Weston Solutions, Inc.
1400 Weston Way
P.O. Box 2653
West Chester, Pennsylvania 19380
610-701-3000 • Fax 610-701-3186
www.westonsolutions.com

March 1, 2019

Mr. Brian Sadowski
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2915

Re: Periodic Review Report (February 14, 2018 to February 14, 2019)
and IC/EC Certification
3M Tonawanda, New York Facility
Order on Consent # B9-0369-91-04, Site Code #915148

Dear Mr. Sadowski:

In accordance with the referenced Order on Consent (Order) and at 3M's direction, we are submitting the Periodic Review Report (PRR) for the 3M Tonawanda, NY facility for the period extending from February 14, 2018 to February 14, 2019.

We also have enclosed the completed Institutional and Engineering Controls Certification Form for this site.

Should you have any comments or questions, please contact me at 610-701-3677.

Very truly yours,

WESTON SOLUTIONS, INC.

Thomas A. Drew, P.G.
Principal Project Manager

c: J. Martin, 3M (w/ enclosure)
K. Held, 3M (w/ enclosure)
G. May, NYSDEC (w/enclosure)

PERIODIC REVIEW REPORT

Site Name and Location:	3M Facility, Tonawanda, New York
Registry Number:	915148
Order on Consent:	B9-0369-91-04
3M Project Contacts:	Jeannie Martin (3M Corporate) Keith Held (3M Tonawanda)
NYSDEC Project Lead:	Glenn May
Reporting Period:	February 14, 2018 to February 14, 2019

Background

The New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) (Registry No. 915148) for the 3M facility in Tonawanda, New York. This ROD presents the selected remedial action for the Tonawanda facility based on the site's Administrative Record and public input. Following ROD issuance, the NYSDEC reclassified the 3M Tonawanda site from "Class 3 – Does not present a significant threat to the public health or environment – action may be deferred", to "Class 4 – Site properly closed – requires continued management."

3M is implementing the selected ROD remedy, No Further Action with Monitoring, under an Order on Consent (Index # B9-0369-91-04) (Order) according to the NYSDEC-approved Operation and Maintenance Work Plan (O&M Work Plan), which was made part of the Order. The original O&M Work Plan called for:

- Filing a Declaration of Covenants and Restrictions with the property deed at the Erie County Clerk's Office. This was completed and was reported in the initial progress report for the period ending March 31, 2001.
- Performing long-term groundwater monitoring. Involved semiannual sampling of site monitor wells MW-1, MW-2, MW-3, and MW-4 and annual sampling of the two site lysimeters, LY-1 and LY-2, with groundwater samples analyzed for carbon disulfide (CS_2).
- Inspecting the completed interim remedial measures (IRMs) (includes the CS_2 tank system, and the catch basin and associated swale) and maintaining the integrity of the IRMs.

Semiannual periodic review reports have been submitted by 3M to NYSDEC and these reports summarize project activities that occurred in the previous reporting periods. In

August 2005, the Five-Year Evaluation Report was submitted by 3M to NYSDEC and this report concluded that the selected remedy has been effective in meeting remediation goals outlined in the 1999 ROD and remains protective of human health and the environment. The aforementioned evaluation report also contained a recommended future course of action for the facility, including reductions in groundwater monitoring and reporting under the Order/O&M Plan.

By letter of May 18, 2006, NYSDEC provided comment on the Five-Year Evaluation Report. Based on the presence of CS_2 in the subsurface environment, NYSDEC required continued monitoring at this facility, but required only one site monitoring well (MW-4) and one site lysimeter (LY-2) be monitored for CS_2 on a semiannual basis and annual basis, respectively. According to the May 2006 NYSDEC correspondence, reporting on the maintenance of the drainage swale and associated catch basins would continue under the Order/O&M Plan; however, reporting on the continued operations, maintenance and inspection of the existing CS_2 tank system could be completed by 3M under NYSDEC's Chemical Bulk Storage Program.

This Periodic Review Report (PRR) reflects the O&M monitoring and reporting modifications agreed upon with NYSDEC. Sampling of the reduced monitoring network under the modified O&M Plan was completed in May 2018 and November 2018. The results from these sampling events are presented herein, along with a description of any maintenance activity conducted in the swale. Also, all analytical results presented in this (PRR) will be uploaded into NYSDEC's EQuIS system in March 2019.

Summary of Activities Performed During the Reporting Period

The following is a summary of activities performed by 3M during the reporting period:

- Groundwater samples for CS_2 analysis were collected from monitoring well MW-4 (primary sample and duplicate sample) and lysimeter LY-02 on May 3, 2018, in accordance with the O&M Plan modifications approved by NYSDEC. Laboratory analytical results from the May 2018 sampling event are provided in this report. Photographs of the site groundwater monitoring well and lysimeter taken on November 1, 2018 are provided in Attachment A.

- Groundwater samples for CS_2 analysis were collected from monitoring well MW-4 (primary sample and duplicate sample) on November 5, 2018 pursuant to the O&M Plan modifications. The sampling results from the November 2018 event are provided in this report.

- No maintenance activity was conducted in the subject drainage swale during the reporting period. Vegetation and grading in this swale are in good condition. Photographs showing the condition of the drainage swale, catch basin and fencing at the time of the site inspection in November 2018 are provided in Attachment A.

- The annual compliance inspection/evaluation was completed on November 1, 2018. No deficiencies were noted during the inspection.

Groundwater Monitoring Results

Summary of Carbon Disulfide Water Analytical Results

Sampling Date	Sample ID and Result		
	MW-4 (µg/L)	MW-4 Duplicate (µg/L)	LY-02 (mg/L)
5/3/2018	< 5	< 5	300
11/5/2018	< 5	< 5	NS

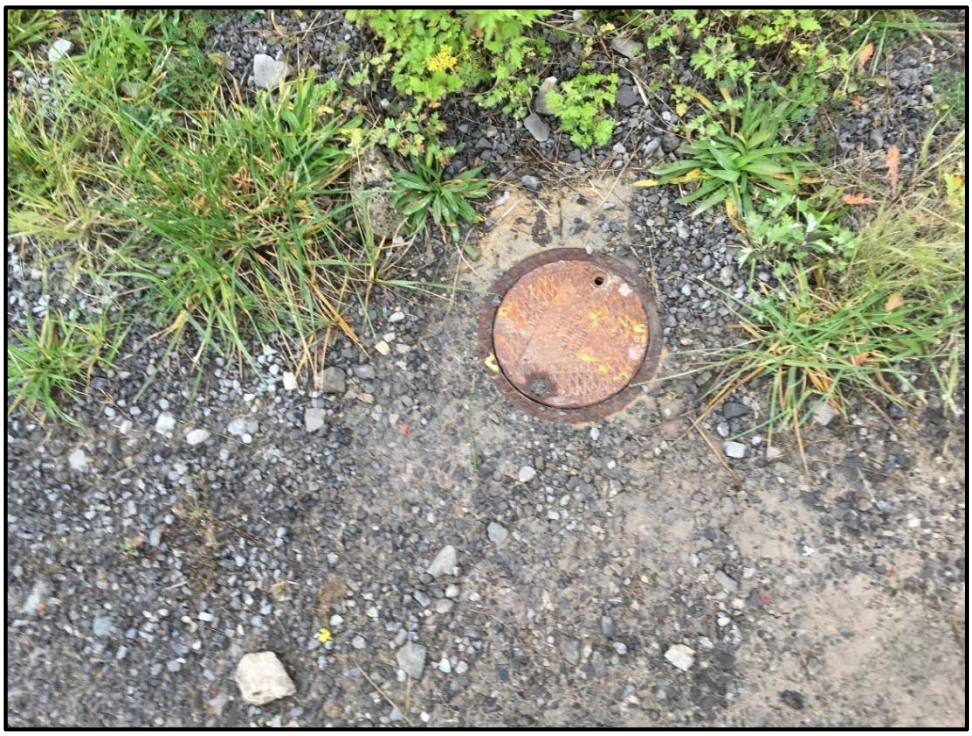
Notes:

NS: Not sampled per approved plan.

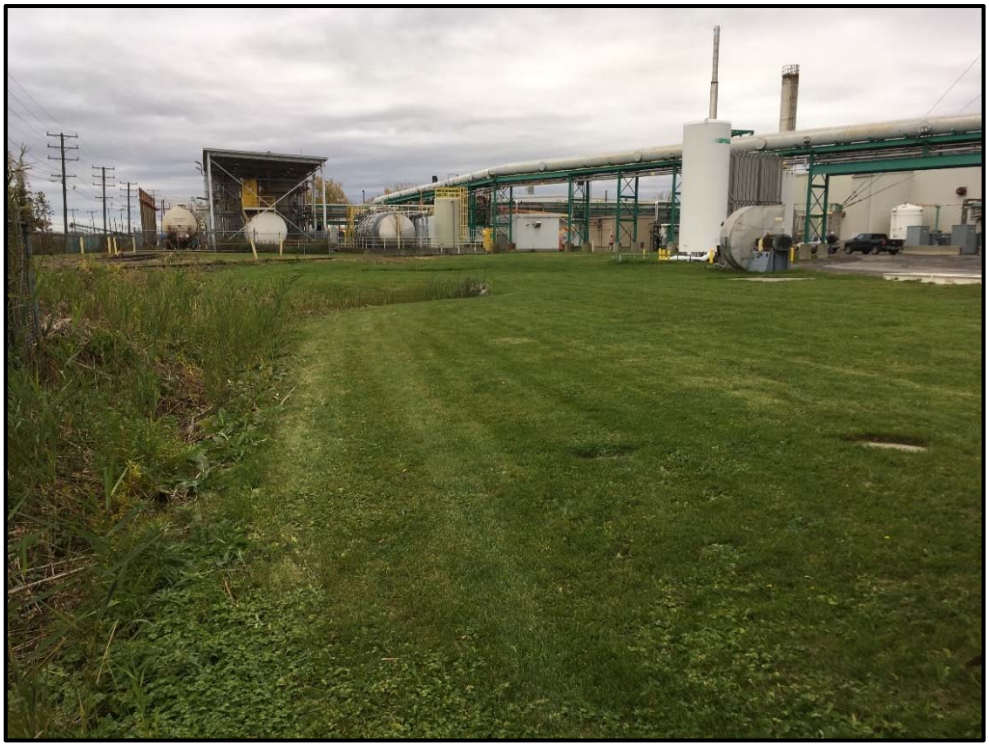
As noted above, CS_2 was not detected in the groundwater samples collected from monitoring well MW-4 in May 2018 and November 2018. CS_2 was detected at a concentration of 300 mg/L in the pore water sample collected from lysimeter LY-02. This finding is consistent with previous sample results. A copy of the completed well purging/sampling forms and the laboratory data packages for the May 2018 and November 2018 sampling events is provided in Attachment B.

ATTACHMENT A
SITE PHOTOGRAPHS – NOVEMBER 1, 2018

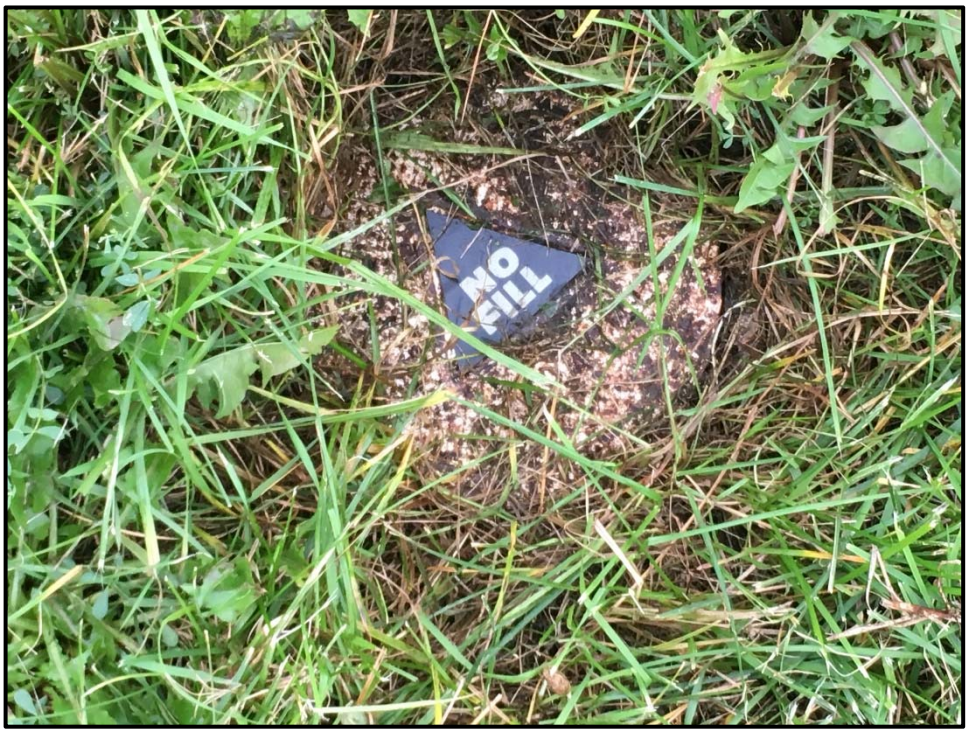
Groundwater Monitoring Well MW-4



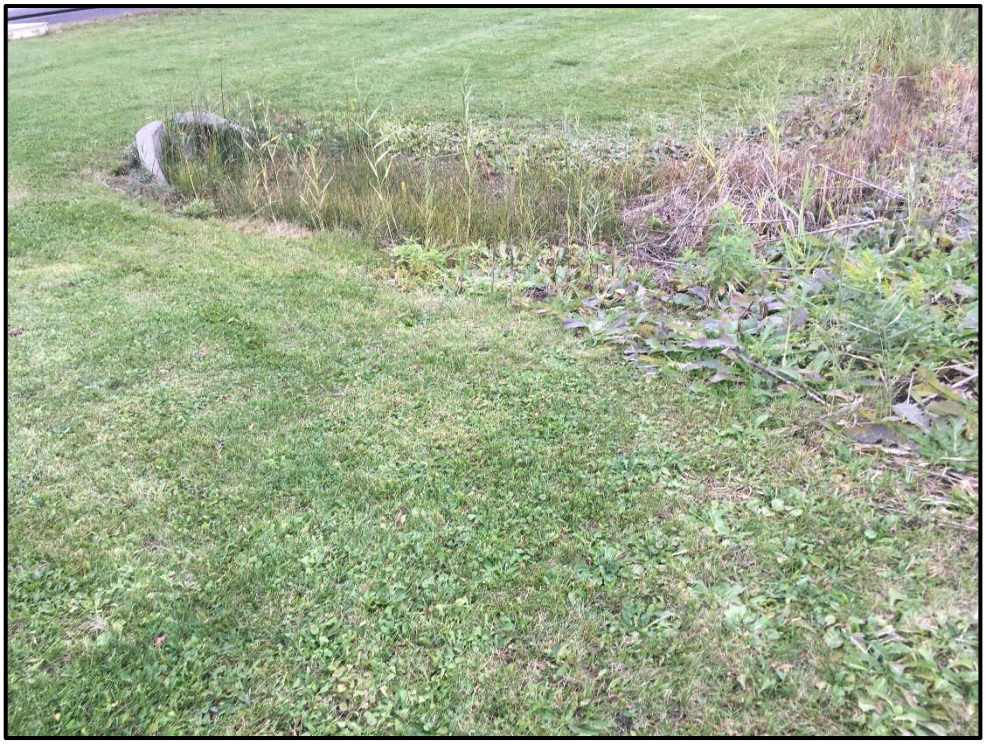
Catch Basin, Swale and Fencing



Lysimeter LY-2



Drainage Collection



ATTACHMENT B
WELL PURGING/SAMPLING FORMS
AND LABORATORY ANALYTICAL PACKAGES
MAY 2018 AND NOVEMBER 2018 SAMPLING EVENTS

WELL PURGING/SAMPLING FORMS

Well Evacuation/Sampling Form

SITE INFORMATION 3M Tonawanda			5/3/18
Well No.: MW-04		Weather: Sunny (Cloudy) Rain	Temp: 65°
Sampling Team: Greg Flasinski		Sampler's Signature:	

WELL INFORMATION

Protective Casing:	Intact / Damaged	Concrete Base:	(Intact) / Damaged
Locked:	(YES) / NO	Well Diameter:	(2-INCH) 4-INCH 6-INCH

WELL EVACUATION INFORMATION

A. Total Depth (Top of Casing = TOC):	72.90	Well Evacuation Method (✓) BAILER ( ) 2-Inch Grundfos ( ) Peristaltic Pump ( ) Other (Specify)
B. Depth to Water (DTW) (TOC):	-30.53	
C. Column of Standing Water (C=A-B):	42.37	
D. Purge Factor	x 0.16	
E. One Well Volume:	6.8	
F. Three Well Volumes (gallons):	20.4	**TOTAL VOLUME PURGED:**

INDICATOR PARAMETERS

Time	830	845	856	913					
Purge Rate (gal. per minute)									
Total Gallons Purged									
Temperature (°C):	14.5	13.6	13.4	13.2					
Specific Conductivity (s):	937	1416	3443	2689					
pH:	9.94	11.66	11.27	8.83					
~~SECONDARY PARAMETERS~~ DTW	30.53	31.72	31.76	30.99					
ORP (mV):	—	—	—	—					
Dissolved Oxygen (mg/L):	—	—	—	—					
Turbidity:	86.6	121.1	87.4	78.3					

NAPL Observed: YES / (NO)	Well Pumped Dry: YES / (NO)
ODOR: YES / (NO)	Other:
Odor Type: ( ) Solvent (✓) Septic ( ) Other	

SAMPLE COLLECTION INFORMATION SAMPLE DATE: 5/3/18

Sample No.	Time	Sample No.	Time
Media Sample ID: MW-04	930	Rinsate Blank: (YES)/NO FB-MW-4	815
Duplicate: (YES)/NO MW-04 Dup	930	Field Blank: YES/NO	

Parameters: (✓) ~~8260 VOC~~ CS_2 ( ) Fluorides
( ) Chlorides
( ) TDS
( ) Metals (Total RCRA) Non-filtered
( ) Metals (Total RCRA) Filtered

DTW's
MW-1 (29.73) MW-3 (32.57)
MW-2 (30.93)

COMMENTS

	Well Pumped Dry: YES / (NO)
	Volume Purged:
	Well Requires Maintenance? YES / (NO)
	Access Requires Maintenance? YES / (NO)

Purge Factors: 1" (0.04); 2" (0.16); 3" (0.37); 4" (0.65); 6" (1.47); 8" (2.61); 10" (4.08)

Well Evacuation/Sampling Form

SITE INFORMATION TONAWANDA	11/5/18
Well No.: MW-4	Weather: Sunny / Cloudy / Rain Temp: 48°
Sampling Team: Greg Floszuski	Sampler's Signature:

WELL INFORMATION

Protective Casing: Intact / Damaged	Concrete Base: Intact / Damaged
Locked: YES / NO	Well Diameter: 2-INCH 4-INCH 6-INCH

WELL EVACUATION INFORMATION

A. Total Depth (Top of Casing = TOC):	72.90
B. Depth to Water (DTW) (TOC):	-31.48
C. Column of Standing Water (C=A-B):	41.42
D. Purge Factor	x 0.16
E. One Well Volume:	6.6
F. Three Well Volumes (gallons):	19.8

Well Evacuation Method
- (X) BAILER
- ( ) 2-Inch Grundfos
- ( ) Peristaltic Pump
- ( ) Other (Specify) _____

TOTAL VOLUME PURGED: 20

INDICATOR PARAMETERS

Time	1117	1128	1140	1156					
Purge Rate (gal. per minute)									
Total Gallons Purged									
Temperature (°C):	14.2	13.3	12.9	12.6					
Specific Conductivity (s):	2916	3297	2792	2897					
pH:	12.15	12.46	9.31	8.04					
~~SECONDARY PARAMETERS~~ DTW	31.48		32.81	32.87					
ORP (mV):	—	—	—	—					
Dissolved Oxygen (mg/L):	—	—	—	—					
Turbidity:	38.8	29.9	67.4	33.4					

NAPL Observed: YES / (NO)	**Well Pumped Dry:** YES / (NO)
ODOR: YES / (NO)	**Other:**
Odor Type: ( ) Solvent ( ) Septic ( ) Other	

SAMPLE COLLECTION INFORMATION **SAMPLE DATE:** 11/5/18

Sample No.	Time	Sample No.	Time
Media Sample ID: OCO-GW-MW04-181105	1220	Rinsate Blank: YES/NO	
Duplicate: (YES)/NO OCO-GW-MW04-DB-181105	1220	Field Blank: (YES)/NO OCO-W-MW04-FB-181105	1210

Parameters:
- (✓) ~~8260 VOC~~ CS_2 ONLY
- ( ) Fluorides
- ( ) Chlorides
- ( ) TDS
- ( ) Metals (Total RCRA) Non-filtered
- ( ) Metals (Total RCRA) Filtered

TB - OCO-W-TB01-TB-181105

COMMENTS

MW-1 31.10
MW-2 31.82
MW-3 33.52
MW-4 31.48

Well Pumped Dry: YES / (NO)
Volume Purged: 20
Well Requires Maintenance? YES / (NO)
Access Requires Maintenance? YES / (NO)

Purge Factors: 1" (0.04); 2" (0.16); 3" (0.37); 4" (0.65); 6" (1.47); 8" (2.61); 10" (4.08)

LABORATORY ANALYTICAL PACKAGES

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: 480-135350-1
Client Project/Site: 3M Tonawanda

For:
Weston Solutions, Inc.
1400 Weston Way
PO BOX 2653
West Chester, Pennsylvania 19380

Attn: Mr. Tom Drew

Joseph V. Giacomazza

Authorized for release by:
5/14/2018 2:03:06 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

Table of Contents

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: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

Job ID: 480-135350-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-135350-1

Receipt
The samples were received on 5/3/2018 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

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

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

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

Client Sample ID: Trip Blank — Lab Sample ID: 480-135350-1

No Detections.

Client Sample ID: FB-MW-04 — Lab Sample ID: 480-135350-2

No Detections.

Client Sample ID: MW-04 — Lab Sample ID: 480-135350-3

No Detections.

Client Sample ID: MW-04DUP — Lab Sample ID: 480-135350-4

No Detections.

Client Sample ID: LY-02 — Lab Sample ID: 480-135350-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	300000		50000	2200	ug/L	10000		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: Trip Blank — Lab Sample ID: 480-135350-1

Date Collected: 05/03/18 07:45
Date Received: 05/03/18 10:00
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.22	ug/L			05/09/18 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*05/09/18 16:12*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/09/18 16:12*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/09/18 16:12*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*05/09/18 16:12*	*1*

Client Sample ID: FB-MW-04 — Lab Sample ID: 480-135350-2

Date Collected: 05/03/18 08:15
Date Received: 05/03/18 10:00
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.22	ug/L			05/09/18 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*05/09/18 16:40*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/09/18 16:40*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/09/18 16:40*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*05/09/18 16:40*	*1*

Client Sample ID: MW-04 — Lab Sample ID: 480-135350-3

Date Collected: 05/03/18 09:30
Date Received: 05/03/18 10:00
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.22	ug/L			05/09/18 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/09/18 17:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/09/18 17:07*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/09/18 17:07*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/09/18 17:07*	*1*

Client Sample ID: MW-04DUP — Lab Sample ID: 480-135350-4

Date Collected: 05/03/18 09:30
Date Received: 05/03/18 10:00
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.22	ug/L			05/09/18 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*05/09/18 17:34*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/09/18 17:34*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/09/18 17:34*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/09/18 17:34*	*1*

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

Client Sample ID: LY-02
Date Collected: 05/03/18 09:45
Date Received: 05/03/18 10:00

Lab Sample ID: 480-135350-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	300000		50000	2200	ug/L			05/09/18 18:02	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*05/09/18 18:02*	*10000*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/09/18 18:02*	*10000*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/09/18 18:02*	*10000*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/09/18 18:02*	*10000*

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-135350-1	Trip Blank	87	100	99	94
480-135350-2	FB-MW-04	91	97	99	94
480-135350-3	MW-04	95	97	97	96
480-135350-4	MW-04DUP	92	98	98	97
480-135350-4 MS	MW-04DUP	92	103	100	95
480-135350-4 MSD	MW-04DUP	92	102	100	95
480-135350-5	LY-02	92	99	98	96
LCS 490-513680/3	Lab Control Sample	91	103	100	96
LCSD 490-513680/4	Lab Control Sample Dup	90	102	100	95
MB 490-513680/6	Method Blank	94	99	98	97

Surrogate Legend

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

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

Lab Sample ID: MB 490-513680/6
Matrix: Water
Analysis Batch: 513680

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.22	ug/L			05/09/18 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/09/18 13:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/09/18 13:24*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/09/18 13:24*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/09/18 13:24*	*1*

Lab Sample ID: LCS 490-513680/3
Matrix: Water
Analysis Batch: 513680

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Carbon disulfide			20.0	21.0		ug/L		105	77 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 490-513680/4
Matrix: Water
Analysis Batch: 513680

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide			20.0	20.7		ug/L		104	77 - 126	1	16

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*

Lab Sample ID: 480-135350-4 MS
Matrix: Water
Analysis Batch: 513680

Client Sample ID: MW-04DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Carbon disulfide	ND		20.0	22.5		ug/L		112	35 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*

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

Lab Sample ID: 480-135350-4 MSD
Matrix: Water
Analysis Batch: 513680

Client Sample ID: MW-04DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	ND		20.0	21.2		ug/L		106	35 - 150	6	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*

QC Association Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

GC/MS VOA

Analysis Batch: 513680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-135350-1	Trip Blank	Total/NA	Water	8260C	
480-135350-2	FB-MW-04	Total/NA	Water	8260C	
480-135350-3	MW-04	Total/NA	Water	8260C	
480-135350-4	MW-04DUP	Total/NA	Water	8260C	
480-135350-5	LY-02	Total/NA	Water	8260C	
MB 490-513680/6	Method Blank	Total/NA	Water	8260C	
LCS 490-513680/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 490-513680/4	Lab Control Sample Dup	Total/NA	Water	8260C	
480-135350-4 MS	MW-04DUP	Total/NA	Water	8260C	
480-135350-4 MSD	MW-04DUP	Total/NA	Water	8260C	

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

Client Sample ID: Trip Blank
Lab Sample ID: 480-135350-1
Date Collected: 05/03/18 07:45
Matrix: Water
Date Received: 05/03/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	513680	05/09/18 16:12	AK1	TAL NSH

Client Sample ID: FB-MW-04
Lab Sample ID: 480-135350-2
Date Collected: 05/03/18 08:15
Matrix: Water
Date Received: 05/03/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	513680	05/09/18 16:40	AK1	TAL NSH

Client Sample ID: MW-04
Lab Sample ID: 480-135350-3
Date Collected: 05/03/18 09:30
Matrix: Water
Date Received: 05/03/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	513680	05/09/18 17:07	AK1	TAL NSH

Client Sample ID: MW-04DUP
Lab Sample ID: 480-135350-4
Date Collected: 05/03/18 09:30
Matrix: Water
Date Received: 05/03/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	513680	05/09/18 17:34	AK1	TAL NSH

Client Sample ID: LY-02
Lab Sample ID: 480-135350-5
Date Collected: 05/03/18 09:45
Matrix: Water
Date Received: 05/03/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10000	513680	05/09/18 18:02	AK1	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

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 *

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-19
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-18
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2LA)	06-30-18
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-18 *
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-18
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-18
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-18
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-18 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-18
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-18
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-18
Wyoming (UST)	A2LA	8	453.07	12-31-19

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

Method Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL NSH
5030C	Purge and Trap	SW846	TAL NSH

Protocol References:

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-135350-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-135350-1	Trip Blank	Water	05/03/18 07:45	05/03/18 10:00
480-135350-2	FB-MW-04	Water	05/03/18 08:15	05/03/18 10:00
480-135350-3	MW-04	Water	05/03/18 09:30	05/03/18 10:00
480-135350-4	MW-04DUP	Water	05/03/18 09:30	05/03/18 10:00
480-135350-5	LY-02	Water	05/03/18 09:45	05/03/18 10:00

TestAmerica Amherst
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 253481

TestA THE LEADER I TestAmer ING nc. 713)

480-135350 COC

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: 610.721.0583

Client Contact	Project Manager: Tom Drew	Site Contact: Greg Flosinski	Date: HAND	COC No: 1 of 1 COCs
Company Name: Weston Solutions	Tel/Fax: 610.701.3677	Lab Contact: Judy Stine	Carrier: Delivered	Sampler:
Address: 1410 Weston Way	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: Wchester PA 19380	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone: 610.721.0583	TAT if different from Below _____			Lab Sampling:
Fax:	☐ 2 weeks			
Project Name: 3M Tonawanda	☐ 1 week			Job / SDG No.:
Site: Tonawanda, NY	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	CS_2	Sample Specific Notes:
Trip Blank	5/3/18	745	G	W	1	N		✓	
FB-MW-04		815			3			✓	CS_2 Only
MW-04		930			3			✓	
MW-04Dup		930			3			✓	5ppb
LY-02		945			3	#		✓	Detection Limit

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

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

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.7 Corr'd: _____ | Therm ID No.: #1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Weston	5/3/18 1008		TDS	5/3/18 1008
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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5/14/2018

Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 480-135350-1

Login Number: 135350
List Number: 1
Creator: Wallace, Cameron

List Source: TestAmerica Buffalo

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.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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	WESTON
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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: 480-144717-1
Client Project/Site: 3M Tonawanda

For:
Weston Solutions, Inc.
1400 Weston Way
PO BOX 2653
West Chester, Pennsylvania 19380

Attn: Mr. Tom Drew

Joseph V. Giacomazza

Authorized for release by:
11/13/2018 11:51:09 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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)

Job ID: 480-144717-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-144717-1

Receipt
The samples were received on 11/5/2018 1:14 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

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

Detection Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

Client Sample ID: OCO-W-TB01-TB-181105 **Lab Sample ID: 480-144717-1**

No Detections.

Client Sample ID: OCO-W-MW04-FB-181105 **Lab Sample ID: 480-144717-2**

No Detections.

Client Sample ID: OCO-GW-MW04-0-181105 **Lab Sample ID: 480-144717-3**

No Detections.

Client Sample ID: OCO-GW-MW04-DB-181105 **Lab Sample ID: 480-144717-4**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: OCO-W-TB01-TB-181105

Lab Sample ID: 480-144717-1

Date Collected: 11/05/18 11:10

Matrix: Water

Date Received: 11/05/18 13:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.19	ug/L			11/12/18 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/12/18 14:54*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*11/12/18 14:54*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*11/12/18 14:54*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*11/12/18 14:54*	*1*

Client Sample ID: OCO-W-MW04-FB-181105

Lab Sample ID: 480-144717-2

Date Collected: 11/05/18 12:10

Matrix: Water

Date Received: 11/05/18 13:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.19	ug/L			11/12/18 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*11/12/18 15:21*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/12/18 15:21*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*11/12/18 15:21*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*11/12/18 15:21*	*1*

Client Sample ID: OCO-GW-MW04-0-181105

Lab Sample ID: 480-144717-3

Date Collected: 11/05/18 12:20

Matrix: Water

Date Received: 11/05/18 13:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.19	ug/L			11/12/18 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*11/12/18 14:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*11/12/18 14:37*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*11/12/18 14:37*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*11/12/18 14:37*	*1*

Client Sample ID: OCO-GW-MW04-DB-181105

Lab Sample ID: 480-144717-4

Date Collected: 11/05/18 12:20

Matrix: Water

Date Received: 11/05/18 13:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.19	ug/L			11/12/18 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*11/12/18 15:05*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/12/18 15:05*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*11/12/18 15:05*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*11/12/18 15:05*	*1*

Surrogate Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(77-120)	(80-120)	(73-120)	(75-123)
480-144717-1	OCO-W-TB01-TB-181105	101	100	101	105
480-144717-2	OCO-W-MW04-FB-181105	110	98	106	109
480-144717-3	OCO-GW-MW04-0-181105	98	99	84	88
480-144717-4	OCO-GW-MW04-DB-181105	100	97	86	90
LCS 480-444961/5	Lab Control Sample	100	100	111	101
LCS 480-444968/7	Lab Control Sample	98	99	87	88
MB 480-444961/7	Method Blank	101	98	103	104
MB 480-444968/9	Method Blank	96	98	86	89

Surrogate Legend

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

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

Lab Sample ID: MB 480-444961/7
Matrix: Water
Analysis Batch: 444961

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.216	J	5.0	0.19	ug/L			11/12/18 11:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/12/18 11:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/12/18 11:08*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*11/12/18 11:08*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*11/12/18 11:08*	*1*

Lab Sample ID: LCS 480-444961/5
Matrix: Water
Analysis Batch: 444961

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Carbon disulfide			25.0	23.2		ug/L		93	59 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Lab Sample ID: MB 480-444968/9
Matrix: Water
Analysis Batch: 444968

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.19	ug/L			11/12/18 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*11/12/18 11:35*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/12/18 11:35*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*11/12/18 11:35*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*11/12/18 11:35*	*1*

Lab Sample ID: LCS 480-444968/7
Matrix: Water
Analysis Batch: 444968

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Carbon disulfide			25.0	26.4		ug/L		106	59 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*
Dibromofluoromethane (Surr)	*88*		*75 - 123*

QC Association Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

GC/MS VOA

Analysis Batch: 444961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144717-1	OCO-W-TB01-TB-181105	Total/NA	Water	8260C	
480-144717-2	OCO-W-MW04-FB-181105	Total/NA	Water	8260C	
MB 480-444961/7	Method Blank	Total/NA	Water	8260C	
LCS 480-444961/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 444968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144717-3	OCO-GW-MW04-0-181105	Total/NA	Water	8260C	
480-144717-4	OCO-GW-MW04-DB-181105	Total/NA	Water	8260C	
MB 480-444968/9	Method Blank	Total/NA	Water	8260C	
LCS 480-444968/7	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

Client Sample ID: OCO-W-TB01-TB-181105

Lab Sample ID: 480-144717-1

Date Collected: 11/05/18 11:10

Matrix: Water

Date Received: 11/05/18 13:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444961	11/12/18 14:54	NMC	TAL BUF

Client Sample ID: OCO-W-MW04-FB-181105

Lab Sample ID: 480-144717-2

Date Collected: 11/05/18 12:10

Matrix: Water

Date Received: 11/05/18 13:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444961	11/12/18 15:21	NMC	TAL BUF

Client Sample ID: OCO-GW-MW04-0-181105

Lab Sample ID: 480-144717-3

Date Collected: 11/05/18 12:20

Matrix: Water

Date Received: 11/05/18 13:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444968	11/12/18 14:37	RLB	TAL BUF

Client Sample ID: OCO-GW-MW04-DB-181105

Lab Sample ID: 480-144717-4

Date Collected: 11/05/18 12:20

Matrix: Water

Date Received: 11/05/18 13:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444968	11/12/18 15:05	RLB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

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	03-31-19

Method Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	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

Sample Summary

Client: Weston Solutions, Inc.
Project/Site: 3M Tonawanda

TestAmerica Job ID: 480-144717-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-144717-1	OCO-W-TB01-TB-181105	Water	11/05/18 11:10	11/05/18 13:14
480-144717-2	OCO-W-MW04-FB-181105	Water	11/05/18 12:10	11/05/18 13:14
480-144717-3	OCO-GW-MW04-0-181105	Water	11/05/18 12:20	11/05/18 13:14
480-144717-4	OCO-GW-MW04-DB-181105	Water	11/05/18 12:20	11/05/18 13:14

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228-2223
phone 716.691.2600 fax 716.691.7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tom Drew	Site Contact: Greg Flasinski	Date:	COC No:
Weston Solutions, Inc.	Tel/Fax: 610-701-3677	Lab Contact: Judy Stone	Carrier: Hand Delivered	1 of 1 COCs
1400 Weston Way	Analysis Turnaround Time			Sampler:
West Chester, PA 19380	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 610-721-0583	TAT if different from Below _____			Walk-in Client:
Fax:	☑ 2 weeks			Lab
Project Name: Conf-3M Tonowanda	☐ 1 week			Job
Site: Tonowanda, NY Site (OCO)	☐ 2 days			480-144717 COC
P O #	☐ 1 day			Sample Specific Notes:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	CS_2 Only
1	OCO-W-TB01-TB-181105	11/5/2018	1110	G	W	3	N		X
2	OCO-W-MW04-FB-181105	11/5/2018	1210	G	W	3	N		X
3	OCO-GW-MW04-0-181105	11/5/2018	1220	G	W	3	N		X
4	OCO-GW-MW04-DB-181105	11/5/2018	1220	G	W	3	N		X
5									
6									
7									
8									
9									
10									
11									
12									

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

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

☑ Non-Hazard ☐ Flammable ☑ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: [Client Project Number: 02181.086.026.0001] [Please CC DataMgt on ALL Data Deliverables (NATACC.Data@WestonSolutions.com)]

CS_2 Only - 5ppb Detection Limit

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 3.8 Corr'd: _____	Therm ID No.: #1 FCE
Relinquished by:	Company: Weston Solutions	Date/Time: 11/5/18 1341	Received by:	Company: TAB	Date/Time: 11/5/18 1341
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.8, dated 11/04/2015

Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 480-144717-1

Login Number: 144717

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris 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.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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	WESTON SOLUTIONS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 915148

Site Name 3M O-Cel-O Sponge Plant

Site Address: 305 Sawyer Avenue Zip Code: 14150
City/Town: Tonawanda
County: Erie
Site Acreage: 1.000

Reporting Period: February 14, 2018 to February 14, 2019

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 915148 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
65.09-6-5	Minnesota Mining & Manufacturing Company	Landuse Restriction
		Monitoring Plan

A No Further Action Record of Decision (ROD) was issued for this site in March 1999. A Declaration of Convenants and Restrictions was placed on the property on March 21, 2001 prohibiting the residential use of the site. The graded area surrounding the catch basins are maintained and inspected annually. Groundwater monitoring is also conducted to confirm that site conditions remain unchanged and to detect any future migration of CS2, should it occur. The site is fenced.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
65.09-6-5	Fencing/Access Control

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative — Date

IC CERTIFICATIONS
SITE NO. 915148

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I JOHN C. AKEY at 305 Sawyer Ave, Tonawanda NY 14150,
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

2/28/19
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I THOMAS A. DREW (print name) at WESTON SOLUTIONS, INC. 1400 WESTON WAY, WEST CHESTER, PA, 19380 (print business address)

am certifying as a Qualified Environmental Professional for the OWNER (Owner or Remedial Party)

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		2/28/2019