



Weston Solutions, Inc.
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The Trusted Integrator for Sustainable Solutions

March 9, 2017

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

**Re: Periodic Review Report (February 14, 2016 to February 14, 2017)
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, 2016 to February 14, 2017.

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. Pettinelli, 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: Justin Pettinelli (3M Corporate)
Keith Held (3M Tonawanda)

NYSDEC Project Lead: Glenn May

Reporting Period: February 14, 2016 to February 14, 2017

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 (CS₂).
- Inspecting the completed interim remedial measures (IRMs) (includes the CS₂ 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 CS₂ 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 CS₂ 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 CS₂ 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 2016 and November 2016. 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 2017.

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 CS₂ analysis were collected from monitoring well MW-4 (primary sample and duplicate sample) and lysimeter LY-02 on May 4, 2016, in accordance with the O&M Plan modifications approved by NYSDEC. Laboratory analytical results from the May 4, 2016 sampling event are provided in this report. Photographs of the site groundwater monitoring well and lysimeter taken on November 8, 2016 are provided in Attachment A.
- Groundwater samples for CS₂ analysis were collected from monitoring well MW-4 (primary sample and duplicate sample) on November 16, 2016 pursuant to the O&M Plan modifications. The sampling results from the November 16, 2016 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 2016 are provided in Attachment A.
- The annual compliance inspection/evaluation was completed on November 8, 2016. 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)
5/04/2016	0.32 JB	0.67 J	260 B
11/16/2016	ND	ND	NS

Notes: ND: Not detected at the reporting limit. The reporting limit for CS₂ is 5 µg/L for MW-4, and 130 mg/L for LY-02 due to sample dilution at the laboratory.

NS: Not sampled per approved plan.

J: Result is less than the reporting limit of 5 µg/L but greater than or equal to the method detection limit of 0.19 µg/L and the concentration is an approximate value.

B: Compound was found in the blank and sample.

As noted above, CS₂ was not detected above the reporting limit in the groundwater samples collected from monitoring well MW-4 in May 2016 and November 2016. CS₂ was detected at a concentration of 260 B 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 2016 and November 2016 sampling events is provided in Attachment B.



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: 1.0		
Reporting Period: February 14, 2016 to February 14, 2017		
		YES NO
1. Is the information above correct?		<input checked="" type="checkbox"/> <input type="checkbox"/>
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?		<input type="checkbox"/> <input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/> <input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
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?		<input type="checkbox"/> <input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Industrial		<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input checked="" type="checkbox"/> <input type="checkbox"/>
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

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
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 Covenants 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

<u>Parcel</u>	<u>Engineering Control</u>
65.09-6-5	Fencing/Access Control

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 complete.

YES NO

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

**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 Carl Carleton at 305 Salyer Ave
print name print business address

am certifying as Plant Manager (Owner or Remedial Party)

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

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

3-1-17
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 at 1400 WESTON WAY, WEST CHESTER,
print name print business address PA 19380

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



3/3/2017

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

ATTACHMENT A
SITE PHOTOGRAPHS – NOVEMBER 8, 2016

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 2016 AND NOVEMBER 2016 SAMPLING EVENTS**

WELL PURGING/SAMPLING FORMS



Well Evacuation/Sampling Form

SITE INFORMATION <u>3M Tonawanda</u>		<u>5/4/16</u>							
Well No.: <u>MW-4</u>	Weather: <u>Sunny</u> Cloudy Rain	Temp: <u>55°</u>							
Sampling Team: <u>Greg Fabiszki</u>	Sampler's Signature: <u>[Signature]</u>								
WELL INFORMATION									
Protective Casing: <input checked="" type="radio"/> Intact / <input type="radio"/> Damaged	Concrete Base: <input checked="" type="radio"/> Intact / <input type="radio"/> Damaged								
Locked: <input checked="" type="radio"/> YES / <input type="radio"/> NO	Well Diameter: <u>2"</u>								
WELL EVACUATION INFORMATION									
A. Total Depth (Top of Casing = TOC):	<u>72.90</u>	Well Evacuation Method <input checked="" type="checkbox"/> BAILER <input type="checkbox"/> 2-Inch Grundfos <input type="checkbox"/> Peristaltic Pump <input type="checkbox"/> Other (Specify) _____							
B. Depth to Water (DTW) (TOC):	<u>-30.41</u>								
C. Column of Standing Water (C=A-B):	<u>42.49</u>								
D. Purge Factor	<u>x .16</u>								
E. One Well Volume:	<u>6.8</u>								
F. Three Well Volumes (gallons):	<u>20.4</u>	TOTAL VOLUME PURGED: <u>20.5</u>							
Sampled using LOW-FLOW									
INDICATOR PARAMETERS									
	Time	<u>1050</u>	<u>1058</u>	<u>1106</u>	<u>1115</u>				
Purge Rate (gal. per minute)									
Total Gallons Purged		<u>0</u>	<u>6.75</u>	<u>13.50</u>	<u>20.5</u>				
Temperature (°C):		<u>13.5</u>	<u>13.1</u>	<u>13.0</u>	<u>12.7</u>				
Specific Conductivity (s):		<u>552</u>	<u>1287</u>	<u>1828</u>	<u>3573</u>				
pH:		<u>8.90</u>	<u>11.22</u>	<u>11.13</u>	<u>8.93</u>				
SECONDARY PARAMETERS									
ORP (mV):		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>				
Dissolved Oxygen (mg/L):		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>				
Turbidity:		<u>26.4</u>	<u>70.4</u>	<u>75.4</u>	<u>85.1</u>				
NAPL Observed: YES / <input checked="" type="radio"/> NO					Well Pumped Dry: YES / <input checked="" type="radio"/> NO				
ODOR: YES / <input checked="" type="radio"/> NO					Other: _____				
Odor Type: () Solvent () Septic () Other									
SAMPLE COLLECTION INFORMATION					SAMPLE DATE: <u>5/4/16</u>				
Sample No.	Time	Sample No.	Time						
Media Sample ID: <u>MW-4</u>	<u>1145</u>	Rinsate Blank: YES / <input checked="" type="radio"/> NO							
Duplicate: <input checked="" type="radio"/> YES / <input type="radio"/> NO <u>MW-4 Dup</u>	<u>1145</u>	Field Blank: <input checked="" type="radio"/> YES / <input checked="" type="radio"/> NO <u>FB-MW4</u>	<u>1045</u>						
Parameters: <input checked="" type="checkbox"/> 3260-VOC <u>CS₂</u> () Fluorides <input type="checkbox"/> Chlorides <u>ONLY</u> <input type="checkbox"/> TDS <input type="checkbox"/> Metals (Total RCRA) Non-filtered <input type="checkbox"/> Metals (Total RCRA) Filtered				Also sampled for: _____					
COMMENTS									
<u>Analyzed for CS₂ 5ppb only</u>					Well Pumped Dry: YES / <input checked="" type="radio"/> NO				
					Volume Purged: <u>20.5</u>				
					Well Requires Maintenance? YES / <input checked="" type="radio"/> NO				
					Access Requires Maintenance? YES / <input checked="" type="radio"/> NO				



Well Evacuation/Sampling Form

SITE INFORMATION <u>TONAWANDA</u>		11/16/16							
Well No.: <u>MW-04</u>	Weather: Sunny Cloudy <u>Rain</u>	Temp: <u>50°</u>							
Sampling Team: <u>Greg Flaszko</u>	Sampler's Signature: <u>[Signature]</u>								
WELL INFORMATION									
Protective Casing: <u>Intact</u> / Damaged	Concrete Base: <u>Intact</u> / Damaged								
Locked: <u>YES</u> / NO	Well Diameter: <u>2-INCH</u> 4-INCH 6-INCH								
WELL EVACUATION INFORMATION									
A. Total Depth (Top of Casing = TOC):	<u>72.90</u>	Well Evacuation Method <input checked="" type="checkbox"/> BAILER <input type="checkbox"/> 2-Inch Grundfos <input type="checkbox"/> Peristaltic Pump <input type="checkbox"/> Other (Specify) _____							
B. Depth to Water (DTW) (TOC):	<u>-31.89</u>								
C. Column of Standing Water (C=A-B):	<u>41.01</u>								
D. Purge Factor	<u>x 0.06</u>								
E. One Well Volume:	<u>6.56</u>								
F. Three Well Volumes (gallons):	<u>19.7</u>	TOTAL VOLUME PURGED: <u>19.75</u>							
INDICATOR PARAMETERS									
	Time	1050	1105	1114	1126				
Purge Rate (gal. per minute)									
Total Gallons Purged									
Temperature (°C):		13.0	12.9	12.7	12.6				
Specific Conductivity (s):		623	4921	3303	3567				
pH:		10.21	12.19	11.11	8.85				
SECONDARY PARAMETERS Depth (meters):		31.89	31.94	31.90	31.91				
ORP (mV):		-	-	-	-				
Dissolved Oxygen (mg/L):		-	-	-	-				
Turbidity:		102.9	85.5	65.3	57.6				
NAPL Observed: YES / <u>NO</u>	Well Pumped Dry: YES / <u>NO</u>								
ODOR: YES / <u>NO</u>	Other: _____								
Odor Type: () Solvent () Septic () Other									
SAMPLE COLLECTION INFORMATION			SAMPLE DATE: <u>11/16/16</u>						
Sample No.	Time	Sample No.	Time						
Media Sample ID: <u>MW-4</u>	<u>1130</u>	Rinsate Blank: <u>YES</u> / <u>NO</u>	<u>FB-MW-4</u>	<u>1045</u>					
Duplicate: <u>YES</u> / <u>NO</u>	<u>MW-4 Dup</u>	Field Blank: <u>YES</u> / <u>NO</u>							
Parameters: <input checked="" type="checkbox"/> 8260 VOC x <input type="checkbox"/> Fluorides <input type="checkbox"/> Chlorides <u>Carbon Disulfide</u> <input type="checkbox"/> TDS <input type="checkbox"/> Metals (Total RCRA) Non-filtered <u>5 ppb</u> <input type="checkbox"/> Metals (Total RCRA) Filtered									
COMMENTS									
			Well Pumped Dry: YES / <u>NO</u>						
			Volume Purged: <u>19.75</u>						
			Well Requires Maintenance? YES / <u>NO</u>						
			Access Requires Maintenance? YES / <u>NO</u>						

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: 480-99546-1

Client Project/Site: 3M Tonawanda

Sampling Event: 3M Tonawanda, NY - Semi-Annual Monit.

For:

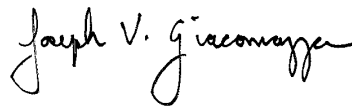
Weston Solutions, Inc.

1400 Weston Way

PO BOX 2653

West Chester, Pennsylvania 19380

Attn: Mr. Tom Drew



Authorized for release by:

5/17/2016 12:06:07 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

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

TestAmerica Job ID: 480-99546-1

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 480-99546-1

Job ID: 480-99546-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-99546-1

Receipt

The samples were received on 5/4/2016 12:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: LY-02 (480-99546-3), (480-99546-A-3 MS) and (480-99546-A-3 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: LY-02 (480-99546-3). Elevated reporting limits (RLs) are provided.

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

Detection Summary

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

TestAmerica Job ID: 480-99546-1

Client Sample ID: Trip Blank

Lab Sample ID: 480-99546-1

No Detections.

Client Sample ID: FB-MW-4

Lab Sample ID: 480-99546-2

No Detections.

Client Sample ID: LY-02

Lab Sample ID: 480-99546-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	260000	B	130000	4800	ug/L	25000		8260C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 480-99546-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.32	J B	5.0	0.19	ug/L	1		8260C	Total/NA

Client Sample ID: MW-4 DUP

Lab Sample ID: 480-99546-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.67	J	5.0	0.19	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-99546-1

Client Sample ID: Trip Blank

Date Collected: 05/04/16 10:00
Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-1

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	0.19	ug/L			05/14/16 12:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		66 - 137					05/14/16 12:29	1
Toluene-d8 (Surr)	98		71 - 126					05/14/16 12:29	1
4-Bromofluorobenzene (Surr)	90		73 - 120					05/14/16 12:29	1

Client Sample ID: FB-MW-4

Date Collected: 05/04/16 10:45
Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-2

Matrix: Monitor Well

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			05/14/16 12:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		66 - 137					05/14/16 12:54	1
Toluene-d8 (Surr)	97		71 - 126					05/14/16 12:54	1
4-Bromofluorobenzene (Surr)	88		73 - 120					05/14/16 12:54	1

Client Sample ID: LY-02

Date Collected: 05/04/16 11:40
Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-3

Matrix: Monitor Well

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	260000	B	130000	4800	ug/L			05/14/16 22:40	25000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		66 - 137					05/14/16 22:40	25000
Toluene-d8 (Surr)	95		71 - 126					05/14/16 22:40	25000
4-Bromofluorobenzene (Surr)	90		73 - 120					05/14/16 22:40	25000

Client Sample ID: MW-4

Date Collected: 05/04/16 11:45
Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-4

Matrix: Monitor Well

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.32	J B	5.0	0.19	ug/L			05/14/16 23:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137					05/14/16 23:05	1
Toluene-d8 (Surr)	99		71 - 126					05/14/16 23:05	1
4-Bromofluorobenzene (Surr)	93		73 - 120					05/14/16 23:05	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-99546-1

Client Sample ID: MW-4 DUP

Lab Sample ID: 480-99546-5

Date Collected: 05/04/16 11:45

Matrix: Monitor Well

Date Received: 05/04/16 12:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.67	J	5.0	0.19	ug/L			05/14/16 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		66 - 137		05/14/16 14:10	1
Toluene-d8 (Surr)	95		71 - 126		05/14/16 14:10	1
4-Bromofluorobenzene (Surr)	85		73 - 120		05/14/16 14:10	1



Surrogate Summary

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

TestAmerica Job ID: 480-99546-1

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

Matrix: Monitor Well

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-99546-2	FB-MW-4	111	97	88
480-99546-3	LY-02	108	95	90
480-99546-4	MW-4	106	99	93
480-99546-5	MW-4 DUP	111	95	85

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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)		
		12DCE (66-137)	TOL (71-126)	BFB (73-120)
480-99546-1	Trip Blank	108	98	90
LCS 480-301763/4	Lab Control Sample	103	102	97
LCS 480-301815/4	Lab Control Sample	103	99	94
MB 480-301763/6	Method Blank	106	98	91
MB 480-301815/6	Method Blank	105	98	91

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

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

TestAmerica Job ID: 480-99546-1

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

Lab Sample ID: MB 480-301763/6

Matrix: Water

Analysis Batch: 301763

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			05/14/16 10:35	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137					05/14/16 10:35	1
Toluene-d8 (Surr)	98		71 - 126					05/14/16 10:35	1
4-Bromofluorobenzene (Surr)	91		73 - 120					05/14/16 10:35	1

Lab Sample ID: LCS 480-301763/4

Matrix: Water

Analysis Batch: 301763

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	24.1		ug/L		96	59 - 134
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	103		66 - 137				
Toluene-d8 (Surr)	102		71 - 126				
4-Bromofluorobenzene (Surr)	97		73 - 120				

Lab Sample ID: MB 480-301815/6

Matrix: Water

Analysis Batch: 301815

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.320	J	5.0	0.19	ug/L			05/14/16 22:10	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137					05/14/16 22:10	1
Toluene-d8 (Surr)	98		71 - 126					05/14/16 22:10	1
4-Bromofluorobenzene (Surr)	91		73 - 120					05/14/16 22:10	1

Lab Sample ID: LCS 480-301815/4

Matrix: Water

Analysis Batch: 301815

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	24.9		ug/L		99	59 - 134
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	103		66 - 137				
Toluene-d8 (Surr)	99		71 - 126				
4-Bromofluorobenzene (Surr)	94		73 - 120				

TestAmerica Buffalo

QC Association Summary

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

TestAmerica Job ID: 480-99546-1

GC/MS VOA

Analysis Batch: 301763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99546-1	Trip Blank	Total/NA	Water	8260C	
480-99546-2	FB-MW-4	Total/NA	Monitor Well	8260C	
480-99546-5	MW-4 DUP	Total/NA	Monitor Well	8260C	
LCS 480-301763/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-301763/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 301815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-99546-3	LY-02	Total/NA	Monitor Well	8260C	
480-99546-4	MW-4	Total/NA	Monitor Well	8260C	
LCS 480-301815/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-301815/6	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

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

TestAmerica Job ID: 480-99546-1

Client Sample ID: Trip Blank

Date Collected: 05/04/16 10:00

Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	301763	05/14/16 12:29	JWG	TAL BUF

Client Sample ID: FB-MW-4

Date Collected: 05/04/16 10:45

Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-2

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	301763	05/14/16 12:54	JWG	TAL BUF

Client Sample ID: LY-02

Date Collected: 05/04/16 11:40

Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-3

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		25000	301815	05/14/16 22:40	GVF	TAL BUF

Client Sample ID: MW-4

Date Collected: 05/04/16 11:45

Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-4

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	301815	05/14/16 23:05	GVF	TAL BUF

Client Sample ID: MW-4 DUP

Date Collected: 05/04/16 11:45

Date Received: 05/04/16 12:05

Lab Sample ID: 480-99546-5

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	301763	05/14/16 14:10	JWG	TAL BUF

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-99546-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

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Method Summary

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

TestAmerica Job ID: 480-99546-1

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



Sample Summary

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

TestAmerica Job ID: 480-99546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-99546-1	Trip Blank	Water	05/04/16 10:00	05/04/16 12:05
480-99546-2	FB-MW-4	Monitor Well	05/04/16 10:45	05/04/16 12:05
480-99546-3	LY-02	Monitor Well	05/04/16 11:40	05/04/16 12:05
480-99546-4	MW-4	Monitor Well	05/04/16 11:45	05/04/16 12:05
480-99546-5	MW-4 DUP	Monitor Well	05/04/16 11:45	05/04/16 12:05

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____
 Drinking Water? Yes No

Chain of Custody Record

TAL-4124 (1007)

Client: Western Solutions Chain of Custody Number: 289354
 Address: 1410 Western Way Date: 5/4/16
 City: W Chester State: PA Zip Code: 19380 Lab Number: _____
 Project Name and Location: 3rd Pennsylvania Lab Contact: Judy Stue Page: 1 of 1
 Contract/Purchase Order/Quote No.: 610.721.0583 Analysis (Attach list if more space is needed): _____

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Special Instructions/ Conditions of Receipt
			Air	Aqueous	Sed	Soil	Unpres	H2SO4	HNO3	HCl	NBQH	ZnAc	
Trip Blank	5/4/16	1000	/	/	/	/	/	/	/	/	/	/	CS ₂ Only
FB-MW-4		1045	/	/	/	/	/	/	/	/	/	/	5ppb detection
LY-Ø2		1140	/	/	/	/	/	/	/	/	/	/	
MW-4		1145	/	/	/	/	/	/	/	/	/	/	
MW-4 Dup		1145	/	/	/	/	/	/	/	/	/	/	



Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant Poison B Unknown Return To Client Disposal By Lab Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required:
 24 hours 48 hours 7 days 14 days 21 days Other _____

1. Relinquished By: _____ Date: 5/4/16 Time: 1205
 2. Relinquished By: _____ Date: _____ Time: _____
 3. Relinquished By: _____ Date: _____ Time: _____

QC Requirements (Specify):
 1. Received By: _____ Date: 5/4/16 Time: 1205
 2. Received By: _____ Date: _____ Time: _____
 3. Received By: _____ Date: _____ Time: _____

Comments: 29#



Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 480-99546-1

Login Number: 99546

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	

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: 480-109703-1

Client Project/Site: 3M Tonawanda

Sampling Event: 3M Tonawanda, NY - Semi-Annual Monit.

For:

Weston Solutions, Inc.

1400 Weston Way

PO BOX 2653

West Chester, Pennsylvania 19380

Attn: Mr. Tom Drew



Authorized for release by:

11/28/2016 9:28:03 AM

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

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Definitions/Glossary

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

TestAmerica Job ID: 480-109703-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 480-109703-1

Job ID: 480-109703-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-109703-1

Receipt

The samples were received on 11/16/2016 12:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

GC/MS VOA

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

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Detection Summary

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

TestAmerica Job ID: 480-109703-1

Client Sample ID: FB-MW-4

Lab Sample ID: 480-109703-1

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 480-109703-2

No Detections.

Client Sample ID: MW-4

Lab Sample ID: 480-109703-3

No Detections.

Client Sample ID: MW-4 DUP

Lab Sample ID: 480-109703-4

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

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Client Sample Results

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

TestAmerica Job ID: 480-109703-1

Client Sample ID: FB-MW-4

Date Collected: 11/16/16 10:45

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-1

Matrix: Monitor Well

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			11/27/16 12:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		77 - 120					11/27/16 12:01	1
Toluene-d8 (Surr)	99		80 - 120					11/27/16 12:01	1
4-Bromofluorobenzene (Surr)	109		73 - 120					11/27/16 12:01	1

Client Sample ID: Trip Blank

Date Collected: 11/16/16 11:00

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-2

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	0.19	ug/L			11/27/16 12:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120					11/27/16 12:25	1
Toluene-d8 (Surr)	98		80 - 120					11/27/16 12:25	1
4-Bromofluorobenzene (Surr)	107		73 - 120					11/27/16 12:25	1

Client Sample ID: MW-4

Date Collected: 11/16/16 11:30

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-3

Matrix: Monitor Well

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			11/27/16 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120					11/27/16 12:48	1
Toluene-d8 (Surr)	100		80 - 120					11/27/16 12:48	1
4-Bromofluorobenzene (Surr)	106		73 - 120					11/27/16 12:48	1

Client Sample ID: MW-4 DUP

Date Collected: 11/16/16 11:30

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-4

Matrix: Monitor Well

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			11/27/16 13:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120					11/27/16 13:12	1
Toluene-d8 (Surr)	101		80 - 120					11/27/16 13:12	1
4-Bromofluorobenzene (Surr)	109		73 - 120					11/27/16 13:12	1

TestAmerica Buffalo

Surrogate Summary

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

TestAmerica Job ID: 480-109703-1

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

Matrix: Monitor Well

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (77-120)	TOL (80-120)	BFB (73-120)
480-109703-1	FB-MW-4	96	99	109
480-109703-3	MW-4	98	100	106
480-109703-4	MW-4 DUP	99	101	109

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DCE (77-120)	TOL (80-120)	BFB (73-120)
480-109703-2	Trip Blank	100	98	107
LCS 480-333596/5	Lab Control Sample	98	100	106
MB 480-333596/7	Method Blank	100	102	107

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

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

TestAmerica Job ID: 480-109703-1

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

Lab Sample ID: MB 480-333596/7
Matrix: Water
Analysis Batch: 333596

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			11/27/16 11:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/27/16 11:03	1
Toluene-d8 (Surr)	102		80 - 120		11/27/16 11:03	1
4-Bromofluorobenzene (Surr)	107		73 - 120		11/27/16 11:03	1

Lab Sample ID: LCS 480-333596/5
Matrix: Water
Analysis Batch: 333596

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	20.4		ug/L		82	59 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		77 - 120
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120

QC Association Summary

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

TestAmerica Job ID: 480-109703-1

GC/MS VOA

Analysis Batch: 333596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-109703-1	FB-MW-4	Total/NA	Monitor Well	8260C	
480-109703-2	Trip Blank	Total/NA	Water	8260C	
480-109703-3	MW-4	Total/NA	Monitor Well	8260C	
480-109703-4	MW-4 DUP	Total/NA	Monitor Well	8260C	
MB 480-333596/7	Method Blank	Total/NA	Water	8260C	
LCS 480-333596/5	Lab Control Sample	Total/NA	Water	8260C	

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Lab Chronicle

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

TestAmerica Job ID: 480-109703-1

Client Sample ID: FB-MW-4

Date Collected: 11/16/16 10:45

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-1

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	333596	11/27/16 12:01	NEA	TAL BUF

Client Sample ID: Trip Blank

Date Collected: 11/16/16 11:00

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	333596	11/27/16 12:25	NEA	TAL BUF

Client Sample ID: MW-4

Date Collected: 11/16/16 11:30

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-3

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	333596	11/27/16 12:48	NEA	TAL BUF

Client Sample ID: MW-4 DUP

Date Collected: 11/16/16 11:30

Date Received: 11/16/16 12:15

Lab Sample ID: 480-109703-4

Matrix: Monitor Well

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	333596	11/27/16 13:12	NEA	TAL BUF

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-109703-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

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Method Summary

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

TestAmerica Job ID: 480-109703-1

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

TestAmerica Job ID: 480-109703-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-109703-1	FB-MW-4	Monitor Well	11/16/16 10:45	11/16/16 12:15
480-109703-2	Trip Blank	Water	11/16/16 11:00	11/16/16 12:15
480-109703-3	MW-4	Monitor Well	11/16/16 11:30	11/16/16 12:15
480-109703-4	MW-4 DUP	Monitor Well	11/16/16 11:30	11/16/16 12:15

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Regulatory Program: DW NPDES RCRA Other:

Client Contact Company Name: <u>Western Solutions</u> Address: <u>1410 Western Way</u> City/State/Zip: <u>W Chester PA 19380</u> Phone: <u>610-721-0583</u> Fax: Project Name: <u>3M Tonawanda</u> Site: P O #		Project Manager: <u>DM Drew</u> Tell/Fax: <u>610-701-3677</u> Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: Lab Contact: <u>Jody Staal</u> Date: _____ Carrier: _____		COC No. _____ of _____ COCs Sampler: _____ For Lab Use Only: Walk-in C: _____ Lab Saml: _____ Job / SD: _____ 480-109703 COC Sample Specific Notes:							
Sample Identification FB-MW 4 Trip Bluk MW-4 PMW-4 Dup		Sample Date <u>11/16/16</u> <u>1100</u> <u>1130</u> <u>1130</u>		Sample Type (C=Comp, G=Grab) <u>G</u> <u>I</u> <u>I</u> <u>I</u>		Matrix <u>W</u> <u>I</u> <u>I</u> <u>I</u>		# of Cont. <u>3</u> <u>3</u> <u>3</u> <u>3</u>		Filtered Sample (Y/N) Perform MS/MSD (Y/N)		Date: _____ Carrier: _____	
Preservation Used: 1=Ice, 2=HC, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown													
Special Instructions/QC Requirements & Comments: <u>C2S - 5 PPB detection</u>													
Custody Seal No.: _____ Company: <u>Western</u> Date/Time: <u>11/16/16</u> Received by: <u>[Signature]</u>				Cooler Temp. (°C): Obs'd: _____ Company: <u>Casey</u>				Therm ID No.: _____ Date/Time: <u>11-16-16 1215</u>					
Disinquired by: <u>[Signature]</u>				Disinquired by: _____ Date/Time: _____				Disinquired by: _____ Date/Time: _____					
Disinquired by: _____ Date/Time: _____				Disinquired by: _____ Date/Time: _____				Disinquired by: _____ Date/Time: _____					

3-7 #1



Login Sample Receipt Checklist

Client: Weston Solutions, Inc.

Job Number: 480-109703-1

Login Number: 109703

List Number: 1

Creator: Conway, Curtis R

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.	N/A	
Chlorine Residual checked.	N/A	

