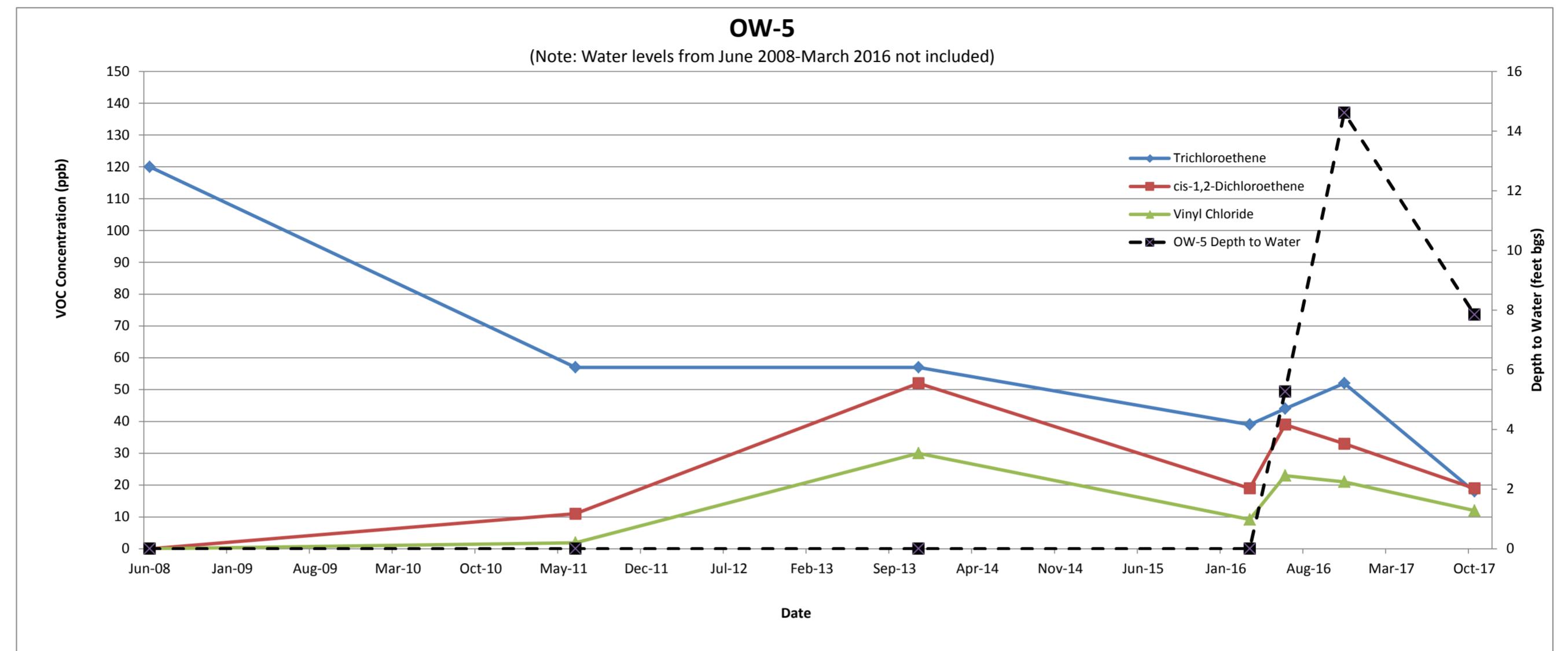
J- Result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value

ND - Parameter not detected

NS - Well/location not sampled



Former Griffin Technology Site
Groundwater Sampling Results
2008-2017



**Former Griffin Technology Site
Groundwater Sampling Results
2008-2017**

Table 1- Groundwater Results - VOCs

Detected Parameters ¹	NYS GW Std ²	OW-7								OW-8/MW-4								OW-9/MW-3												
		Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	Jun-08	Jun-11	Nov-13	Mar-16	Jun-16	Nov-16	Oct-17	
Acetone	50*	ND	ND	ND	ND	ND	ND	4.0 J	ND	ND	ND	ND	ND	ND	4.2 J	ND	ND	ND	ND	ND	ND	5.2 J	ND							
1,1,1-Trichloroethane	5	ND	ND	2.6	1.1	1.7	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
1,1-Dichloroethane	5	ND	ND	3	1.3	2.3	ND	0.55 J	ND	ND	0.95 J	ND	1.1	0.68 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
cis-1,2-Dichloroethene	5	5.7	0.75	65	24	43	1.7	7.7	1.1 J	1.8	24	5.7	16	10	7.8	0.85 J	3.0	12	3.9	8.4	7.6	ND								
Methylene Chloride	5	2.7 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Trichloroethene	5	180	5.2	60	20	54	5.3	9.4	57	5.7	61	14	29	26	49	23	16	39	34	50	58	10	ND							
Vinyl Chloride	2	ND	ND	74	ND	41	ND	3.5	ND	1.3	50	7.2	31	16	8.1	ND	1.5	5.8	4.6	9.6	5.2	ND	ND							

BOLD ~ parameter detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

1 - Results presentend in ug/L or parts per billion (ppb)

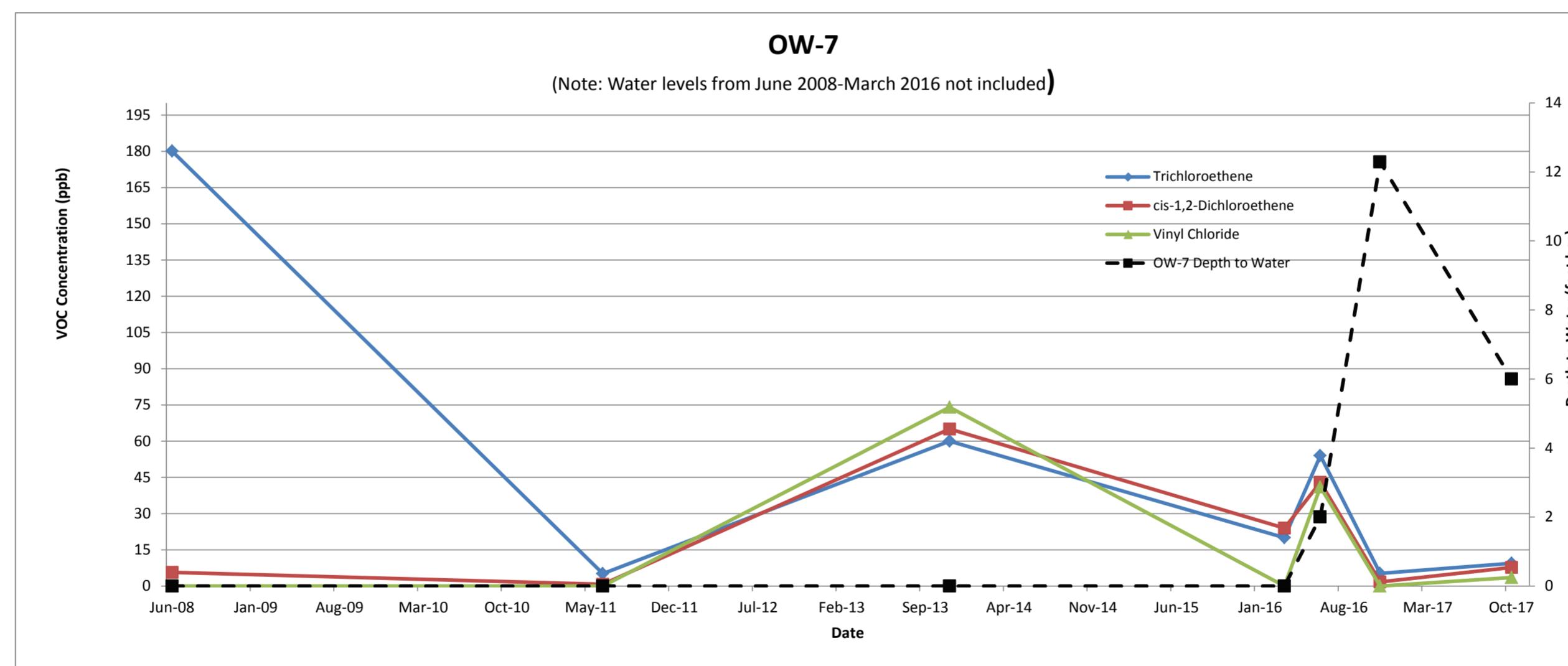
F1 - MS and/or MSD recovery is outside acceptance limits

*- NYSDEC guidance value

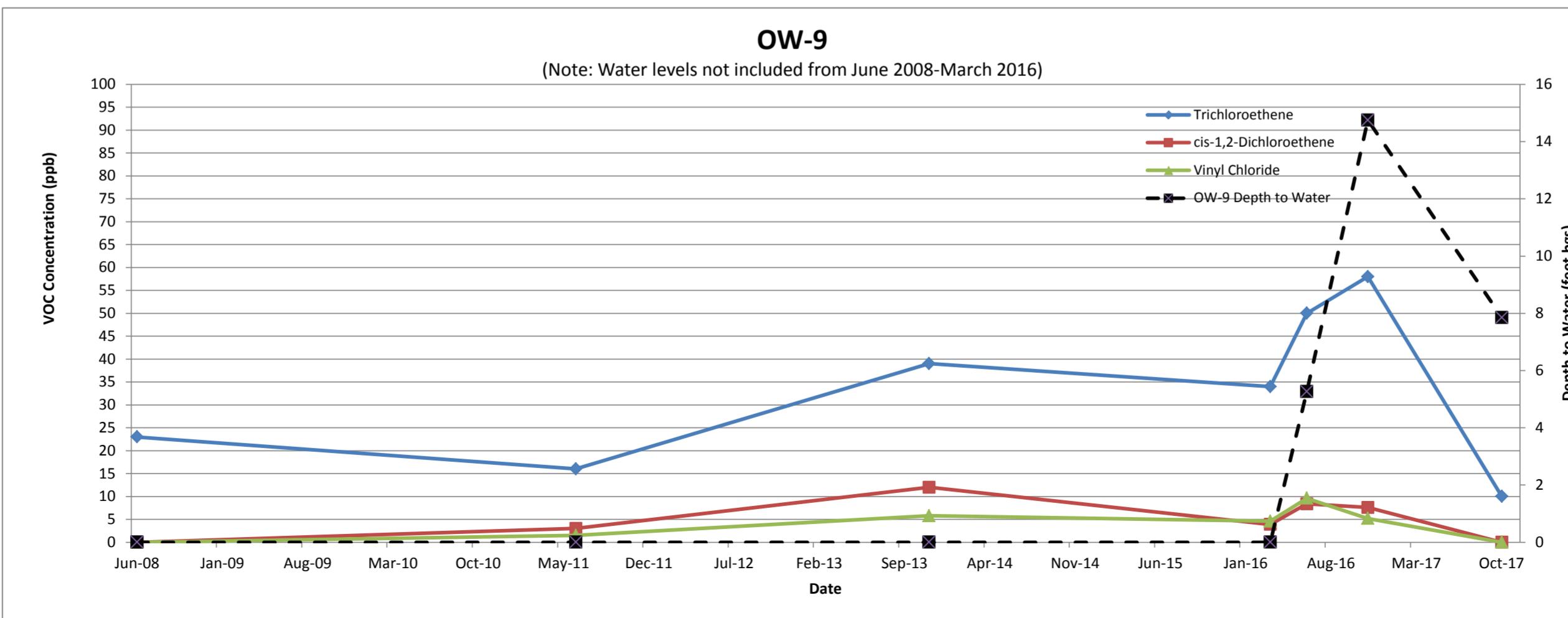
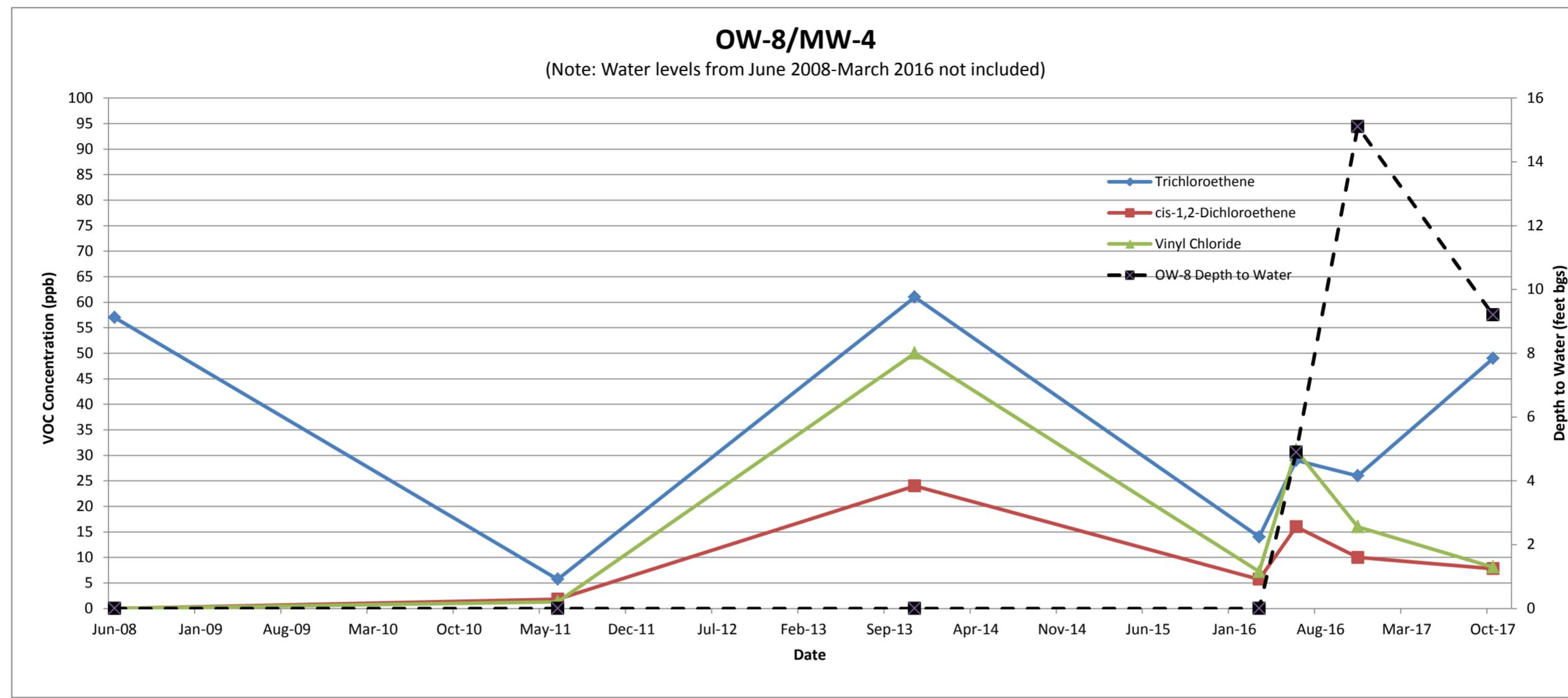
J- Result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value

ND - Parameter not detected

NS - Well/location not sampled



Former Griffin Technology Site
Groundwater Sampling Results
2008-2017



Attachment A



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID O6-1
Activity Time 9:30

Field Sample ID OW-1-131217
Sample Time 10

Job # 50322
Sampling Event #
Date 10/12/17

SAMPLING NOTES

Initial Depth to Water 9.5 feet Measurement Point TOR
 Final Depth to Water 9.5 feet Well Depth 72.47 feet
 Screen Length _____ feet Pump Intake Depth _____
 Total Volume Purged 7 gallons PID Well Head _____
 [purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
 Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth
PURGE DATA

Well Diameter 2"
Well Integrity:
Cap
Casing
Locked
Collar

Purge Observations: Slight odor, mostly clear
Purge Water Containerized: _____

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing: _____

Type of Water Quality Meter: _____

Calibrated:

ANALYTICAL PARAMETERS

Parameter Volumes Sample Collected

LOCATION NOTES

Signature: *Carly S.*
Checked By: *Carly S.*



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID Ow-2
Activity Time 1040

Field Sample ID 00-2-101217
Sample Time 1045

Job # 50322
Sampling Event #
Date 10/12/17

SAMPLING NOTES

Initial Depth to Water 8.1 feet Measurement Point TOR
Final Depth to Water 8.2 feet Well Depth 25.6 feet
Screen Length _____ feet Pump Intake Depth _____
Total Volume Purged 25 gallons PID Well Head

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Well Diameter 2"
Well Integrity:
Cap
Casing
Locked
Collar

PURGE DATA

Purge Observations: Slight odor. Relatively clear

Purge Water Containerized:

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing:

Type of Water Quality Meter: _____

Calibrated:

ANALYTICAL PARAMETERS

Parameter Volumes Sample Collected

LOCATION NOTES

Signature: Lamont
Checked By: _____



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID OW-3
Activity Time 10:50

Field Sample ID OW-3-101217
Sample Time 11

Job # 50322
Sampling Event # _
Date 10/12/17

SAMPLING NOTES

Initial Depth to Water 8 feet Measurement Point TOR
 Final Depth to Water 2.3 feet Well Depth 27.4 feet
 Screen Length _____ Pump Intake Depth _____
 Total Volume Purged 10.5 gallons PID Well Head _____
 [purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
 Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth
PURGE DATA

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

Purge Observations: Very Dark in Color (ie: black coffee)
Purge Water Containerized:

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing:

Type of Water Quality Meter:

Calibrated:

ANALYTICAL PARAMETERS

<u>Parameter</u>	<u>Volumes</u>	<u>Sample Collected</u>
VOCs	3 x 40 ml	

LOCATION NOTES

Signature: Craig E
Checked By: _____



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID 0w-4
Activity Time 11:10

Field Sample ID OM-4-101217
Sample Time 11:15

Job # 50322
Sampling Event #
Date

SAMPLING NOTES

Initial Depth to Water 7.8 feet Measurement Point TOR
Final Depth to Water 8.0 feet Well Depth 28.1 feet
Screen Length _____ feet Pump Intake Depth _____
Total Volume Purged 10 gallons PID Well Head _____
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth
PURGE DATA

Purge Observations: Relatively clear, slight odor
Purge Water Containerized:

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing:

Type of Water Quality Meter:

Calibrated:

ANALYTICAL PARAMETERS

Parameter Volumes Sample Collected

Signature: Lang KC
Checked By: _____

LOCATION NOTES

+ MS/MS D



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID OW-5
Activity Time 11:20

Field Sample ID ω-5-10247
Sample Time 11:30

Job # 50322
Sampling Event #
Date 10/21/17

SAMPLING NOTES

Initial Depth to Water 7.85 feet
Final Depth to Water 7.65 feet
Screen Length _____ feet
Total Volume Purged 10.5 gallons

Measurement Point TOR
Well Depth 29.4 feet
Pump Intake Depth
PID Well Head

Well Diameter 2'
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Purge Observations: Sight color, mostly clear
Purge Water Containerized: _____

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing:

Type of Water Quality Meter:

Calibrated:

ANALYTICAL PARAMETERS

Parameter Volumes Sample Collected

LOCATION NOTES

Signature: Larry J. Sc
Checked By:



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID 0w-7
Activity Time 11:50

Field Sample ID Ow-7-101217
Sample Time 12

Job # 50322
Sampling Event # - -
Date 10/12/17

SAMPLING NOTES

Initial Depth to Water 6 feet
Final Depth to Water 6.3 feet
Screen Length _____ feet
Total Volume Purged 6.7 gallons

Measurement Point TOR
Well Depth 24.2 feet
Pump Intake Depth _____
PID Well Head

Well Diameter
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]

Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth. 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Purge Observations: Slight color, Slightly Turbid
Purge Water Containerized: _____

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing: _____

Type of Water Quality Meter: _____

Calibrated:

ANALYTICAL PARAMETERS

<u>Parameter</u>	<u>Volumes</u>	<u>Sample Collected</u>
VOCs	3 x 40 ml	

LOCATION NOTES

Signature: Craig B.
Checked By: _____



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID 00-8
Activity Time 1210

Field Sample ID 05-8-10217
Sample Time 12:15

Job # 50322
Sampling Event #
Date 10/17/17

SAMPLING NOTES

Initial Depth to Water 9.7 feet Measurement Point TOR
Final Depth to Water 9.5 feet Well Depth 19.55 feet
Screen Length _____ feet Pump Intake Depth _____
Total Volume Purged 5 gallons PID Well Head _____
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth
PURGE DATA

Well Diameter 2"
Well Integrity:
Cap
Casing
Locked
Collar

Purge Observations: No odor, mostly clear
Purge Water Containerized: _____

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing: _____

Type of Water Quality Meter: _____

Calibrated:

ANALYTICAL PARAMETERS

Parameter Volumes Sample Collected

LOCATION NOTES

Signature: Connie Boc
Checked By: _____



Groundwater Sampling Field Record

Project Name Former Griffin Tech
Location ID 6w-9
Activity Time 1230

Field Sample ID 02-9-101217
Sample Time 1240

Job # 50322
Sampling Event #
Date 10/12/17

SAMPLING NOTES

Initial Depth to Water 7.85 feet
Final Depth to Water 7.8 feet
Screen Length _____ feet
Total Volume Purged 6 gallons

Measurement Point TOR
Well Depth 20 feet
Pump Intake Depth _____
PID Well Head

Well Diameter 2"
Well Integrity:
Cap
Casing
Locked
Collar

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing - 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Purge Observations: No odor
Purge Water Containerized:

EQUIPMENT DOCUMENTATION

Type of Pump: PVC Bailer

Type of Tubing:

Type of Water Quality Meter:

Calibrated:

ANALYTICAL PARAMETERS

Parameter Volumes Sample Collected

LOCATION NOTES

Signature: Craig Beck
Checked By: Craig Beck

Attachment B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-125806-1

Client Project/Site: Griffin #50322

For:

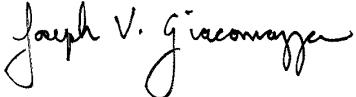
Joseph C. Lu Eng & Land Surveying PC

339 East Avenue

Suite 200

Rochester, New York 14604

Attn: Ari Cheremeteff



Authorized for release by:

10/27/2017 3:20:31 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

LINKS

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

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

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

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Definitions/Glossary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

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

Case Narrative

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Job ID: 480-125806-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-125806-1

Comments

No additional comments.

Receipt

The samples were received on 10/13/2017 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-383363 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: OW-1-101217 (480-125806-1), OW-2-101217 (480-125806-2), OW-3-101217 (480-125806-3), OW-4-101217 (480-125806-4), OW-5-101217 (480-125806-5), OW-7-101217 (480-125806-6), OW-8-101217 (480-125806-7), OW-9-101217 (480-125806-8), BLIND DUP (480-125806-9) and TB (480-125806-10).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-383363 recovered outside control limits for the following analytes: 1,2-Dichloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: OW-1-101217 (480-125806-1), OW-2-101217 (480-125806-2), OW-3-101217 (480-125806-3), OW-4-101217 (480-125806-4), OW-5-101217 (480-125806-5), OW-7-101217 (480-125806-6), OW-8-101217 (480-125806-7), OW-9-101217 (480-125806-8), BLIND DUP (480-125806-9) and TB (480-125806-10)

Method(s) 8260C: The continuing calibration verification (CCV) associated with analytical batch 480-383363 recovered above the upper control limit for the analyte 2-Hexanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: OW-1-101217 (480-125806-1), OW-2-101217 (480-125806-2), OW-3-101217 (480-125806-3), OW-4-101217 (480-125806-4), OW-5-101217 (480-125806-5), OW-7-101217 (480-125806-6), OW-8-101217 (480-125806-7), OW-9-101217 (480-125806-8), BLIND DUP (480-125806-9) and TB (480-125806-10).

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

Detection Summary

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-1-101217

Lab Sample ID: 480-125806-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.7		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: OW-2-101217

Lab Sample ID: 480-125806-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60	J	1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	3.5	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.7		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	6.4		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	5.3		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: OW-3-101217

Lab Sample ID: 480-125806-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.2		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.6		1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	4.3	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	24		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	23		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	14		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: OW-4-101217

Lab Sample ID: 480-125806-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.2		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.87	J	1.0	0.38	ug/L	1		8260C	Total/NA
Chloroethane	0.52	J	1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	35		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	5.1		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: OW-5-101217

Lab Sample ID: 480-125806-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.3		1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	3.9	J	10	3.0	ug/L	1		8260C	Total/NA
Chloroethane	0.47	J	1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	18		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	12		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: OW-7-101217

Lab Sample ID: 480-125806-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.55	J	1.0	0.38	ug/L	1		8260C	Total/NA
Acetone	4.0	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.7		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	9.4		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	3.5		1.0	0.90	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-8-101217

Lab Sample ID: 480-125806-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J	10	3.0	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	7.8		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	49		1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	8.1		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: OW-9-101217

Lab Sample ID: 480-125806-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.2	J	10	3.0	ug/L	1		8260C	Total/NA
Trichloroethene	10		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: BLIND DUP

Lab Sample ID: 480-125806-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.8	J	10	3.0	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.27	J	1.0	0.16	ug/L	1		8260C	Total/NA
Trichloroethene	3.8		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: TB

Lab Sample ID: 480-125806-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.5	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-1-101217

Date Collected: 10/12/17 10:00

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 01:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 01:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 01:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 01:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/24/17 01:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 01:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 01:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 01:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 01:46	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 01:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 01:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 01:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 01:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 01:46	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 01:46	1
Acetone	ND		10	3.0	ug/L			10/24/17 01:46	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 01:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 01:46	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 01:46	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 01:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 01:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 01:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 01:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 01:46	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 01:46	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 01:46	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 01:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/24/17 01:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 01:46	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 01:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 01:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 01:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 01:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 01:46	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 01:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 01:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 01:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 01:46	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 01:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 01:46	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 01:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 01:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 01:46	1
Trichloroethene	3.7		1.0	0.46	ug/L			10/24/17 01:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 01:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/24/17 01:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 01:46	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-1-101217

Date Collected: 10/12/17 10:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-1

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 01:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	90		80 - 120					10/24/17 01:46	1
1,2-Dichloroethane-d4 (Surr)	111		77 - 120					10/24/17 01:46	1
4-Bromofluorobenzene (Surr)	92		73 - 120					10/24/17 01:46	1
Dibromofluoromethane (Surr)	91		75 - 123					10/24/17 01:46	1

Client Sample ID: OW-2-101217

Date Collected: 10/12/17 10:45
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 02:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 02:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 02:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 02:13	1
1,1-Dichloroethane	0.60	J	1.0	0.38	ug/L			10/24/17 02:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 02:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 02:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 02:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 02:13	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 02:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 02:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 02:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 02:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 02:13	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 02:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 02:13	1
Acetone	3.5	J	10	3.0	ug/L			10/24/17 02:13	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 02:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 02:13	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 02:13	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 02:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 02:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 02:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 02:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 02:13	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 02:13	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 02:13	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 02:13	1
cis-1,2-Dichloroethene	7.7		1.0	0.81	ug/L			10/24/17 02:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 02:13	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 02:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 02:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 02:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 02:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 02:13	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 02:13	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-2-101217

Date Collected: 10/12/17 10:45
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 02:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 02:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 02:13	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 02:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 02:13	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 02:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 02:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 02:13	1
Trichloroethene	6.4		1.0	0.46	ug/L			10/24/17 02:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 02:13	1
Vinyl chloride	5.3		1.0	0.90	ug/L			10/24/17 02:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 02:13	1
Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 02:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	90		80 - 120					10/24/17 02:13	1
1,2-Dichloroethane-d4 (Surr)	111		77 - 120					10/24/17 02:13	1
4-Bromofluorobenzene (Surr)	97		73 - 120					10/24/17 02:13	1
Dibromofluoromethane (Surr)	90		75 - 123					10/24/17 02:13	1

Client Sample ID: OW-3-101217

Date Collected: 10/12/17 11:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.2		1.0	0.82	ug/L			10/24/17 02:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 02:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 02:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 02:40	1
1,1-Dichloroethane	2.6		1.0	0.38	ug/L			10/24/17 02:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 02:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 02:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 02:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 02:40	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 02:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 02:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 02:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 02:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 02:40	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 02:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 02:40	1
Acetone	4.3 J		10	3.0	ug/L			10/24/17 02:40	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 02:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 02:40	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 02:40	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 02:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 02:40	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-3-101217

Date Collected: 10/12/17 11:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 02:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 02:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 02:40	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 02:40	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 02:40	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 02:40	1
cis-1,2-Dichloroethene	24		1.0	0.81	ug/L			10/24/17 02:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 02:40	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 02:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 02:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 02:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 02:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 02:40	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 02:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 02:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 02:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 02:40	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 02:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 02:40	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 02:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 02:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 02:40	1
Trichloroethene	23		1.0	0.46	ug/L			10/24/17 02:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 02:40	1
Vinyl chloride	14		1.0	0.90	ug/L			10/24/17 02:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 02:40	1
Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 02:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	87		80 - 120					10/24/17 02:40	1
1,2-Dichloroethane-d4 (Surr)	105		77 - 120					10/24/17 02:40	1
4-Bromofluorobenzene (Surr)	94		73 - 120					10/24/17 02:40	1
Dibromofluoromethane (Surr)	86		75 - 123					10/24/17 02:40	1

Client Sample ID: OW-4-101217

Date Collected: 10/12/17 11:15
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.2		1.0	0.82	ug/L			10/24/17 03:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 03:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 03:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 03:06	1
1,1-Dichloroethane	0.87 J		1.0	0.38	ug/L			10/24/17 03:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 03:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 03:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 03:06	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-4-101217

Lab Sample ID: 480-125806-4

Date Collected: 10/12/17 11:15

Matrix: Water

Date Received: 10/13/17 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 03:06	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 03:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 03:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 03:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 03:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 03:06	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 03:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 03:06	1
Acetone	ND		10	3.0	ug/L			10/24/17 03:06	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 03:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 03:06	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 03:06	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 03:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 03:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 03:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 03:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 03:06	1
Chloroethane	0.52 J		1.0	0.32	ug/L			10/24/17 03:06	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 03:06	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 03:06	1
cis-1,2-Dichloroethene	11		1.0	0.81	ug/L			10/24/17 03:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 03:06	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 03:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 03:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 03:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 03:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 03:06	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 03:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 03:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 03:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 03:06	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 03:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 03:06	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 03:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 03:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 03:06	1
Trichloroethene	35		1.0	0.46	ug/L			10/24/17 03:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 03:06	1
Vinyl chloride	5.1		1.0	0.90	ug/L			10/24/17 03:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 03:06	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 03:06	1
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Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89		80 - 120					10/24/17 03:06	1
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					10/24/17 03:06	1
4-Bromofluorobenzene (Surr)	93		73 - 120					10/24/17 03:06	1
Dibromofluoromethane (Surr)	88		75 - 123					10/24/17 03:06	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-5-101217

Date Collected: 10/12/17 11:30

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 03:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 03:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 03:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 03:33	1
1,1-Dichloroethane	1.3		1.0	0.38	ug/L			10/24/17 03:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 03:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 03:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 03:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 03:33	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 03:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 03:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 03:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 03:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 03:33	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 03:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 03:33	1
Acetone	3.9 J		10	3.0	ug/L			10/24/17 03:33	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 03:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 03:33	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 03:33	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 03:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 03:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 03:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 03:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 03:33	1
Chloroethane	0.47 J		1.0	0.32	ug/L			10/24/17 03:33	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 03:33	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 03:33	1
cis-1,2-Dichloroethene	19		1.0	0.81	ug/L			10/24/17 03:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 03:33	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 03:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 03:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 03:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 03:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 03:33	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 03:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 03:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 03:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 03:33	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 03:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 03:33	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 03:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 03:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 03:33	1
Trichloroethene	18		1.0	0.46	ug/L			10/24/17 03:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 03:33	1
Vinyl chloride	12		1.0	0.90	ug/L			10/24/17 03:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 03:33	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-5-101217

Date Collected: 10/12/17 11:30
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-5

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 03:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	90		80 - 120					10/24/17 03:33	1
1,2-Dichloroethane-d4 (Surr)	107		77 - 120					10/24/17 03:33	1
4-Bromofluorobenzene (Surr)	93		73 - 120					10/24/17 03:33	1
Dibromofluoromethane (Surr)	88		75 - 123					10/24/17 03:33	1

Client Sample ID: OW-7-101217

Date Collected: 10/12/17 12:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 04:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 04:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 04:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 04:00	1
1,1-Dichloroethane	0.55 J		1.0	0.38	ug/L			10/24/17 04:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 04:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 04:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 04:00	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 04:00	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 04:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 04:00	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 04:00	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 04:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 04:00	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 04:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 04:00	1
Acetone	4.0 J		10	3.0	ug/L			10/24/17 04:00	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 04:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 04:00	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 04:00	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 04:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 04:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 04:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 04:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 04:00	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 04:00	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 04:00	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 04:00	1
cis-1,2-Dichloroethene	7.7		1.0	0.81	ug/L			10/24/17 04:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 04:00	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 04:00	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 04:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 04:00	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 04:00	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 04:00	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 04:00	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-7-101217

Date Collected: 10/12/17 12:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 04:00	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 04:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 04:00	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 04:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 04:00	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 04:00	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 04:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 04:00	1
Trichloroethene	9.4		1.0	0.46	ug/L			10/24/17 04:00	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 04:00	1
Vinyl chloride	3.5		1.0	0.90	ug/L			10/24/17 04:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 04:00	1
Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 04:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89		80 - 120					10/24/17 04:00	1
1,2-Dichloroethane-d4 (Surr)	108		77 - 120					10/24/17 04:00	1
4-Bromofluorobenzene (Surr)	95		73 - 120					10/24/17 04:00	1
Dibromofluoromethane (Surr)	87		75 - 123					10/24/17 04:00	1

Client Sample ID: OW-8-101217

Date Collected: 10/12/17 12:15
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 04:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 04:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 04:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 04:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/24/17 04:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 04:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 04:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 04:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 04:27	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 04:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 04:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 04:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 04:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 04:27	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 04:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 04:27	1
Acetone	4.2 J		10	3.0	ug/L			10/24/17 04:27	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 04:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 04:27	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 04:27	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 04:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 04:27	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-8-101217

Date Collected: 10/12/17 12:15
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 04:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 04:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 04:27	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 04:27	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 04:27	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 04:27	1
cis-1,2-Dichloroethene	7.8		1.0	0.81	ug/L			10/24/17 04:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 04:27	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 04:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 04:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 04:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 04:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 04:27	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 04:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 04:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 04:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 04:27	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 04:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 04:27	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 04:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 04:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 04:27	1
Trichloroethene	49		1.0	0.46	ug/L			10/24/17 04:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 04:27	1
Vinyl chloride	8.1		1.0	0.90	ug/L			10/24/17 04:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 04:27	1
Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 04:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		80 - 120					10/24/17 04:27	1
1,2-Dichloroethane-d4 (Surr)	113		77 - 120					10/24/17 04:27	1
4-Bromofluorobenzene (Surr)	92		73 - 120					10/24/17 04:27	1
Dibromofluoromethane (Surr)	95		75 - 123					10/24/17 04:27	1

Client Sample ID: OW-9-101217

Date Collected: 10/12/17 12:40
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 04:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 04:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 04:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 04:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/24/17 04:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 04:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 04:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 04:54	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-9-101217

Lab Sample ID: 480-125806-8

Date Collected: 10/12/17 12:40
 Date Received: 10/13/17 08:00

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 04:54	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 04:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 04:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 04:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 04:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 04:54	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 04:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 04:54	1
Acetone	5.2 J		10	3.0	ug/L			10/24/17 04:54	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 04:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 04:54	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 04:54	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 04:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 04:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 04:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 04:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 04:54	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 04:54	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 04:54	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 04:54	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/24/17 04:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 04:54	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 04:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 04:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 04:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 04:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 04:54	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 04:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 04:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 04:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 04:54	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 04:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 04:54	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 04:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 04:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 04:54	1
Trichloroethene	10		1.0	0.46	ug/L			10/24/17 04:54	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 04:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/24/17 04:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 04:54	1

Tentatively Identified Compound

Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None	ug/L					10/24/17 04:54	1

Surrogate

%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88	80 - 120			

1,2-Dichloroethane-d4 (Surr)	108	77 - 120			
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4-Bromofluorobenzene (Surr)	91	73 - 120			
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Dibromofluoromethane (Surr)	88	75 - 123			
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TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: BLIND DUP
Date Collected: 10/12/17 00:00
Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 05:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 05:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 05:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 05:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/24/17 05:21	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 05:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 05:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 05:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 05:21	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 05:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 05:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 05:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 05:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 05:21	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 05:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 05:21	1
Acetone	3.8 J		10	3.0	ug/L			10/24/17 05:21	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 05:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 05:21	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 05:21	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 05:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 05:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 05:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 05:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 05:21	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 05:21	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 05:21	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 05:21	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/24/17 05:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 05:21	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 05:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 05:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 05:21	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 05:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 05:21	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 05:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 05:21	1
Methylcyclohexane	0.27 J		1.0	0.16	ug/L			10/24/17 05:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 05:21	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 05:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 05:21	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 05:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 05:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 05:21	1
Trichloroethene	3.8		1.0	0.46	ug/L			10/24/17 05:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 05:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/24/17 05:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 05:21	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: BLIND DUP

Date Collected: 10/12/17 00:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-9

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 05:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		80 - 120					10/24/17 05:21	1
1,2-Dichloroethane-d4 (Surr)	107		77 - 120					10/24/17 05:21	1
4-Bromofluorobenzene (Surr)	89		73 - 120					10/24/17 05:21	1
Dibromofluoromethane (Surr)	89		75 - 123					10/24/17 05:21	1

Client Sample ID: TB

Date Collected: 10/12/17 00:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 05:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 05:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 05:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 05:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/24/17 05:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 05:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 05:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 05:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 05:48	1
1,2-Dichloroethane	ND *		1.0	0.21	ug/L			10/24/17 05:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 05:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 05:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 05:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 05:48	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 05:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 05:48	1
Acetone	4.5 J		10	3.0	ug/L			10/24/17 05:48	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 05:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 05:48	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 05:48	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 05:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 05:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 05:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 05:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 05:48	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 05:48	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 05:48	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 05:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/24/17 05:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/24/17 05:48	1
Cyclohexane	ND		1.0	0.18	ug/L			10/24/17 05:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/24/17 05:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/17 05:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/24/17 05:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/17 05:48	1
Methyl acetate	ND		2.5	1.3	ug/L			10/24/17 05:48	1

TestAmerica Buffalo

Client Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: TB

Date Collected: 10/12/17 00:00
 Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/17 05:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/24/17 05:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/24/17 05:48	1
Styrene	ND		1.0	0.73	ug/L			10/24/17 05:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/24/17 05:48	1
Toluene	ND		1.0	0.51	ug/L			10/24/17 05:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/24/17 05:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/24/17 05:48	1
Trichloroethene	ND		1.0	0.46	ug/L			10/24/17 05:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/24/17 05:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/24/17 05:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/17 05:48	1
Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					10/24/17 05:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89		80 - 120					10/24/17 05:48	1
1,2-Dichloroethane-d4 (Surr)	110		77 - 120					10/24/17 05:48	1
4-Bromofluorobenzene (Surr)	96		73 - 120					10/24/17 05:48	1
Dibromofluoromethane (Surr)	90		75 - 123					10/24/17 05:48	1

TestAmerica Buffalo

Surrogate Summary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	12DCE (77-120)	BFB (73-120)	DBFM (75-123)
480-125806-1	OW-1-101217	90	111	92	91
480-125806-2	OW-2-101217	90	111	97	90
480-125806-3	OW-3-101217	87	105	94	86
480-125806-4	OW-4-101217	89	101	93	88
480-125806-4 MS	OW-4-101217	105	100	106	109
480-125806-4 MSD	OW-4-101217	104	99	106	106
480-125806-5	OW-5-101217	90	107	93	88
480-125806-6	OW-7-101217	89	108	95	87
480-125806-7	OW-8-101217	88	113	92	95
480-125806-8	OW-9-101217	88	108	91	88
480-125806-9	BLIND DUP	88	107	89	89
480-125806-10	TB	89	110	96	90
LCS 480-383363/4	Lab Control Sample	91	111	94	89
LCS 480-383580/4	Lab Control Sample	104	96	105	101
MB 480-383363/6	Method Blank	89	111	94	92
MB 480-383580/6	Method Blank	101	101	98	102

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-383363/6

Matrix: Water

Analysis Batch: 383363

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
1,1,1-Trichloroethane	ND		1	1.0	0.82	ug/L		10/23/17 23:20	1
1,1,2,2-Tetrachloroethane	ND		1	1.0	0.21	ug/L		10/23/17 23:20	1
1,1,2-Trichloroethane	ND		1	1.0	0.23	ug/L		10/23/17 23:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1	1.0	0.31	ug/L		10/23/17 23:20	1
1,1-Dichloroethane	ND		1	1.0	0.38	ug/L		10/23/17 23:20	1
1,1-Dichloroethene	ND		1	1.0	0.29	ug/L		10/23/17 23:20	1
1,2,4-Trichlorobenzene	ND		1	1.0	0.41	ug/L		10/23/17 23:20	1
1,2-Dibromo-3-Chloropropane	ND		1	1.0	0.39	ug/L		10/23/17 23:20	1
1,2-Dichlorobenzene	ND		1	1.0	0.79	ug/L		10/23/17 23:20	1
1,2-Dichloroethane	ND		1	1.0	0.21	ug/L		10/23/17 23:20	1
1,2-Dichloropropane	ND		1	1.0	0.72	ug/L		10/23/17 23:20	1
1,3-Dichlorobenzene	ND		1	1.0	0.78	ug/L		10/23/17 23:20	1
1,4-Dichlorobenzene	ND		1	1.0	0.84	ug/L		10/23/17 23:20	1
2-Butanone (MEK)	ND		1	10	1.3	ug/L		10/23/17 23:20	1
2-Hexanone	ND		1	5.0	1.2	ug/L		10/23/17 23:20	1
4-Methyl-2-pentanone (MIBK)	ND		1	5.0	2.1	ug/L		10/23/17 23:20	1
Acetone	ND		1	10	3.0	ug/L		10/23/17 23:20	1
Benzene	ND		1	1.0	0.41	ug/L		10/23/17 23:20	1
Bromodichlormethane	ND		1	1.0	0.39	ug/L		10/23/17 23:20	1
Bromoform	ND		1	1.0	0.26	ug/L		10/23/17 23:20	1
Bromomethane	ND		1	1.0	0.69	ug/L		10/23/17 23:20	1
Carbon disulfide	ND		1	1.0	0.19	ug/L		10/23/17 23:20	1
Carbon tetrachloride	ND		1	1.0	0.27	ug/L		10/23/17 23:20	1
Chlorobenzene	ND		1	1.0	0.75	ug/L		10/23/17 23:20	1
Dibromochloromethane	ND		1	1.0	0.32	ug/L		10/23/17 23:20	1
Chloroethane	ND		1	1.0	0.32	ug/L		10/23/17 23:20	1
Chloroform	ND		1	1.0	0.34	ug/L		10/23/17 23:20	1
Chloromethane	ND		1	1.0	0.35	ug/L		10/23/17 23:20	1
cis-1,2-Dichloroethene	ND		1	1.0	0.81	ug/L		10/23/17 23:20	1
cis-1,3-Dichloropropene	ND		1	1.0	0.36	ug/L		10/23/17 23:20	1
Cyclohexane	ND		1	1.0	0.18	ug/L		10/23/17 23:20	1
Dichlorodifluoromethane	ND		1	1.0	0.68	ug/L		10/23/17 23:20	1
Ethylbenzene	ND		1	1.0	0.74	ug/L		10/23/17 23:20	1
1,2-Dibromoethane	ND		1	1.0	0.73	ug/L		10/23/17 23:20	1
Isopropylbenzene	ND		1	1.0	0.79	ug/L		10/23/17 23:20	1
Methyl acetate	ND		1	2.5	1.3	ug/L		10/23/17 23:20	1
Methyl tert-butyl ether	ND		1	1.0	0.16	ug/L		10/23/17 23:20	1
Methylcyclohexane	ND		1	1.0	0.16	ug/L		10/23/17 23:20	1
Methylene Chloride	ND		1	1.0	0.44	ug/L		10/23/17 23:20	1
Styrene	ND		1	1.0	0.73	ug/L		10/23/17 23:20	1
Tetrachloroethene	ND		1	1.0	0.36	ug/L		10/23/17 23:20	1
Toluene	ND		1	1.0	0.51	ug/L		10/23/17 23:20	1
trans-1,2-Dichloroethene	ND		1	1.0	0.90	ug/L		10/23/17 23:20	1
trans-1,3-Dichloropropene	ND		1	1.0	0.37	ug/L		10/23/17 23:20	1
Trichloroethene	ND		1	1.0	0.46	ug/L		10/23/17 23:20	1
Trichlorofluoromethane	ND		1	1.0	0.88	ug/L		10/23/17 23:20	1
Vinyl chloride	ND		1	1.0	0.90	ug/L		10/23/17 23:20	1
Xylenes, Total			1	2.0	0.66	ug/L		10/23/17 23:20	1

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Tentatively Identified Compound	MB	MB	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	None	ug/L									
Tentatively Identified Compound										10/23/17 23:20	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89				80 - 120					10/23/17 23:20	1
1,2-Dichloroethane-d4 (Surr)	111				77 - 120					10/23/17 23:20	1
4-Bromofluorobenzene (Surr)	94				73 - 120					10/23/17 23:20	1
Dibromofluoromethane (Surr)	92				75 - 123					10/23/17 23:20	1

Lab Sample ID: LCS 480-383363/4

Matrix: Water

Analysis Batch: 383363

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
1,1,1-Trichloroethane	25.0	24.9		ug/L		99	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	21.3		ug/L		85	76 - 120	
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	76 - 122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.5		ug/L		86	61 - 148	
1,1-Dichloroethane	25.0	25.9		ug/L		103	77 - 120	
1,1-Dichloroethene	25.0	21.4		ug/L		86	66 - 127	
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		108	79 - 122	
1,2-Dibromo-3-Chloropropane	25.0	20.0		ug/L		80	56 - 134	
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 124	
1,2-Dichloroethane	25.0	30.6 *		ug/L		122	75 - 120	
1,2-Dichloropropane	25.0	26.3		ug/L		105	76 - 120	
1,3-Dichlorobenzene	25.0	25.9		ug/L		103	77 - 120	
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 120	
2-Butanone (MEK)	125	148		ug/L		118	57 - 140	
2-Hexanone	125	159		ug/L		127	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	138		ug/L		110	71 - 125	
Acetone	125	150		ug/L		120	56 - 142	
Benzene	25.0	22.2		ug/L		89	71 - 124	
Bromodichloromethane	25.0	23.8		ug/L		95	80 - 122	
Bromoform	25.0	20.9		ug/L		84	61 - 132	
Bromomethane	25.0	23.6		ug/L		94	55 - 144	
Carbon disulfide	25.0	19.0		ug/L		76	59 - 134	
Carbon tetrachloride	25.0	23.5		ug/L		94	72 - 134	
Chlorobenzene	25.0	23.6		ug/L		94	80 - 120	
Dibromochloromethane	25.0	22.5		ug/L		90	75 - 125	
Chloroethane	25.0	26.8		ug/L		107	69 - 136	
Chloroform	25.0	24.8		ug/L		99	73 - 127	
Chloromethane	25.0	30.1		ug/L		120	68 - 124	
cis-1,2-Dichloroethene	25.0	22.4		ug/L		90	74 - 124	
cis-1,3-Dichloropropene	25.0	22.2		ug/L		89	74 - 124	
Cyclohexane	25.0	27.7		ug/L		111	59 - 135	
Dichlorodifluoromethane	25.0	22.0		ug/L		88	59 - 135	
Ethylbenzene	25.0	23.9		ug/L		96	77 - 123	
1,2-Dibromoethane	25.0	22.9		ug/L		92	77 - 120	
Isopropylbenzene	25.0	22.3		ug/L		89	77 - 122	
Methyl acetate	50.0	58.1		ug/L		116	74 - 133	
Methyl tert-butyl ether	25.0	23.0		ug/L		92	77 - 120	
Methylcyclohexane	25.0	21.1		ug/L		84	68 - 134	
Methylene Chloride	25.0	22.3		ug/L		89	75 - 124	

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

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

Lab Sample ID: LCS 480-383363/4

Matrix: Water

Analysis Batch: 383363

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

Analyte	Spike		LCS			Unit	D	%Rec	%Rec.
	Added	Result	LCS	Qualifier	Limits				
Styrene	25.0	22.9			ug/L		92	80 - 120	
Tetrachloroethene	25.0	27.0			ug/L		108	74 - 122	
Toluene	25.0	22.6			ug/L		90	80 - 122	
trans-1,2-Dichloroethene	25.0	21.6			ug/L		87	73 - 127	
trans-1,3-Dichloropropene	25.0	22.6			ug/L		90	80 - 120	
Trichloroethene	25.0	24.3			ug/L		97	74 - 123	
Trichlorofluoromethane	25.0	27.7			ug/L		111	62 - 150	
Vinyl chloride	25.0	26.2			ug/L		105	65 - 133	
Surrogate		LCS	LCS						
		%Recovery	Qualifier		Limits				
Toluene-d8 (Surr)		91			80 - 120				
1,2-Dichloroethane-d4 (Surr)		111			77 - 120				
4-Bromofluorobenzene (Surr)		94			73 - 120				
Dibromofluoromethane (Surr)		89			75 - 123				

Lab Sample ID: MB 480-383580/6

Matrix: Water

Analysis Batch: 383580

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/24/17 23:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/24/17 23:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/24/17 23:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/24/17 23:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/24/17 23:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/24/17 23:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/24/17 23:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/24/17 23:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/24/17 23:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/24/17 23:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/24/17 23:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/24/17 23:18	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/24/17 23:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/24/17 23:18	1
2-Hexanone	ND		5.0	1.2	ug/L			10/24/17 23:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/24/17 23:18	1
Acetone	ND		10	3.0	ug/L			10/24/17 23:18	1
Benzene	ND		1.0	0.41	ug/L			10/24/17 23:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/24/17 23:18	1
Bromoform	ND		1.0	0.26	ug/L			10/24/17 23:18	1
Bromomethane	ND		1.0	0.69	ug/L			10/24/17 23:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/24/17 23:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/24/17 23:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/24/17 23:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/24/17 23:18	1
Chloroethane	ND		1.0	0.32	ug/L			10/24/17 23:18	1
Chloroform	ND		1.0	0.34	ug/L			10/24/17 23:18	1
Chloromethane	ND		1.0	0.35	ug/L			10/24/17 23:18	1

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

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

Lab Sample ID: MB 480-383580/6

Matrix: Water

Analysis Batch: 383580

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
cis-1,2-Dichloroethene	ND				1.0	0.81	ug/L			10/24/17 23:18	1
cis-1,3-Dichloropropene	ND				1.0	0.36	ug/L			10/24/17 23:18	1
Cyclohexane	ND				1.0	0.18	ug/L			10/24/17 23:18	1
Dichlorodifluoromethane	ND				1.0	0.68	ug/L			10/24/17 23:18	1
Ethylbenzene	ND				1.0	0.74	ug/L			10/24/17 23:18	1
1,2-Dibromoethane	ND				1.0	0.73	ug/L			10/24/17 23:18	1
Isopropylbenzene	ND				1.0	0.79	ug/L			10/24/17 23:18	1
Methyl acetate	ND				2.5	1.3	ug/L			10/24/17 23:18	1
Methyl tert-butyl ether	ND				1.0	0.16	ug/L			10/24/17 23:18	1
Methylcyclohexane	ND				1.0	0.16	ug/L			10/24/17 23:18	1
Methylene Chloride	ND				1.0	0.44	ug/L			10/24/17 23:18	1
Styrene	ND				1.0	0.73	ug/L			10/24/17 23:18	1
Tetrachloroethene	ND				1.0	0.36	ug/L			10/24/17 23:18	1
Toluene	ND				1.0	0.51	ug/L			10/24/17 23:18	1
trans-1,2-Dichloroethene	ND				1.0	0.90	ug/L			10/24/17 23:18	1
trans-1,3-Dichloropropene	ND				1.0	0.37	ug/L			10/24/17 23:18	1
Trichloroethene	ND				1.0	0.46	ug/L			10/24/17 23:18	1
Trichlorofluoromethane	ND				1.0	0.88	ug/L			10/24/17 23:18	1
Vinyl chloride	ND				1.0	0.90	ug/L			10/24/17 23:18	1
Xylenes, Total	ND				2.0	0.66	ug/L			10/24/17 23:18	1

Tentatively Identified Compound	MB	MB	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Tentatively Identified Compound	None				ug/L					10/24/17 23:18	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Toluene-d8 (Surr)	101		80 - 120						10/24/17 23:18	1
1,2-Dichloroethane-d4 (Surr)	101		77 - 120						10/24/17 23:18	1
4-Bromofluorobenzene (Surr)	98		73 - 120						10/24/17 23:18	1
Dibromofluoromethane (Surr)	102		75 - 123						10/24/17 23:18	1

Lab Sample ID: LCS 480-383580/4

Matrix: Water

Analysis Batch: 383580

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

Analyte	Spike	LCS			%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	25.0	22.2		ug/L		89	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.0		ug/L		104	76 - 120
1,1,2-Trichloroethane	25.0	26.5		ug/L		106	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	16.5		ug/L		66	61 - 148
ne							
1,1-Dichloroethane	25.0	23.6		ug/L		94	77 - 120
1,1-Dichloroethene	25.0	22.0		ug/L		88	66 - 127
1,2,4-Trichlorobenzene	25.0	25.6		ug/L		102	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.9		ug/L		104	56 - 134
1,2-Dichlorobenzene	25.0	26.2		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	22.7		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.6		ug/L		102	77 - 120

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

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

Lab Sample ID: LCS 480-383580/4

Matrix: Water

Analysis Batch: 383580

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

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
1,4-Dichlorobenzene	25.0	25.6		ug/L		103	80 - 120
2-Butanone (MEK)	125	124		ug/L		99	57 - 140
2-Hexanone	125	128		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		99	71 - 125
Acetone	125	128		ug/L		103	56 - 142
Benzene	25.0	25.7		ug/L		103	71 - 124
Bromodichloromethane	25.0	25.2		ug/L		101	80 - 122
Bromoform	25.0	25.7		ug/L		103	61 - 132
Bromomethane	25.0	22.2		ug/L		89	55 - 144
Carbon disulfide	25.0	23.0		ug/L		92	59 - 134
Carbon tetrachloride	25.0	22.2		ug/L		89	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	80 - 120
Dibromochloromethane	25.0	26.3		ug/L		105	75 - 125
Chloroethane	25.0	23.3		ug/L		93	69 - 136
Chloroform	25.0	23.3		ug/L		93	73 - 127
Chloromethane	25.0	22.4		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	23.4		ug/L		94	74 - 124
Cyclohexane	25.0	22.7		ug/L		91	59 - 135
Dichlorodifluoromethane	25.0	17.2		ug/L		69	59 - 135
Ethylbenzene	25.0	24.4		ug/L		98	77 - 123
1,2-Dibromoethane	25.0	26.5		ug/L		106	77 - 120
Isopropylbenzene	25.0	22.9		ug/L		91	77 - 122
Methyl acetate	50.0	47.3		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	25.1		ug/L		101	77 - 120
Methylcyclohexane	25.0	23.5		ug/L		94	68 - 134
Methylene Chloride	25.0	24.8		ug/L		99	75 - 124
Styrene	25.0	25.7		ug/L		103	80 - 120
Tetrachloroethene	25.0	25.4		ug/L		102	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	23.4		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	24.2		ug/L		97	80 - 120
Trichloroethene	25.0	24.0		ug/L		96	74 - 123
Trichlorofluoromethane	25.0	21.7		ug/L		87	62 - 150
Vinyl chloride	25.0	21.8		ug/L		87	65 - 133

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	104		80 - 120
1,2-Dichloroethane-d4 (Surr)	96		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	101		75 - 123

Lab Sample ID: 480-125806-4 MS

Matrix: Water

Analysis Batch: 383580

Client Sample ID: OW-4-101217
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1,1-Trichloroethane	1.1		25.0	26.8		ug/L		103	73 - 126

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

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

Lab Sample ID: 480-125806-4 MS

Client Sample ID: OW-4-101217

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 383580

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
1,1,2,2-Tetrachloroethane	ND		25.0	25.3		ug/L		101	76 - 120		
1,1,2-Trichloroethane	ND		25.0	27.8		ug/L		111	76 - 122		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	21.9		ug/L		88	61 - 148		
1,1-Dichloroethane	0.65	J	25.0	27.5		ug/L		107	77 - 120		
1,1-Dichloroethene	ND		25.0	25.5		ug/L		102	66 - 127		
1,2,4-Trichlorobenzene	ND		25.0	25.3		ug/L		101	79 - 122		
1,2-Dibromo-3-Chloropropane	ND		25.0	25.3		ug/L		101	56 - 134		
1,2-Dichlorobenzene	ND		25.0	26.7		ug/L		107	80 - 124		
1,2-Dichloroethane	ND		25.0	25.3		ug/L		101	75 - 120		
1,2-Dichloropropane	ND		25.0	27.7		ug/L		111	76 - 120		
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	77 - 120		
1,4-Dichlorobenzene	ND		25.0	26.1		ug/L		104	78 - 124		
2-Butanone (MEK)	ND		125	129		ug/L		103	57 - 140		
2-Hexanone	ND		125	126		ug/L		101	65 - 127		
4-Methyl-2-pentanone (MIBK)	ND		125	125		ug/L		100	71 - 125		
Acetone	ND		125	112		ug/L		90	56 - 142		
Benzene	ND		25.0	29.5		ug/L		118	71 - 124		
Bromodichloromethane	ND		25.0	27.8		ug/L		111	80 - 122		
Bromoform	ND		25.0	27.9		ug/L		112	61 - 132		
Bromomethane	ND		25.0	24.8		ug/L		99	55 - 144		
Carbon disulfide	ND		25.0	25.9		ug/L		104	59 - 134		
Carbon tetrachloride	ND		25.0	26.8		ug/L		107	72 - 134		
Chlorobenzene	ND		25.0	27.9		ug/L		112	80 - 120		
Dibromochloromethane	ND		25.0	27.8		ug/L		111	75 - 125		
Chloroethane	ND		25.0	28.4		ug/L		113	69 - 136		
Chloroform	ND		25.0	27.5		ug/L		110	73 - 127		
Chloromethane	ND		25.0	26.3		ug/L		105	68 - 124		
cis-1,2-Dichloroethene	14		25.0	41.1		ug/L		109	74 - 124		
cis-1,3-Dichloropropene	ND		25.0	24.6		ug/L		98	74 - 124		
Cyclohexane	ND		25.0	23.5		ug/L		94	59 - 135		
Dichlorodifluoromethane	ND		25.0	22.6		ug/L		91	59 - 135		
Ethylbenzene	ND		25.0	27.4		ug/L		110	77 - 123		
1,2-Dibromoethane	ND		25.0	27.2		ug/L		109	77 - 120		
Isopropylbenzene	ND		25.0	24.3		ug/L		97	77 - 122		
Methyl acetate	ND		50.0	50.6		ug/L		101	74 - 133		
Methyl tert-butyl ether	ND		25.0	26.4		ug/L		105	77 - 120		
Methylcyclohexane	ND		25.0	26.5		ug/L		106	68 - 134		
Methylene Chloride	ND		25.0	27.7		ug/L		111	75 - 124		
Styrene	ND		25.0	27.1		ug/L		109	80 - 120		
Tetrachloroethene	ND		25.0	28.5		ug/L		114	74 - 122		
Toluene	ND		25.0	27.9		ug/L		111	80 - 122		
trans-1,2-Dichloroethene	ND		25.0	28.5		ug/L		114	73 - 127		
trans-1,3-Dichloropropene	ND		25.0	24.2		ug/L		97	80 - 120		
Trichloroethene	37		25.0	58.8		ug/L		88	74 - 123		
Trichlorofluoromethane	ND		25.0	25.7		ug/L		103	62 - 150		
Vinyl chloride	4.9		25.0	30.5		ug/L		103	65 - 133		

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

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

Lab Sample ID: 480-125806-4 MS

Matrix: Water

Analysis Batch: 383580

Client Sample ID: OW-4-101217

Prep Type: Total/NA

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	105		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120
Dibromofluoromethane (Surr)	109		75 - 123

Lab Sample ID: 480-125806-4 MSD

Matrix: Water

Analysis Batch: 383580

Client Sample ID: OW-4-101217

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
1,1,1-Trichloroethane	1.1		25.0	25.1		ug/L		96	73 - 126	7	15	
1,1,2,2-Tetrachloroethane	ND		25.0	26.4		ug/L		105	76 - 120	4	15	
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	76 - 122	1	15	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	20.1		ug/L		80	61 - 148	9	20	
1,1-Dichloroethane	0.65	J	25.0	26.3		ug/L		103	77 - 120	5	20	
1,1-Dichloroethene	ND		25.0	25.6		ug/L		102	66 - 127	0	16	
1,2,4-Trichlorobenzene	ND		25.0	25.5		ug/L		102	79 - 122	1	20	
1,2-Dibromo-3-Chloropropane	ND		25.0	25.1		ug/L		100	56 - 134	1	15	
1,2-Dichlorobenzene	ND		25.0	26.3		ug/L		105	80 - 124	2	20	
1,2-Dichloroethane	ND		25.0	23.9		ug/L		96	75 - 120	6	20	
1,2-Dichloropropane	ND		25.0	27.0		ug/L		108	76 - 120	3	20	
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		104	77 - 120	1	20	
1,4-Dichlorobenzene	ND		25.0	26.1		ug/L		104	78 - 124	0	20	
2-Butanone (MEK)	ND		125	125		ug/L		100	57 - 140	3	20	
2-Hexanone	ND		125	123		ug/L		98	65 - 127	2	15	
4-Methyl-2-pentanone (MIBK)	ND		125	125		ug/L		100	71 - 125	0	35	
Acetone	ND		125	101		ug/L		81	56 - 142	11	15	
Benzene	ND		25.0	28.4		ug/L		113	71 - 124	4	13	
Bromodichloromethane	ND		25.0	26.5		ug/L		106	80 - 122	5	15	
Bromoform	ND		25.0	27.2		ug/L		109	61 - 132	3	15	
Bromomethane	ND		25.0	24.4		ug/L		98	55 - 144	2	15	
Carbon disulfide	ND		25.0	24.5		ug/L		98	59 - 134	5	15	
Carbon tetrachloride	ND		25.0	24.0		ug/L		96	72 - 134	11	15	
Chlorobenzene	ND		25.0	26.5		ug/L		106	80 - 120	5	25	
Dibromochloromethane	ND		25.0	27.4		ug/L		110	75 - 125	1	15	
Chloroethane	ND		25.0	26.7		ug/L		107	69 - 136	6	15	
Chloroform	ND		25.0	25.7		ug/L		103	73 - 127	7	20	
Chloromethane	ND		25.0	24.2		ug/L		97	68 - 124	8	15	
cis-1,2-Dichloroethene	14		25.0	38.8		ug/L		100	74 - 124	6	15	
cis-1,3-Dichloropropene	ND		25.0	24.2		ug/L		97	74 - 124	2	15	
Cyclohexane	ND		25.0	22.7		ug/L		91	59 - 135	3	20	
Dichlorodifluoromethane	ND		25.0	18.5		ug/L		74	59 - 135	20	20	
Ethylbenzene	ND		25.0	25.8		ug/L		103	77 - 123	6	15	
1,2-Dibromoethane	ND		25.0	26.8		ug/L		107	77 - 120	2	15	
Isopropylbenzene	ND		25.0	23.8		ug/L		95	77 - 122	2	20	
Methyl acetate	ND		50.0	47.7		ug/L		95	74 - 133	6	20	
Methyl tert-butyl ether	ND		25.0	26.2		ug/L		105	77 - 120	0	37	

TestAmerica Buffalo

QC Sample Results

Client: Joseph C. Lu Eng & Land Surveying PC
 Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

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

Lab Sample ID: 480-125806-4 MSD

Client Sample ID: OW-4-101217

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 383580

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Methylcyclohexane	ND		25.0	24.7		ug/L		99	68 - 134	7	20
Methylene Chloride	ND		25.0	27.0		ug/L		108	75 - 124	3	15
Styrene	ND		25.0	27.0		ug/L		108	80 - 120	1	20
Tetrachloroethene	ND		25.0	27.1		ug/L		109	74 - 122	5	20
Toluene	ND		25.0	26.4		ug/L		106	80 - 122	5	15
trans-1,2-Dichloroethene	ND		25.0	27.3		ug/L		109	73 - 127	4	20
trans-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	80 - 120	1	15
Trichloroethene	37		25.0	57.4		ug/L		83	74 - 123	3	16
Trichlorofluoromethane	ND		25.0	23.8		ug/L		95	62 - 150	8	20
Vinyl chloride	4.9		25.0	29.5		ug/L		98	65 - 133	4	15
<hr/>											
<i>Surrogate</i>		MSD	MSD	<i>Surrogate</i>		<i>Surrogate</i>		<i>Surrogate</i>		<i>Surrogate</i>	
<i>Toluene-d8 (Surr)</i>		104		<i>1,2-Dichloroethane-d4 (Surr)</i>		<i>4-Bromofluorobenzene (Surr)</i>		<i>Dibromofluoromethane (Surr)</i>		<i>Dibromofluoromethane (Surr)</i>	
		%Recovery	Qualifier								

QC Association Summary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

GC/MS VOA

Analysis Batch: 383363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125806-1	OW-1-101217	Total/NA	Water	8260C	5
480-125806-2	OW-2-101217	Total/NA	Water	8260C	6
480-125806-3	OW-3-101217	Total/NA	Water	8260C	7
480-125806-4	OW-4-101217	Total/NA	Water	8260C	8
480-125806-5	OW-5-101217	Total/NA	Water	8260C	9
480-125806-6	OW-7-101217	Total/NA	Water	8260C	10
480-125806-7	OW-8-101217	Total/NA	Water	8260C	11
480-125806-8	OW-9-101217	Total/NA	Water	8260C	12
480-125806-9	BLIND DUP	Total/NA	Water	8260C	13
480-125806-10	TB	Total/NA	Water	8260C	14
MB 480-383363/6	Method Blank	Total/NA	Water	8260C	15
LCS 480-383363/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 383580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-383580/6	Method Blank	Total/NA	Water	8260C	12
LCS 480-383580/4	Lab Control Sample	Total/NA	Water	8260C	13
480-125806-4 MS	OW-4-101217	Total/NA	Water	8260C	14
480-125806-4 MSD	OW-4-101217	Total/NA	Water	8260C	15

Lab Chronicle

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-1-101217

Date Collected: 10/12/17 10:00

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 01:46	ARS	TAL BUF

Client Sample ID: OW-2-101217

Date Collected: 10/12/17 10:45

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 02:13	ARS	TAL BUF

Client Sample ID: OW-3-101217

Date Collected: 10/12/17 11:00

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 02:40	ARS	TAL BUF

Client Sample ID: OW-4-101217

Date Collected: 10/12/17 11:15

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 03:06	ARS	TAL BUF

Client Sample ID: OW-5-101217

Date Collected: 10/12/17 11:30

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 03:33	ARS	TAL BUF

Client Sample ID: OW-7-101217

Date Collected: 10/12/17 12:00

Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 04:00	ARS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Client Sample ID: OW-8-101217

Date Collected: 10/12/17 12:15
Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 04:27	ARS	TAL BUF

Client Sample ID: OW-9-101217

Date Collected: 10/12/17 12:40
Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 04:54	ARS	TAL BUF

Client Sample ID: BLIND DUP

Date Collected: 10/12/17 00:00
Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 05:21	ARS	TAL BUF

Client Sample ID: TB

Date Collected: 10/12/17 00:00
Date Received: 10/13/17 08:00

Lab Sample ID: 480-125806-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	383363	10/24/17 05:48	ARS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TestAmerica Buffalo

Accreditation/Certification Summary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

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Method Summary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: Joseph C. Lu Eng & Land Surveying PC
Project/Site: Griffin #50322

TestAmerica Job ID: 480-125806-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-125806-1	OW-1-101217	Water	10/12/17 10:00	10/13/17 08:00
480-125806-2	OW-2-101217	Water	10/12/17 10:45	10/13/17 08:00
480-125806-3	OW-3-101217	Water	10/12/17 11:00	10/13/17 08:00
480-125806-4	OW-4-101217	Water	10/12/17 11:15	10/13/17 08:00
480-125806-5	OW-5-101217	Water	10/12/17 11:30	10/13/17 08:00
480-125806-6	OW-7-101217	Water	10/12/17 12:00	10/13/17 08:00
480-125806-7	OW-8-101217	Water	10/12/17 12:15	10/13/17 08:00
480-125806-8	OW-9-101217	Water	10/12/17 12:40	10/13/17 08:00
480-125806-9	BLIND DUP	Water	10/12/17 00:00	10/13/17 08:00
480-125806-10	TB	Water	10/12/17 00:00	10/13/17 08:00

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Login Sample Receipt Checklist

Client: Joseph C. Lu Eng & Land Surveying PC

Job Number: 480-125806-1

Login Number: 125806

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	No: Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	LU
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	