

MAR 1 6 2012

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Donald R. McMahon, P.E. Michael J. Mann, P.E. Kenneth L. Fishman, PhD., P.E. John A. Minichiello, CPESC, CPSWQ James Bojarski, P.E. Shawn W. Logan, P.E. Andrew J. Nichols, P.E. Todd Swackhamer, P.E.

March 13, 2012 File: 94-022

Mr. Brian Sadowski New York State Department of Environmental Conservation, Region 9 Division of Environmental Remediation 270 Michigan Avenue Buffalo, New York 14203-2999

Re: 2011 PERIODIC REVIEW REPORT Chem-Trol Site, Registry No. 9-15-015, Blasdell, Erie County

Dear Mr. Sadowski:

McMahon & Mann Consulting Engineers, P.C. (MMCE), on behalf of SC Holdings, Inc. (SC Holdings), is submitting this Periodic Review Report (PRR) along with a completed Institutional and Engineering Controls (IE/EC) Certification Form (Attachment A) for the Chem-Trol site. This report is being submitted as requested by the New York State Department of Environmental Conservation (NYSDEC) in its letter dated January 19, 2012 to Mr. Mark Snyder. The letter provides guidance for preparing the PRR and IE/EC forms and requires that they be submitted to NYSDEC no later than March 16, 2012.

#### I. INTRODUCTION

The Chem-Trol site is located at 4818 Lake Avenue, Town of Hamburg, in Erie County, New York. Chem-Trol Pollution Services purchased the property in 1969 and operated the site as a waste chemical processing facility that included chemical recovery, storage and neutralization. Wastes, including capacitors, pesticides, oil sludges, paint sludges, spent solvents and pickle liquors, were accepted at the facility for processing. The facility ceased operations in 1972 and operations were moved to a new facility in Model City, New York.

Chem-Trol was acquired by SCA Services, Inc., in 1973 and SCA Services, Inc. was acquired by Waste Management, Inc. in 1984.

As a result of the waste processing activities, on-site soil and groundwater were impacted with heavy metals and volatile organic compounds (VOCs). In 1977, as part of

the facility closure activities, Chem-Trol removed approximately 95 cubic yards of contaminated soils, placed clean soil cover and established vegetative cover over the area.

Investigative studies led to a Record of Decision (ROD) in 1996 that specified additional remedial activities. These included removal of additional soils, construction of a soil vapor extraction (SVE) system and a groundwater collection and treatment system. The groundwater collection and treatment system includes a shallow tray air stripper that removes VOCs from the collected groundwater. The treated groundwater is discharged through a pipe to the South Branch of Smokes Creek.

The SVE system and the groundwater collection system continue to operate. During 2010, MMCE evaluated the effectiveness of the passive system in removing soil vapors. Subsequently, the SVE system was converted from active to passive operation in 2010. A copy of the SVE system evaluation letter report was included as Attachment B in the 2010 PRR.

#### II. SITE OVERVIEW

The Chem-Trol site is situated in an urban setting with industrial/commercial areas to the north and east, commercial development along Lake Avenue to the south, and residential areas to the west, across the South Branch of Smokes Creek. Figure 1 shows the Chem-Trol site location and features.

Investigations completed between 1991 and 1994 showed contaminated soils generally located in the former operations and surface lagoon areas. Additional soil contamination was found in the on-site tributary of Smokes Creek as well as the flood plain along the western edge of the site. Contaminated groundwater was found in the shallow overburden as well as the deeper bedrock beneath the site. Groundwater contours developed as part of the investigations show that groundwater flows in a northwesterly direction beneath the site toward the south branch of Smokes Creek.

Because of the on-site contamination, the Chem-Trol site was assigned a hazardous waste site classification of 2 by the NYSDEC. This classification indicates that the site poses a significant threat to public health and/or the environment and that action in the form of further investigations and remediation is required.

The NYSDEC selected a remedial design based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the Chem-Trol site. The March 1996 ROD selected a remedy that included:

- Excavation of soils and sediments from selected areas of the site,
- Installation of a groundwater collection trench along the western edge of the site,
- Improvement of the existing soil cover over the former chemical processing area, and,
- Installation of a soil vapor extraction system within the former waste chemical processing area.



Goals for the remedial program were established through the remediation selection process given in 6 NYCRR 375-1.10. The remediation goals established for this site include:

- Reduce and remove chemical contamination in the soils, sediments and groundwater at the site,
- Eliminate the potential for direct human or animal contact with the contaminated soils, sediments and groundwaters at the site,
- Prevent migration of contaminants in the on-site soils into the groundwater,
- Prevent off-site migration of contaminated groundwater and mitigate the impacts of contaminated groundwater to the environment, and
- Provide for attainment of Soil Cleanup Guidelines (SCG) for groundwater quality to the extent practical.

#### **III. REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS**

SC Holdings continues to monitor the performance of the groundwater treatment system.

SC Holdings submitted a work plan to the NYSDEC on October 22, 2009 proposing conversion of the active system to a passive venting system and monitoring the performance of the passive system for a year. The NYSDEC authorized the conversion to a passive system along with monthly monitoring. The SVE treatment system was converted from active to passive operation in January 2010.

After a year of monitoring, MMCE prepared a report on behalf of SC Holdings describing the monitoring results as indicating that passive operation of the SVE system provides similar and possibly improved effectiveness as active operation of the SVE system in venting soil vapors. The water level data in the passive vent risers indicated that passive venting might also contribute to generally lower water levels in the laterals for a longer period of time over the course of the year and therefore provide a greater opportunity to vent soil vapors.

It was recommended that the active operation of the SVE system permanently cease and that passive soil venting of the SVE system laterals continue. In addition, it was recommended that continued monitoring of the SVE system laterals be eliminated. The NYSDEC agreed with the recommendations in a letter to Mr. Mark Snyder dated May 29, 2011.

The passive SVE treatment system is no longer monitored but the lateral riser pipes are visually examined for damage during quarterly site visits.

#### Groundwater Collection and Treatment System

SC Holdings has the following actions performed by third party consultants in order to monitor the performance of the groundwater collection system as required in the ROD;



- Perform monthly operation and maintenance tasks on the system,
- Sample and analyze the groundwater collection and treatment system influent and effluent on a monthly basis,
- Measure and record water levels in groundwater extraction wells and groundwater monitoring wells on a quarterly basis,
- Obtain annual groundwater samples from groundwater monitoring wells and analyze for organic compounds,
- Prepare bedrock groundwater contours based on quarterly water level measurements collected during the year, and,
- Visually observe the condition of the SVE system lateral riser pipes.

Effluent from the groundwater collection and treatment system (air stripper) discharges into the South Branch of Smokes Creek. Monthly aqueous effluent samples taken from the air stripper surface water discharge pipe are analyzed for surface water discharge parameter limit concentrations. Analytical test results show that discharge parameter concentrations in the stripper effluent for 2011 were below the mass loading discharge limits established by the NYSDEC. O-chlorotoluene exceeded the discharge limit in the November 2011 effluent sample but did not exceed the mass loading discharge limit. AECOM contacted Matrix to dismantle and acid wash the system (November 28, 2011). Analysis of the treatment system effluent sample showed no exceedances of the discharge limits.

The analytical test results for the effluent samples are included in the monthly O&M reports submitted by AECOM to the NYSDEC on a quarterly basis.

Monthly testing of the air stripper exhaust discharge samples ceased after April 2011. Monthly testing was eliminated based upon a letter from Al Zylinski, NYSDEC Division of Air Resources, to MMCE dated April 6, 2011. The letter approved elimination of sampling and testing of the air stripper exhaust.

A summary of groundwater elevations measured in the groundwater monitoring wells and piezometers is included in Table 1 - Summary of Groundwater Elevation Measurements 2011. Quarterly groundwater level contours are plotted on Figures 2 through 5.

The contours show that the three extraction wells depress water levels in the trench below natural groundwater levels in that area of the site. The resulting depression in the groundwater table creates groundwater flow toward the collection trench. The measurements demonstrate that the collection trench is functioning as designed to restrict off site flow and limit groundwater discharge to the South Branch of Smokes Creek.

VOC analytical test results of groundwater influent samples have historically shown ochlorotoluene levels in higher concentrations than other organic compounds found in influent to the groundwater extraction system. Therefore, concentrations of ochlorotoluene detected in influent groundwater samples to the groundwater collection and treatment system have been used to assess the performance of the treatment



system in reducing organic compound concentrations in the groundwater. The ochlorotoluene concentration data for influent groundwater samples was plotted versus time for the July 2002 through December 2011 sampling events (see Figure 6). The plot shows that the concentration of o-chlorotoluene in the influent groundwater samples has been reduced since initiation of treatment system operation. This indicates that the treatment system is meeting the remedial goal of reducing organic compound concentrations in the groundwater.

A comparison of the influent and effluent sample analytical results show the air stripper is effectively removing VOCs from the groundwater collected by the treatment system.

A summary of all organic compound analytical test detections for the annual 2011 groundwater-sampling event is included as Table 2, Detection Summary. The complete 2011 groundwater sample analytical laboratory report is included as Attachment B.

#### Soil Vapor Extraction System

The soil vapor extraction system continues to operate passively.

The SVE passive vent risers were observed for damage during each quarterly visit during 2011. No damage was observed during these visits.

#### IV. O&M PLAN COMPLIANCE

SC Holdings performed the following activities as part of the Operation & Maintenance (O&M) Plan requirements:

#### Groundwater Collection and Treatment System

Third party consultants performed the following activities in 2011 as part of monthly O&M visits:

- · Verified that each extraction well was running and performing as designed,
- Observed that each pump was operating, documented pumping rates, total gallons pumped and insured that high and low water controls are functioning as designed,
- · Performed monthly influent and effluent sample analytical testing,
- Observed that the air stripper was performing as designed,
- Performed monthly inspections and cleaning of stripper trays. Performed acid washes quarterly or more often if necessary to promote optimum removal of volatile organic compounds, and
- Prepared and submitted O&M reports on a quarterly basis to the NYSDEC.

The operation and maintenance reports submitted to the NYSDEC provide further details on specific activities performed, analytical testing results and observations made during the monthly O&M visits. With the exception of general maintenance work performed on pumps and sensors, as described in the monthly O&M reports, no



significant issues have occurred to the groundwater collection and treatment system. Results of the treatment system performance are discussed in Section III.

#### Soil Vapor Extraction System

Third party consultants performed the following activities in 2011 as part of quarterly visits to the site:

Visually observed each SVE passive vent riser for damage.

#### V. CONCLUSIONS AND RECOMMENDATIONS

#### **Groundwater Collection and Treatment**

A comparison of the monthly influent vs. effluent analytical test results shows that the groundwater collection and treatment system continues to remove contaminants from the groundwater at the Chem-Trol site. A plot of the influent o-chlorotoluene concentration versus time (see Figure 6) indicates that the source contributing to groundwater VOC concentrations has been reduced to where its influence on groundwater has decreased and appears to continue approaching an asymptotic curve.

The data shows that the groundwater collection and treatment system continues to contain groundwater contaminants and creates a gradient toward the groundwater collection wells and away from the South Branch of Smokes Creek.

No changes to the activities currently being performed at the Chem-Trol site are recommended.

Please call MMCE (716-834-8932) or Mr. Mark R. Snyder (585-223-6922) if you have any questions or require any additional information after reviewing this report.

Sincerely yours,

#### **McMAHON & MANN CONSULTING ENGINEERS, PC**

⊸∕ames Bojarski, P.E.

min

John A. Minichiello, CPESC, CPSWQ

cc. Mark R. Snyder, P.E. (SC Holdings, Inc.) w/attachments Enclosures:



- Table 1 Summary of Groundwater Elevation Measurements 2011
- Table 2 2011 Detection Summary
- Figure 1 Site Plan

Figure 2 - 1<sup>st</sup> Quarter Bedrock Groundwater Contours Figure 3 - 2<sup>nd</sup> Quarter Bedrock Groundwater Contours Figure 4 - 3<sup>rd</sup> Quarter Bedrock Groundwater Contours Figure 5 - 4<sup>th</sup> Quarter Bedrock Groundwater Contours

Figure 6 – O-Chlorotoluene in Influent Groundwater

Attachment A – Completed IE/EC Forms

Attachment B - 2011 Annual Groundwater Analytical Test Report

#### TABLES

Table 1 - Summary of Groundwater Elevations - 2011Table 2 - Detection Summary - 2011

Summary of Groundwater Elevation Measurements - 2011									
	1Q		2Q		3Q		4Q		
Well	3/28/2011		6/2/2011		9/15/2011		12/30/2011		
OW-1FR	609.23		609.79		606.00		610.07		
P97-5	608.96		609.45		606.01		609.69		
MW10S	609.85		610.16	dry	609.20	dry	610.50		
MW10R	609.28		609.77		606.16		609.89		
P97-4	609.08		609.61		605.98		610.00		
MW 13R	608.91		609.31		606.05		n/a (2)		
MW 8S	610.54		611.23		610.79		610.03		
MW 8R	609.32		609.85		606.29		610.68		
P97 - 3	609.26		609.87		605.88		610.14		
MW 9RD	609.35		612.11		611.88		612.08		
MW 9R	609.03		610.16		605.85		610.92		
MW 9S	612.71		610.82		609.41	dry	612.59		
P97 - 2	611.27		611.71		609.08		611.02		
P97 - 1	612.77		613.02		611.25		612.82		
MW 12R	614.33		614.25		610.95		613.27		
MW 12S	616.89		616.82		611.77	dry	615.66		
MW14R	613.44		613.53		612.74		618.55		
OW-2FR	609.36		610.16		605.87		610.35		
MW 4S	623.56		624.17		621.80	dry	623.48		
MW 4R	608.99		609.57		604.23		609.82		
P4S	621.45		621.38		620.59		621.27		
MW 3S	620.42		620.59		618.93		620.39		
P - 3R	619.36		619.35		619.33		618.65		
P - 3S	620.36		620.37		619.49		620.04		
OW - 3R	614.89		615.23		613.90		615.10		
P-5S	628.66		628.11		623.94	dry	626.85	dry	
P-5R	618.69		619.05		616.11		618.44		
MW-5S	625.07		625.88		622.38		627.51		
P-2R	642.92		628.11		633.01		641.76		
P2-S	637.93		619.05		635.01		638.17		
MW-2S	638.50		625.88		635.44		638.48		
MW-6S	631.01		642.47		626.49		630.74		
MW 6R	621.06		638.08		619.03		620.72		
P-1S	637.62		638.42		634.48		637.67		
MW 1R	638.14		637.98		635.05		640.06		
MW 1S	640.10		640.11		635.58		640.13		
MW 7S	638.58		637.97		633.43		635.55		
MW 7R	637.68		631.25		634.68		637.53		

## Table 1 Chem-Trol Site dwater Flevation Me

#### TABLE 2

#### **Detection Summary**

#### **Client Sample ID: DUP**

#### No Detections

#### Client Sample ID: MW-13R Lab Sample ID: 480-11588-2 Analyte Result Qualifier RL MDL Unit Dil Fac D Method Ргер Туре Chloroethane 37 25 ug/L 5 8260B Total/NA 820 50 10 8260B Total/NA o-Chlorotoluene - DL ug/L

#### Client Sample ID: MW-15R

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.5		5.0		ug/L	1	_	8260B	 Total/NA
Cyclohexane	48		5.0		ug/L	1		8260B	Total/NA
Ethylbenzene	8.3		5.0		ug/L	1		8260B	Total/NA
Methylcyclohexane	27		5.0		ug/L	1		8260B	 Total/NA
Xylenes, Total	45		15		ug/L	1		8260B	Total/NA

#### Client Sample ID: MW-3S Analyte Result Qualifier Dil Fac D Method RL MDL Unit Ргер Туре 8260B o-Chlorotoluene - DL 67000 4000 800 Total/NA ug/L

#### **Client Sample ID: MW-7R**

No Detections

#### Client Sample ID: MW-8R

Analyte	Result Q	ualifier F	L MDL	Unit	Dil Fac	D	Method	Prep Туре
o-Chlorotoluene	55	5	0	ug/L	1	_	8260B	Total/NA

Client Sample ID: MW-9R						Lab Sample ID: 480-115			
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	<b>Р</b> гер Туре
1,1,1-Trichloroethane	250		25		ug/L	5	_	8260B	Total/NA
1,1-Dichloroethane	140		25		ug/L	5		8260B	Total/NA
o-Chlorotoluene	150		25		ug/L	5		8260B	Total/NA
Carbon tetrachloride	31		25		ug/L	5		8260B	Total/NA
Chloroethane	35		25		ug/L	5		8260B	Total/NA
10 - 1									

#### **Client Sample ID: TB**

No Detections

Lab Sample ID: 480-11588-1

Lab Sample ID: 480-11588-5

Lab Sample ID: 480-11588-8

Lab Sample ID: 480-11588-4

Lab Sample ID: 480-11588-3

- Lab Sample ID: 480-11588-6

#### **FIGURES**

Figure 1 – Site Plan Figure 2 – 1st Quarter Bedrock Groundwater Contours Figure 3 –  $2^{nd}$  Quarter Bedrock Groundwater Contours Figure 4 –  $3^{rd}$  Quarter Bedrock Groundwater Contours Figure 5 –  $4^{th}$  Quarter Bedrock Groundwater Contours Figure 6 – O-Chlorotoluene in Influent Groundwater











Chem-Trol Groundwater Treatment System Influent o-Chlorotoluene Concentration 2002-2011



Date

**FIGURE 6** 

#### ATTACHMENT A

Completed IE/EC Forms



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



Т

Site	e No.	915015	Site Details	E	Box 1	
Site	e Name Ch	em-Trol				
Site City Cor Site	e Address: y/Town: Ha unty:Erie e Acreage:	Lake Avenue mburg 17.5	Zip Code: 14107			
Rej	porting Perio	od: February 15	, 2011 to February 15, 2012			
				Y	′ES	NO
1.	Is the infor	mation above co	rrect?	D	X	
	If NO, inclu	de handwritten a	above or on a separate sheet.			
2.	Has some tax map an	or all of the site p nendment during	property been sold, subdivided, merged this Reporting Period?	l, or undergone a □		X
3.	Has there I (see 6NYC	been any change RR 375-1.11(d))	e of use at the site during this Reporting ?	Period		X
4.	Have any f for or at the	ederal, state, an e property during	d/or local permits (e.g., building, discha this Reporting Period?	rge) been issued □		X
	If you ans that docur	wered YES to q nentation has b	uestions 2 thru 4, include documenta been previously submitted with this c	ation or evidence ertification form.		
5.	Is the site o	currently undergo	ping development?	C		X
				E	Box 2	
				Ŷ	′ES	NO
6.	Is the curre Closed Lar	ent site use cons ndfill	istent with the use(s) listed below?	Ľ	¥	
7.	Are all ICs/	ECs in place and	d functioning as designed?	Ď	X	
	IF TI	HE ANSWER TO DO NOT COMP	EITHER QUESTION 6 OR 7 IS NO, sign LETE THE REST OF THIS FORM. Othe	and date below and rwise continue.	d	
A C	Corrective M	easures Work P	lan must be submitted along with this	form to address the	se issı	Jes.
Sig	nature of Ow	ner, Remedial Pa	arty or Designated Representative	Date		

SITE NO. 915015		Box 3
Description of Instit Parcel 151.02-1-14.1	utional Controls <u>Owner</u> Waste Management	Institutional Control Ground Water Use Restriction Landuse Restriction Monitoring Plan O&M Plan
Description of Engir	eering Controls	Box 4
<u>Parcel</u> 151.02-1-14.1	Engineering Control Cover System Fencing/Access Contr Groundwater Containr Groundwater Treatme Leachate Collection Vapor Mitigation	ol nent nt System
Parcel: 151.02-1-14.1 Remediation was completed Elements". These elements Source Control Elements:	in two phases consisting of "Sourc are summarized as follows:	ce Control Elements" and "Groundwater Control
<ul> <li>"Hot Spot" Soils Removal;</li> <li>Tributary Sediment Excava</li> <li>Site Soils Cover; and</li> <li>Soil Vapor Extraction (pas</li> </ul>	ation/Disposal; sive state as of 2/10).	
- Groundwater Control Eleme - Groundwater Extraction, C - Groundwater Quality Moni	nts. n-Site Treatment, and Discharge ( toring.	Compliance Monitoring; and
Discharge compliance moni to confirm that the remedy re	toring, groundwater elevations and mains protective of public health a	d groundwater quality monitoring are completed nd the environment.
The controls identified in the 25, 2004, include but are not the Property by maintaining i capping the Property with an for industrial or commercial u groundwater underlying the p industrial purposes, except th monitor contamination levels the land.	e Declaration of Covenants and Re limited to the following: the owner ts grass cover, or after obtaining w other material; the property is proh se, excluding use for day care, chi property is prohibited without treatment the groundwater may be reason of the groundwater. These restrict	estrictions, recorded with Erie County on March of the Property shall maintain the cap covering written approval from the Relevant Agency, by hibited from being used for purposes other than ild care and medical care; the use of nent to render it safe for drinking water or hably used as necessary to conduct tests to ctive covenants are binding and shall run with

....

	Box 5
	Periodic Review Report (PRR) Certification Statements
	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
	engineering practices, and the mormation presented is accurate and compete. YES NO
	$\bowtie$
	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 sinc 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. 915015

#### 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.

Mark R. Snyder		at	25 Perinton Parkway, Fairport NY 14450
	print name		print business address
am certii	fying as	Ow	er (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** 

March 12, 2012 Date

Box 6

#### **IC/EC CERTIFICATIONS**

F

Box 7

#### **Professional Engineer 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.

print name		print business address
am certifying as a Professional Enginee	r for the	Owner Witer NE Remedial Party)
		STA- STA
Whichard & Mann	/	- 0599 <sup>17</sup> H <sup>S</sup> 3/13/12
Signature of Professional Engineer, for	the Owner of	Stand <b>ESSION</b> Date

#### ATTACHMENT B

2011 Annual Groundwater Analytical Test Report

## **ANALYTICAL REPORT**

#### TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

#### TestAmerica Job ID: 480-11588-1

Client Project/Site: ChemTrol Site Sampling Event: Semiannual Groundwater

#### For:

Waste Management 425 Perinton Parkway Fairport, New York 14450

Attn: Mr. Mark Snyder

Eberry

Authorized for release by: 11/02/2011 03:12:19 PM Eve Berry Project Administrator eve.berry@testamericainc.com

Designee for

Ryan VanDette Project Manager I ryan.vandette@testamericainc.com

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

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#### **Definitions/Glossary**

#### Client: Waste Management Project/Site: ChemTrol Site

#### Glossarv

Glossary		3
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
<del>¢</del>	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	5
CNF	Contains no Free Liquid	3
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
EDL	Estimated Detection Limit	
EPA	United States Environmental Protection Agency	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	8
PQL	Practical Quantitation Limit	
RL	Reporting Limit	9
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: 480-11588-1

#### Laboratory: TestAmerica Buffalo

#### Narrative

Job Narrative 480-11588-1

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

Method(s) 8260B: The following samples were diluted due to the abundance of target analytes: MW-13R (480-11588-2), MW-3S (480-11588-4), MW-9R (480-11588-7). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### **Client Sample ID: DUP**

#### No Detections

Client Sample ID: MW-13F			La	Lab Sample ID: 480-11588-2			
Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Chloroethane	37	25		ug/L	5	8260B	Total/NA
o-Chlorotoluene - DL	820	50		ug/L	10	8260B	Total/NA

#### **Client Sample ID: MW-15R**

 Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.5		5.0		ug/L	1	_	8260B	Total/NA
Cyclohexane	48		5.0		ug/L	1		8260B	Total/NA
Ethylbenzene	8.3		5.0		ug/L	1		8260B	Total/NA
Methylcyclohexane	27		5.0		ug/L	1		8260B	Total/NA
Xylenes, Total	45		15		ug/L	1		8260B	Total/NA

Client Sample ID: MW-3S						La	b Sa	mple	ID: 480-11588-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Me	thod	Prep Type
o-Chlorotoluene - DL	67000		4000		ug/L	800	826	60B	Total/NA

#### **Client Sample ID: MW-7R**

No Detections

#### Client Sample ID: MW-8R

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	55		5.0		ug/L	1	_	8260B	 Total/NA

Client Sample ID: MW-9R							Lab Sample ID: 480-11588-			
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type	
1,1,1-Trichloroethane	250		25		ug/L	5		8260B	Total/NA	
1,1-Dichloroethane	140		25		ug/L	5		8260B	Total/NA	
o-Chlorotoluene	150		25		ug/L	5		8260B	Total/NA	
Carbon tetrachloride	31		25		ug/L	5		8260B	Total/NA	
Chloroethane	35		25		ug/L	5		8260B	Total/NA	

#### **Client Sample ID: TB**

No Detections

Lab Sample ID: 480-11588-3

TestAmerica Job ID: 480-11588-1

#### Lab Sample ID: 480-11588-5

Lab Sample ID: 480-11588-6

Lab Sample ID: 480-11588-8

#### Client Sample ID: DUP

Date Collected: 10/20/11 13:50 Date Received: 10/20/11 16:30

Trichloroethene

Vinyl chloride

Xylenes, Total

Trichlorofluoromethane

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

#### Lab Sample ID: 480-11588-1 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/29/11 03:01	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/29/11 03:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/29/11 03:01	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/29/11 03:01	1
1,1-Dichloroethane	ND		5.0		ug/L			10/29/11 03:01	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/29/11 03:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/29/11 03:01	1
1,2-Dibromoethane	ND		5.0		ug/L			10/29/11 03:01	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/29/11 03:01	1
1,2-Dichloroethane	ND		5.0		ug/L			10/29/11 03:01	1
1,2-Dichloropropane	ND		5.0		ug/L			10/29/11 03:01	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/29/11 03:01	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/29/11 03:01	1
2-Butanone (MEK)	ND		25		ug/L			10/29/11 03:01	1
o-Chlorotoluene	ND		5.0		ug/L			10/29/11 03:01	1
2-Hexanone	ND		25		ug/L			10/29/11 03:01	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/29/11 03:01	1
Acetone	ND		25		ug/L			10/29/11 03:01	1
Benzene	ND		5.0		ug/L			10/29/11 03:01	1
Bromoform	ND		5.0		ug/L			10/29/11 03:01	1
Bromomethane	ND		5.0		ug/L			10/29/11 03:01	1
Carbon disulfide	ND		5.0		ug/L			10/29/11 03:01	1
Carbon tetrachloride	ND		5.0		ug/L			10/29/11 03:01	1
Chlorobenzene	ND		5.0		ug/L			10/29/11 03:01	1
Chlorodibromomethane	ND		5.0		ug/L			10/29/11 03:01	1
Chloroethane	ND		5.0		ug/L			10/29/11 03:01	1
Chloroform	ND		5.0		ug/L			10/29/11 03:01	1
Chloromethane	ND		5.0		ug/L			10/29/11 03:01	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 03:01	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 03:01	1
Cyclohexane	ND		5.0		ug/L			10/29/11 03:01	1
Bromodichloromethane	ND		5.0		ug/L			10/29/11 03:01	1
Dichlorofluoromethane	ND		5.0		ug/L			10/29/11 03:01	1
Ethylbenzene	ND		5.0		ug/L			10/29/11 03:01	1
Isopropylbenzene	ND		5.0		ug/L			10/29/11 03:01	1
Methyl acetate	ND		5.0		ug/L			10/29/11 03:01	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/29/11 03:01	1
Methylcyclohexane	ND		5.0		ug/L			10/29/11 03:01	1
Methylene Chloride	ND		5.0		ug/L			10/29/11 03:01	1
Styrene	ND		5.0		ug/L			10/29/11 03:01	1
Tetrachloroethene	ND		5.0		ug/L			10/29/11 03:01	1
Toluene	ND		5.0		ug/L			10/29/11 03:01	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 03:01	1
trans-1,3-Dichloropropene	ND		5.0		ua/L			10/29/11 03:01	1

1

1

1

1

10/29/11 03:01

10/29/11 03:01

10/29/11 03:01

10/29/11 03:01

5.0

5.0

5.0

15

ug/L

ug/L

ug/L

ug/L

ND

ND

ND

ND

#### Client Sample ID: DUP Date Collected: 10/20/11 13:50 Date Received: 10/20/11 16:30

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137	-		10/29/11 03:01	1
Toluene-d8 (Surr)	104		71 - 126			10/29/11 03:01	1
4-Bromofluorobenzene (Surr)	94		73 - 120			10/29/11 03:01	1

#### Client Sample ID: MW-13R

Date Collected: 10/20/11 13:16 Date Received: 10/20/11 16:30

Method: 8260B - Volatile Organic (	Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		25		ug/L			10/29/11 03:25	5
1,1,2,2-Tetrachloroethane	ND		25		ug/L			10/29/11 03:25	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25		ug/L			10/29/11 03:25	5
1,1,2-Trichloroethane	ND		25		ug/L			10/29/11 03:25	5
1,1-Dichloroethane	ND		25		ug/L			10/29/11 03:25	5
1,2,4-Trichlorobenzene	ND		25		ug/L			10/29/11 03:25	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			10/29/11 03:25	5
1,2-Dibromoethane	ND		25		ug/L			10/29/11 03:25	5
1,2-Dichlorobenzene	ND		25		ug/L			10/29/11 03:25	5
1,2-Dichloroethane	ND		25		ug/L			10/29/11 03:25	5
1,2-Dichloropropane	ND		25		ug/L			10/29/11 03:25	5
1,3-Dichlorobenzene	ND		25		ug/L			10/29/11 03:25	5
1,4-Dichlorobenzene	ND		25		ug/L			10/29/11 03:25	5
2-Butanone (MEK)	ND		130		ug/L			10/29/11 03:25	5
2-Hexanone	ND		130		ug/L			10/29/11 03:25	5
4-Methyl-2-pentanone (MIBK)	ND		130		ug/L			10/29/11 03:25	5
Acetone	ND		130		ug/L			10/29/11 03:25	5
Benzene	ND		25		ug/L			10/29/11 03:25	5
Bromoform	ND		25		ug/L			10/29/11 03:25	5
Bromomethane	ND		25		ug/L			10/29/11 03:25	5
Carbon disulfide	ND		25		ug/L			10/29/11 03:25	5
Carbon tetrachloride	ND		25		ug/L			10/29/11 03:25	5
Chlorobenzene	ND		25		ug/L			10/29/11 03:25	5
Chlorodibromomethane	ND		25		ug/L			10/29/11 03:25	5
Chloroethane	37		25		ug/L			10/29/11 03:25	5
Chloroform	ND		25		ug/L			10/29/11 03:25	5
Chloromethane	ND		25		ug/L			10/29/11 03:25	5
cis-1,2-Dichloroethene	ND		25		ug/L			10/29/11 03:25	5
cis-1,3-Dichloropropene	ND		25		ug/L			10/29/11 03:25	5
Cyclohexane	ND		25		ug/L			10/29/11 03:25	5
Bromodichloromethane	ND		25		ug/L			10/29/11 03:25	5
Dichlorofluoromethane	ND		25		ug/L			10/29/11 03:25	5
Ethylbenzene	ND		25		ug/L			10/29/11 03:25	5
Isopropylbenzene	ND		25		ug/L			10/29/11 03:25	5
Methyl acetate	ND		25		ug/L			10/29/11 03:25	5
Methyl tert-butyl ether	ND		25		ua/L			10/29/11 03:25	5
Methylcyclohexane	ND		25		ug/L			10/29/11 03:25	5
Methylene Chloride	ND		25		ug/L			10/29/11 03:25	5
Styrene	ND		25		ua/L			10/29/11 03:25	5
Tetrachloroethene	ND				ua/L			10/29/11 03:25	5
									0

TestAmerica Job ID: 480-11588-1

Lab Sample ID: 480-11588-1

Lab Sample ID: 480-11588-2

Matrix: Water

Matrix: Water

## 2 3 4 5 6 7

TestAmerica Buffalo 11/02/2011

#### Client Sample ID: MW-13R Date Collected: 10/20/11 13:16 Date Received: 10/20/11 16:30

#### Lab Sample ID: 480-11588-2 Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		25		ug/L			10/29/11 03:25	5
trans-1,2-Dichloroethene	ND		25		ug/L			10/29/11 03:25	5
trans-1,3-Dichloropropene	ND		25		ug/L			10/29/11 03:25	5
Trichloroethene	ND		25		ug/L			10/29/11 03:25	5
Trichlorofluoromethane	ND		25		ug/L			10/29/11 03:25	5
Vinyl chloride	ND		25		ug/L			10/29/11 03:25	5
Xylenes, Total	ND		75		ug/L			10/29/11 03:25	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137			-		10/29/11 03:25	5
Toluene-d8 (Surr)	102		71 - 126					10/29/11 03:25	5
4-Bromofluorobenzene (Surr)	94		73 - 120					10/29/11 03:25	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Chlorotoluene	820		50		ug/L			10/29/11 13:17	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			-		10/29/11 13:17	10
Toluene-d8 (Surr)	103		71 - 126					10/29/11 13:17	10
4-Bromofluorobenzene (Surr)	95		73 - 120					10/29/11 13:17	10

#### Client Sample ID: MW-15R

Date Collected: 10/20/11 13:10

Method: 8260B - Volatile Organic	lethod: 8260B - Volatile Organic Compounds (GC/MS)								
Analyte	Result Qualifier	RL	MDL Unit	D Prepare	ed Analyzed	Dil Fac			
1,1,1-Trichloroethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,1,2-Trichloroethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,1-Dichloroethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,2,4-Trichlorobenzene	ND	5.0	ug/L		10/29/11 03:47	1			
1,2-Dibromo-3-Chloropropane	ND	5.0	ug/L		10/29/11 03:47	1			
1,2-Dibromoethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,2-Dichlorobenzene	ND	5.0	ug/L		10/29/11 03:47	1			
1,2-Dichloroethane	ND	5.0	ug/L		10/29/11 03:47	1			
1,2-Dichloropropane	ND	5.0	ug/L		10/29/11 03:47	1			
1,3-Dichlorobenzene	ND	5.0	ug/L		10/29/11 03:47	1			
1,4-Dichlorobenzene	ND	5.0	ug/L		10/29/11 03:47	1			
2-Butanone (MEK)	ND	25	ug/L		10/29/11 03:47	1			
o-Chlorotoluene	ND	5.0	ug/L		10/29/11 03:47	1			
2-Hexanone	ND	25	ug/L		10/29/11 03:47	1			
4-Methyl-2-pentanone (MIBK)	ND	25	ug/L		10/29/11 03:47	1			
Acetone	ND	25	ug/L		10/29/11 03:47	1			
Benzene	7.5	5.0	ug/L		10/29/11 03:47	1			
Bromoform	ND	5.0	ug/L		10/29/11 03:47	1			
Bromomethane	ND	5.0	ug/L		10/29/11 03:47	1			
Carbon disulfide	ND	5.0	ug/L		10/29/11 03:47	1			

### Lab Sample ID: 480-11588-3

Matrix: Water

#### Client Sample ID: MW-15R Date Collected: 10/20/11 13:10 Date Received: 10/20/11 16:30

#### Lab Sample ID: 480-11588-3 Matrix: Water

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Fa	С	2
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Method: 8260B - Volatile Orga	nic Compounds (	(GC/MS) (C	ontinued)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		5.0		ug/L			10/29/11 03:47	1
Chlorobenzene	ND		5.0		ug/L			10/29/11 03:47	1
Chlorodibromomethane	ND		5.0		ug/L			10/29/11 03:47	1
Chloroethane	ND		5.0		ug/L			10/29/11 03:47	1
Chloroform	ND		5.0		ug/L			10/29/11 03:47	1
Chloromethane	ND		5.0		ug/L			10/29/11 03:47	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 03:47	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 03:47	1
Cyclohexane	48		5.0		ug/L			10/29/11 03:47	1
Bromodichloromethane	ND		5.0		ug/L			10/29/11 03:47	1
Dichlorofluoromethane	ND		5.0		ug/L			10/29/11 03:47	1
Ethylbenzene	8.3		5.0		ug/L			10/29/11 03:47	1
Isopropylbenzene	ND		5.0		ug/L			10/29/11 03:47	1
Methyl acetate	ND		5.0		ug/L			10/29/11 03:47	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/29/11 03:47	1
Methylcyclohexane	27		5.0		ug/L			10/29/11 03:47	1
Methylene Chloride	ND		5.0		ug/L			10/29/11 03:47	1
Styrene	ND		5.0		ug/L			10/29/11 03:47	1
Tetrachloroethene	ND		5.0		ug/L			10/29/11 03:47	1
Toluene	ND		5.0		ug/L			10/29/11 03:47	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 03:47	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 03:47	1
Trichloroethene	ND		5.0		ug/L			10/29/11 03:47	1
Trichlorofluoromethane	ND		5.0		ug/L			10/29/11 03:47	1
Vinyl chloride	ND		5.0		ug/L			10/29/11 03:47	1
Xylenes, Total	45		15		ug/L			10/29/11 03:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		66 - 137			-		10/29/11 03:47	1
Toluene-d8 (Surr)	104		71 - 126					10/29/11 03:47	1
4-Bromofluorobenzene (Surr)	98		73 - 120					10/29/11 03:47	1

#### Client Sample ID: MW-3S

Date Collected: 10/20/11 14:05

Date Received: 10/20/11 16:30

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Method: 8260B - Volatile Organic	/lethod: 8260B - Volatile Organic Compounds (GC/MS)											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
1,1,1-Trichloroethane	ND		2500		ug/L			10/29/11 04:11	500			
1,1,2,2-Tetrachloroethane	ND		2500		ug/L			10/29/11 04:11	500			
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500		ug/L			10/29/11 04:11	500			
1,1,2-Trichloroethane	ND		2500		ug/L			10/29/11 04:11	500			
1,1-Dichloroethane	ND		2500		ug/L			10/29/11 04:11	500			
1,2,4-Trichlorobenzene	ND		2500		ug/L			10/29/11 04:11	500			
1,2-Dibromo-3-Chloropropane	ND		2500		ug/L			10/29/11 04:11	500			
1,2-Dibromoethane	ND		2500		ug/L			10/29/11 04:11	500			
1,2-Dichlorobenzene	ND		2500		ug/L			10/29/11 04:11	500			
1,2-Dichloroethane	ND		2500		ug/L			10/29/11 04:11	500			
1,2-Dichloropropane	ND		2500		ug/L			10/29/11 04:11	500			
1,3-Dichlorobenzene	ND		2500		ug/L			10/29/11 04:11	500			

Lab Sample ID: 480-11588-4

Matrix: Water

#### **Client Sample ID: MW-3S** Date Collected: 10/20/11 14:05 Date Received: 10/20/11 16:30

#### Lab Sample ID: 480-11588-4 Matrix: Water

5 6

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

Analyte	Result	Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		2500	ι	ıg/L			10/29/11 04:11	500
2-Butanone (MEK)	ND		13000	ι	ıg/L			10/29/11 04:11	500
2-Hexanone	ND		13000	ι	ıg/L			10/29/11 04:11	500
4-Methyl-2-pentanone (MIBK)	ND		13000	ι	ıg/L			10/29/11 04:11	500
Acetone	ND		13000	ι	ıg/L			10/29/11 04:11	500
Benzene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Bromoform	ND		2500	ι	ıg/L			10/29/11 04:11	500
Bromomethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Carbon disulfide	ND		2500	ι	ıg/L			10/29/11 04:11	500
Carbon tetrachloride	ND		2500	ι	ıg/L			10/29/11 04:11	500
Chlorobenzene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Chlorodibromomethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Chloroethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Chloroform	ND		2500	ι	ıg/L			10/29/11 04:11	500
Chloromethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
cis-1,2-Dichloroethene	ND		2500	ι	ıg/L			10/29/11 04:11	500
cis-1,3-Dichloropropene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Cyclohexane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Bromodichloromethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Dichlorofluoromethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Ethylbenzene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Isopropylbenzene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Methyl acetate	ND		2500	ι	ıg/L			10/29/11 04:11	500
Methyl tert-butyl ether	ND		2500	ι	ıg/L			10/29/11 04:11	500
Methylcyclohexane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Methylene Chloride	ND		2500	ι	ıg/L			10/29/11 04:11	500
Styrene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Tetrachloroethene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Toluene	ND		2500	ι	ıg/L			10/29/11 04:11	500
trans-1,2-Dichloroethene	ND		2500	ι	ıg/L			10/29/11 04:11	500
trans-1,3-Dichloropropene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Trichloroethene	ND		2500	ι	ıg/L			10/29/11 04:11	500
Trichlorofluoromethane	ND		2500	ι	ıg/L			10/29/11 04:11	500
Vinyl chloride	ND		2500	ι	ıg/L			10/29/11 04:11	500
Xylenes, Total	ND		7500	ι	ıg/L			10/29/11 04:11	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			-		10/29/11 04:11	500
Toluene-d8 (Surr)	102		71 - 126					10/29/11 04:11	500
4-Bromofluorobenzene (Surr)	94		73 - 120					10/29/11 04:11	500

Method: 8260B - Volatile Orga	nic Compounds	(GC/MS) - D	L						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Chlorotoluene	67000		4000		ug/L			10/29/11 13:40	800
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137			-		10/29/11 13:40	800
Toluene-d8 (Surr)	104		71 _ 126					10/29/11 13:40	800
4-Bromofluorobenzene (Surr)	95		73 - 120					10/29/11 13:40	800

#### Client Sample ID: MW-7R Date Collected: 10/20/11 13:50 Date Received: 10/20/11 16:30

Vinyl chloride

Xylenes, Total

#### Lab Sample ID: 480-11588-5 Matrix: Water

Method: 8260B - Volatile Organic (	Compounds ( Result	GC/MS) Qualifier	RI	мы	Unit	п	Prepared	Analyzed	Dil Fac
1 1 1-Trichloroethane			<u> </u>				Ticparea	10/29/11 04:33	1
1 1 2 2-Tetrachloroethane			5.0		ug/L			10/29/11 04:33	1
1 1 2-Trichloro-1 2 2-trifluoroethane			5.0		ug/L			10/29/11 04:33	1
1 1 2-Trichloroethane			5.0		ug/L			10/20/11 04:33	
1 1-Dichloroethane			5.0		ug/L			10/29/11 04:33	1
			5.0		ug/L			10/20/11 04:33	1
1 2-Dibromo-3-Chloropropage			5.0		ug/L			10/29/11 04:33	····· 1
1 2-Dibromoethane			5.0		ug/L			10/29/11 04:33	1
1 2-Dichlorobenzene			5.0		ug/L			10/20/11 04:33	1
1 2-Dichloroethane			5.0		ug/L			10/29/11 04:33	1
1.2 Dichloropropapa			5.0		ug/L			10/29/11 04:33	1
1.3 Dichlorobenzone			5.0		ug/L			10/29/11 04:33	1
1 4 Dichlorobenzene			5.0		ug/L			10/29/11 04:33	
2 Butanana (MEK)			3.0		ug/L			10/29/11 04:33	1
a Chlorotoluona			20		ug/L			10/29/11 04:33	1
			5.0		ug/L			10/29/11 04:33	
2-Hexanone	ND		25		ug/L			10/29/11 04:33	1
			25		ug/L			10/29/11 04:33	1
Acetone			25		ug/L			10/29/11 04.33	·····
Benzene	ND		5.0		ug/L			10/29/11 04:33	1
Bromotorm	ND		5.0		ug/L			10/29/11 04:33	1
Bromomethane	ND		5.0		ug/L			10/29/11 04:33	1
Carbon disulfide	ND		5.0		ug/L			10/29/11 04:33	1
Carbon tetrachloride	ND		5.0		ug/L			10/29/11 04:33	1
Chlorobenzene	ND		5.0		ug/L			10/29/11 04:33	1
Chlorodibromomethane	ND		5.0		ug/L			10/29/11 04:33	1
Chloroethane	ND		5.0		ug/L			10/29/11 04:33	1
Chloroform	ND		5.0		ug/L			10/29/11 04:33	1
Chloromethane	ND		5.0		ug/L			10/29/11 04:33	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 04:33	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 04:33	1
Cyclohexane	ND		5.0		ug/L			10/29/11 04:33	1
Bromodichloromethane	ND		5.0		ug/L			10/29/11 04:33	1
Dichlorofluoromethane	ND		5.0		ug/L			10/29/11 04:33	1
Ethylbenzene	ND		5.0		ug/L			10/29/11 04:33	1
Isopropylbenzene	ND		5.0		ug/L			10/29/11 04:33	1
Methyl acetate	ND		5.0		ug/L			10/29/11 04:33	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/29/11 04:33	1
Methylcyclohexane	ND		5.0		ug/L			10/29/11 04:33	1
Methylene Chloride	ND		5.0		ug/L			10/29/11 04:33	1
Styrene	ND		5.0		ug/L			10/29/11 04:33	1
Tetrachloroethene	ND		5.0		ug/L			10/29/11 04:33	1
Toluene	ND		5.0		ug/L			10/29/11 04:33	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 04:33	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 04:33	1
Trichloroethene	ND		5.0		ug/L			10/29/11 04:33	1
Trichlorofluoromethane	ND		5.0		ug/L			10/29/11 04:33	1

1

1

10/29/11 04:33

10/29/11 04:33

5.0

15

ug/L

ug/L

ND

ND

#### Client Sample ID: MW-7R Date Collected: 10/20/11 13:50 Date Received: 10/20/11 16:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		10/29/11 04:33	1
Toluene-d8 (Surr)	104		71 - 126		10/29/11 04:33	1

73 - 120

93

#### **Client Sample ID: MW-8R**

4-Bromofluorobenzene (Surr)

Date Collected: 10/20/11 13:30 Date Received: 10/20/11 16:30

Method: 8260B - Volatile Organic	c Compounds Result	(GC/MS) Qualifier	RI	МП	Unit	п	Prepared	Analyzed	Dil Fac
1 1 1-Trichloroethane	ND		50				Tioparoa	10/29/11 04:57	1
1.1.2.2-Tetrachloroethane	ND		5.0		ua/L			10/29/11 04:57	1
1.1.2-Trichloro-1.2.2-trifluoroethane	ND		5.0		ua/L			10/29/11 04:57	1
1.1.2-Trichloroethane	ND		5.0		ua/L			10/29/11 04:57	1
1,1-Dichloroethane	ND		5.0		ug/L			10/29/11 04:57	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/29/11 04:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/29/11 04:57	1
1,2-Dibromoethane	ND		5.0		ug/L			10/29/11 04:57	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/29/11 04:57	1
1,2-Dichloroethane	ND		5.0		ug/L			10/29/11 04:57	1
1,2-Dichloropropane	ND		5.0		ug/L			10/29/11 04:57	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/29/11 04:57	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/29/11 04:57	1
2-Butanone (MEK)	ND		25		ug/L			10/29/11 04:57	1
o-Chlorotoluene	55		5.0		ug/L			10/29/11 04:57	1
2-Hexanone	ND		25		ug/L			10/29/11 04:57	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/29/11 04:57	1
Acetone	ND		25		ug/L			10/29/11 04:57	1
Benzene	ND		5.0		ug/L			10/29/11 04:57	1
Bromoform	ND		5.0		ug/L			10/29/11 04:57	1
Bromomethane	ND		5.0		ug/L			10/29/11 04:57	1
Carbon disulfide	ND		5.0		ug/L			10/29/11 04:57	1
Carbon tetrachloride	ND		5.0		ug/L			10/29/11 04:57	1
Chlorobenzene	ND		5.0		ug/L			10/29/11 04:57	1
Chlorodibromomethane	ND		5.0		ug/L			10/29/11 04:57	1
Chloroethane	ND		5.0		ug/L			10/29/11 04:57	1
Chloroform	ND		5.0		ug/L			10/29/11 04:57	1
Chloromethane	ND		5.0		ug/L			10/29/11 04:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 04:57	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 04:57	1
Cyclohexane	ND		5.0		ug/L			10/29/11 04:57	1
Bromodichloromethane	ND		5.0		ug/L			10/29/11 04:57	1
Dichlorofluoromethane	ND		5.0		ug/L			10/29/11 04:57	1
Ethylbenzene	ND		5.0		ug/L			10/29/11 04:57	1
Isopropylbenzene	ND		5.0		ug/L			10/29/11 04:57	1
Methyl acetate	ND		5.0		ug/L			10/29/11 04:57	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/29/11 04:57	1
Methylcyclohexane	ND		5.0		ug/L			10/29/11 04:57	1
Methylene Chloride	ND		5.0		ug/L			10/29/11 04:57	1
Styrene	ND		5.0		ug/L			10/29/11 04:57	1

Lab Sample ID: 480-11588-5

10/29/11 04:33

Lab Sample ID: 480-11588-6

Matrix: Water

Matrix: Water

6

1

TestAmerica Buffalo 11/02/2011

#### Client Sample ID: MW-8R Date Collected: 10/20/11 13:30 Date Received: 10/20/11 16:30

Method: 8260B - Volatile Organ	nic Compounds (GC/MS) (Cor Bosult Qualifier	ntinued)	MDI Unit	D Bronarod	Analyzod
letrachloroethene	ND	5.0	ug/L		10/29/11 04:57
Toluene	ND	5.0	ug/L		10/29/11 04:57
trans-1,2-Dichloroethene	ND	5.0	ug/L		10/29/11 04:57
trans-1,3-Dichloropropene	ND	5.0	ug/L		10/29/11 04:57
Trichloroethene	ND	5.0	ug/L		10/29/11 04:57
Trichlorofluoromethane	ND	5.0	ug/L		10/29/11 04:57
Vinyl chloride	ND	5.0	ug/L		10/29/11 04:57
Xylenes, Total	ND	15	ug/L		10/29/11 04:57

Surrogate	%Recovery	Qualifier	Limits	Prej	pared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137			10/29/11 04:57	1
Toluene-d8 (Surr)	104		71 - 126			10/29/11 04:57	1
4-Bromofluorobenzene (Surr)	94		73 - 120			10/29/11 04:57	1

#### Client Sample ID: MW-9R

Date Collected: 10/20/11 13:40 Date Received: 10/20/11 16:30

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Analyte	Compounds Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	250		25		ug/L			10/29/11 05:20	5
1,1,2,2-Tetrachloroethane	ND		25		ug/L			10/29/11 05:20	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25		ug/L			10/29/11 05:20	5
1,1,2-Trichloroethane	ND		25		ug/L			10/29/11 05:20	5
1,1-Dichloroethane	140		25		ug/L			10/29/11 05:20	5
1,2,4-Trichlorobenzene	ND		25		ug/L			10/29/11 05:20	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			10/29/11 05:20	5
1,2-Dibromoethane	ND		25		ug/L			10/29/11 05:20	5
1,2-Dichlorobenzene	ND		25		ug/L			10/29/11 05:20	5
1,2-Dichloroethane	ND		25		ug/L			10/29/11 05:20	5
1,2-Dichloropropane	ND		25		ug/L			10/29/11 05:20	5
1,3-Dichlorobenzene	ND		25		ug/L			10/29/11 05:20	5
1,4-Dichlorobenzene	ND		25		ug/L			10/29/11 05:20	5
2-Butanone (MEK)	ND		130		ug/L			10/29/11 05:20	5
o-Chlorotoluene	150		25		ug/L			10/29/11 05:20	5
2-Hexanone	ND		130		ug/L			10/29/11 05:20	5
4-Methyl-2-pentanone (MIBK)	ND		130		ug/L			10/29/11 05:20	5
Acetone	ND		130		ug/L			10/29/11 05:20	5
Benzene	ND		25		ug/L			10/29/11 05:20	5
Bromoform	ND		25		ug/L			10/29/11 05:20	5
Bromomethane	ND		25		ug/L			10/29/11 05:20	5
Carbon disulfide	ND		25		ug/L			10/29/11 05:20	5
Carbon tetrachloride	31		25		ug/L			10/29/11 05:20	5
Chlorobenzene	ND		25		ug/L			10/29/11 05:20	5
Chlorodibromomethane	ND		25		ug/L			10/29/11 05:20	5
Chloroethane	35		25		ug/L			10/29/11 05:20	5
Chloroform	ND		25		ug/L			10/29/11 05:20	5
Chloromethane	ND		25		ug/L			10/29/11 05:20	5
cis-1,2-Dichloroethene	ND		25		ug/L			10/29/11 05:20	5
cis-1,3-Dichloropropene	ND		25		ug/L			10/29/11 05:20	5



10/29/11 04:57	1
10/29/11 04:57	1

#### Lab Sample ID: 480-11588-7

#### Matrix: Water

Matrix: Water

Dil Fac 1

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1

Lab Sample ID: 480-11588-6

#### Client Sample ID: MW-9R Date Collected: 10/20/11 13:40 Date Received: 10/20/11 16:30

Lab Sample ID: 480-11588-8

Matrix: Water

#### Lab Sample ID: 480-11588-7 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		25		ug/L			10/29/11 05:20	5
Bromodichloromethane	ND		25		ug/L			10/29/11 05:20	5
Dichlorofluoromethane	ND		25		ug/L			10/29/11 05:20	5
Ethylbenzene	ND		25		ug/L			10/29/11 05:20	5
Isopropylbenzene	ND		25		ug/L			10/29/11 05:20	5
Methyl acetate	ND		25		ug/L			10/29/11 05:20	5
Methyl tert-butyl ether	ND		25		ug/L			10/29/11 05:20	5
Methylcyclohexane	ND		25		ug/L			10/29/11 05:20	5
Methylene Chloride	ND		25		ug/L			10/29/11 05:20	5
Styrene	ND		25		ug/L			10/29/11 05:20	5
Tetrachloroethene	ND		25		ug/L			10/29/11 05:20	5
Toluene	ND		25		ug/L			10/29/11 05:20	5
trans-1,2-Dichloroethene	ND		25		ug/L			10/29/11 05:20	5
trans-1,3-Dichloropropene	ND		25		ug/L			10/29/11 05:20	5
Trichloroethene	ND		25		ug/L			10/29/11 05:20	5
Trichlorofluoromethane	ND		25		ug/L			10/29/11 05:20	5
Vinyl chloride	ND		25		ug/L			10/29/11 05:20	5
Xylenes, Total	ND		75		ug/L			10/29/11 05:20	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137			-		10/29/11 05:20	5
Toluene-d8 (Surr)	104		71 - 126					10/29/11 05:20	5
4-Bromofluorobenzene (Surr)	95		73 - 120					10/29/11 05:20	5

#### **Client Sample ID: TB**

Date Collected: 10/20/11 08:00

Date Received: 10/20/11 16:30

Method: 8260B - Volatile Organic	Compounds (	GC/MS)						
Analyte	Result	Qualifier	RL	MDL Unit	t D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	ug/L			10/29/11 05:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L	-		10/29/11 05:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L	-		10/29/11 05:43	1
1,1,2-Trichloroethane	ND		5.0	ug/L			10/29/11 05:43	1
1,1-Dichloroethane	ND		5.0	ug/L	-		10/29/11 05:43	1
1,2,4-Trichlorobenzene	ND		5.0	ug/L	-		10/29/11 05:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			10/29/11 05:43	1
1,2-Dibromoethane	ND		5.0	ug/L	-		10/29/11 05:43	1
1,2-Dichlorobenzene	ND		5.0	ug/L			10/29/11 05:43	1
1,2-Dichloroethane	ND		5.0	ug/L			10/29/11 05:43	1
1,2-Dichloropropane	ND		5.0	ug/L	-		10/29/11 05:43	1
1,3-Dichlorobenzene	ND		5.0	ug/L	-		10/29/11 05:43	1
1,4-Dichlorobenzene	ND		5.0	ug/L			10/29/11 05:43	1
2-Butanone (MEK)	ND		25	ug/L	-		10/29/11 05:43	1
o-Chlorotoluene	ND		5.0	ug/L	-		10/29/11 05:43	1
2-Hexanone	ND		25	ug/L			10/29/11 05:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	ug/L	-		10/29/11 05:43	1
Acetone	ND		25	ug/L	-		10/29/11 05:43	1
Benzene	ND		5.0	ug/L			10/29/11 05:43	1
Bromoform	ND		5.0	ug/L			10/29/11 05:43	1

**Client: Waste Management** Project/Site: ChemTrol Site

#### **Client Sample ID: TB** Date Collected: 10/20/11 08:00 Date Received: 10/20/11 16:30

#### Lab Sample ID: 480-11588-8 Matrix: Water

Method: 8260B - Volatile Orga	nic Compounds (	(GC/MS) (Con	tinued)						5
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Bromomethane	ND		5.0	ug/L			10/29/11 05:43	1	6
Carbon disulfide	ND		5.0	ug/L			10/29/11 05:43	1	
Carbon tetrachloride	ND		5.0	ug/L			10/29/11 05:43	1	
Chlorobenzene	ND		5.0	ug/L			10/29/11 05:43	1	
Chlorodibromomethane	ND		5.0	ug/L			10/29/11 05:43	1	8
Chloroethane	ND		5.0	ug/L			10/29/11 05:43	1	0
Chloroform	ND		5.0	ug/L			10/29/11 05:43	1	0
Chloromethane	ND		5.0	ug/L			10/29/11 05:43	1	3
cis-1,2-Dichloroethene	ND		5.0	ug/L			10/29/11 05:43	1	
cis-1,3-Dichloropropene	ND		5.0	ug/L			10/29/11 05:43	1	
Cyclohexane	ND		5.0	ug/L			10/29/11 05:43	1	
Bromodichloromethane	ND		5.0	ug/L			10/29/11 05:43	1	
Dichlorofluoromethane	ND		5.0	ug/L			10/29/11 05:43	1	
Ethylbenzene	ND		5.0	ug/L			10/29/11 05:43	1	
Isopropylbenzene	ND		5.0	ug/L			10/29/11 05:43	1	
Methyl acetate	ND		5.0	ug/L			10/29/11 05:43	1	
Methyl tert-butyl ether	ND		5.0	ug/L			10/29/11 05:43	1	
Methylcyclohexane	ND		5.0	ug/L			10/29/11 05:43	1	
Methylene Chloride	ND		5.0	ug/L			10/29/11 05:43	1	
Styrene	ND		5.0	ug/L			10/29/11 05:43	1	
Tetrachloroethene	ND		5.0	ug/L			10/29/11 05:43	1	
Toluene	ND		5.0	ug/L			10/29/11 05:43	1	
trans-1,2-Dichloroethene	ND		5.0	ug/L			10/29/11 05:43	1	
trans-1,3-Dichloropropene	ND		5.0	ug/L			10/29/11 05:43	1	
Trichloroethene	ND		5.0	ug/L			10/29/11 05:43	1	
Trichlorofluoromethane	ND		5.0	ug/L			10/29/11 05:43	1	
Vinyl chloride	ND		5.0	ug/L			10/29/11 05:43	1	

Xylenes, Total	ND		15	ug/L		10/29/11 05:43	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137			10/29/11 05:43	1
Toluene-d8 (Surr)	101		71 - 126			10/29/11 05:43	1
4-Bromofluorobenzene (Surr)	91		73 - 120			10/29/11 05:43	1

## 2 3 4 5 6

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

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

#### Lab Sample ID: MB 480-37964/5

Matrix: water							Prep Type: I	otal/NA
Analysis Batch: 37964	МР	MD						
Analyte	Result	MD Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	ug/L			10/28/11 23:11	1
1,1,2,2-Tetrachloroethane	ND		5.0	ug/L			10/28/11 23:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			10/28/11 23:11	1
1,1,2-Trichloroethane	ND		5.0	ug/L			10/28/11 23:11	1
1,1-Dichloroethane	ND		5.0	ug/L			10/28/11 23:11	1
1,2,4-Trichlorobenzene	ND		5.0	ug/L			10/28/11 23:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			10/28/11 23:11	1
1,2-Dibromoethane	ND		5.0	ug/L			10/28/11 23:11	1
1,2-Dichlorobenzene	ND		5.0	ug/L			10/28/11 23:11	1
1,2-Dichloroethane	ND		5.0	ug/L			10/28/11 23:11	1
1,2-Dichloropropane	ND		5.0	ug/L			10/28/11 23:11	1
1,3-Dichlorobenzene	ND		5.0	ug/L			10/28/11 23:11	1
1,4-Dichlorobenzene	ND		5.0	ug/L			10/28/11 23:11	1
2-Butanone (MEK)	ND		25	ug/L			10/28/11 23:11	1
o-Chlorotoluene	ND		5.0	ug/L			10/28/11 23:11	1
2-Hexanone	ND		25	ug/L			10/28/11 23:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	ug/L			10/28/11 23:11	1
Acetone	ND		25	ug/L			10/28/11 23:11	1
Benzene	ND		5.0	ug/L			10/28/11 23:11	1
Bromoform	ND		5.0	ug/L			10/28/11 23:11	1
Bromomethane	ND		5.0	ug/L			10/28/11 23:11	1
Carbon disulfide	ND		5.0	ug/L			10/28/11 23:11	1
Carbon tetrachloride	ND		5.0	ug/L			10/28/11 23:11	1
Chlorobenzene	ND		5.0	ug/L			10/28/11 23:11	1
Chlorodibromomethane	ND		5.0	ug/L			10/28/11 23:11	1
Chloroethane	ND		5.0	ug/L			10/28/11 23:11	1
Chloroform	ND		5.0	ug/L			10/28/11 23:11	1
Chloromethane	ND		5.0	ug/L			10/28/11 23:11	1
cis-1,2-Dichloroethene	ND		5.0	ug/L			10/28/11 23:11	1
cis-1,3-Dichloropropene	ND		5.0	ug/L			10/28/11 23:11	1
Cyclohexane	ND		5.0	ug/L			10/28/11 23:11	1
Bromodichloromethane	ND		5.0	ug/L			10/28/11 23:11	1
Dichlorofluoromethane	ND		5.0	ug/L			10/28/11 23:11	1
Ethylbenzene	ND		5.0	ug/L			10/28/11 23:11	1
Isopropylbenzene	ND		5.0	ug/L			10/28/11 23:11	1
Methyl acetate	ND		5.0	ug/L			10/28/11 23:11	1
Methyl tert-butyl ether	ND		5.0	ug/L			10/28/11 23:11	1
Methylcyclohexane	ND		5.0	ug/L			10/28/11 23:11	1
Methylene Chloride	ND		5.0	ug/L			10/28/11 23:11	1
Styrene	ND		5.0	ug/L			10/28/11 23:11	1
Tetrachloroethene	ND		5.0	ug/L			10/28/11 23:11	1
Toluene	ND		5.0	ug/L			10/28/11 23:11	1
trans-1,2-Dichloroethene	ND		5.0	ug/L			10/28/11 23:11	1
trans-1,3-Dichloropropene	ND		5.0	ug/L			10/28/11 23:11	1
Trichloroethene	ND		5.0	ug/L			10/28/11 23:11	1
Trichlorofluoromethane	ND		5.0	ug/L			10/28/11 23:11	1
Vinyl chloride	ND		5.0	ug/L			10/28/11 23:11	1
Xylenes, Total	ND		15	ug/L			10/28/11 23:11	1

**Client Sample ID: Method Blank** 

Analyzed

10/28/11 23:11

10/28/11 23:11

10/28/11 23:11

**Client Sample ID: Lab Control Sample** 

Prepared

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

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

#### Lab Sample ID: MB 480-37964/5

watrix. v	aler	
Analysis	<b>Batch:</b>	37964

	MB	MB	
Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
Toluene-d8 (Surr)	104		71 - 126
4-Bromofluorobenzene (Surr)	94		73 - 120

#### Lab Sample ID: LCS 480-37964/4 Matrix: Water

#### Analysis Batch: 37964

	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethane		21.9		ug/L		88	71 _ 129	
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	77 _ 120	
1,2-Dichloroethane	25.0	22.6		ug/L		90	75 - 127	
Benzene	25.0	23.0		ug/L		92	71 - 124	
Chlorobenzene	25.0	23.3		ug/L		93	72 - 120	
cis-1,2-Dichloroethene	25.0	22.7		ug/L		91	74 _ 124	
Ethylbenzene	25.0	23.1		ug/L		92	77 - 123	
Methyl tert-butyl ether	25.0	20.9		ug/L		84	64 _ 127	
Tetrachloroethene	25.0	23.1		ug/L		92	74 - 122	
Toluene	25.0	23.1		ug/L		92	70 - 122	
trans-1,2-Dichloroethene	25.0	22.2		ug/L		89	73 - 127	
Trichloroethene	25.0	22.7		ug/L		91	74 _ 123	

	LCS	LCS	
Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		66 - 137
Toluene-d8 (Surr)	104		71 - 126
4-Bromofluorobenzene (Surr)	100		73 - 120

#### Lab Sample ID: MB 480-38008/5 Matrix: Water

#### Analysis Batch: 38008

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/29/11 12:40	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/29/11 12:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/29/11 12:40	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/29/11 12:40	1
1,1-Dichloroethane	ND		5.0		ug/L			10/29/11 12:40	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/29/11 12:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/29/11 12:40	1
1,2-Dibromoethane	ND		5.0		ug/L			10/29/11 12:40	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/29/11 12:40	1
1,2-Dichloroethane	ND		5.0		ug/L			10/29/11 12:40	1
1,2-Dichloropropane	ND		5.0		ug/L			10/29/11 12:40	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/29/11 12:40	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/29/11 12:40	1
2-Butanone (MEK)	ND		25		ug/L			10/29/11 12:40	1
o-Chlorotoluene	ND		5.0		ug/L			10/29/11 12:40	1
2-Hexanone	ND		25		ug/L			10/29/11 12:40	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/29/11 12:40	1

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

TestAmerica Buffalo 11/02/2011

## 5

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

#### Lab Sample ID: MB 480-38008/5

Matrix: Water Analysis Batch: 38008

-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			10/29/11 12:40	1
Benzene	ND		5.0		ug/L			10/29/11 12:40	1
Bromoform	ND		5.0		ug/L			10/29/11 12:40	1
Bromomethane	ND		5.0		ug/L			10/29/11 12:40	1
Carbon disulfide	ND		5.0		ug/L			10/29/11 12:40	1
Carbon tetrachloride	ND		5.0		ug/L			10/29/11 12:40	1
Chlorobenzene	ND		5.0		ug/L			10/29/11 12:40	1
Chlorodibromomethane	ND		5.0		ug/L			10/29/11 12:40	1
Chloroethane	ND		5.0		ug/L			10/29/11 12:40	1
Chloroform	ND		5.0		ug/L			10/29/11 12:40	1
Chloromethane	ND		5.0		ug/L			10/29/11 12:40	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 12:40	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 12:40	1
Cyclohexane	ND		5.0		ug/L			10/29/11 12:40	1
Bromodichloromethane	ND		5.0		ug/L			10/29/11 12:40	1
Dichlorofluoromethane	ND		5.0		ug/L			10/29/11 12:40	1
Ethylbenzene	ND		5.0		ug/L			10/29/11 12:40	1
Isopropylbenzene	ND		5.0		ug/L			10/29/11 12:40	1
Methyl acetate	ND		5.0		ug/L			10/29/11 12:40	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/29/11 12:40	1
Methylcyclohexane	ND		5.0		ug/L			10/29/11 12:40	1
Methylene Chloride	ND		5.0		ug/L			10/29/11 12:40	1
Styrene	ND		5.0		ug/L			10/29/11 12:40	1
Tetrachloroethene	ND		5.0		ug/L			10/29/11 12:40	1
Toluene	ND		5.0		ug/L			10/29/11 12:40	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/29/11 12:40	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/29/11 12:40	1
Trichloroethene	ND		5.0		ug/L			10/29/11 12:40	1
Trichlorofluoromethane	ND		5.0		ug/L			10/29/11 12:40	1
Vinyl chloride	ND		5.0		ug/L			10/29/11 12:40	1
Xylenes, Total	ND		15		ug/L			10/29/11 12:40	1
	МВ	МВ							
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surroyate	% Recovery	Quaimer	Linits		Prepareu	Analyzeu	DIIFac
1,2-Dichloroethane-d4 (Surr)	96		66 - 137	—		10/29/11 12:40	1
Toluene-d8 (Surr)	102		71 - 126			10/29/11 12:40	1
4-Bromofluorobenzene (Surr)	94		73 - 120			10/29/11 12:40	1
-							

#### Lab Sample ID: LCS 480-38008/4 Matrix: Water

Analysis Batch: 38008

	Spike	LCS	LCS			% Rec.	
Analyte	Added	Result	Qualifier U	nit l	D %Rec	Limits	
1,1-Dichloroethane	25.0	21.7	u	g/L	87	71 - 129	
1,2-Dichlorobenzene	25.0	23.0	u	g/L	92	77 _ 120	
1,2-Dichloroethane	25.0	22.2	u	g/L	89	75 <sub>-</sub> 127	
Benzene	25.0	22.9	u	g/L	92	71 - 124	
Chlorobenzene	25.0	23.1	u	g/L	92	72 _ 120	
cis-1,2-Dichloroethene	25.0	22.6	u	g/L	90	74 - 124	
Ethylbenzene	25.0	23.0	u	g/L	92	77 _ 123	

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

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

#### Lab Sample ID: LCS 480-38008/4 Matrix: Water

#### Analysis Patch: 2000

Analysis Batch: 38008										
			Spike	LCS	LCS				% Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methyl tert-butyl ether			25.0	20.3		ug/L		81	64 - 127	
Tetrachloroethene			25.0	22.9		ug/L		92	74 - 122	
Toluene			25.0	22.8		ug/L		91	70 _ 122	
trans-1,2-Dichloroethene			25.0	21.9		ug/L		88	73 - 127	
Trichloroethene			25.0	22.3		ug/L		89	74 _ 123	
	LCS	LCS								
Surrogate	% Recovery	Qualifier	Limits							

Surrogate	% Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	101		73 - 120

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

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#### **Certification Summary**

Program

#### Client: Waste Management Project/Site: ChemTrol Site

Authority

Laboratory

**Certification ID** 

EPA Region

TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

J. 460-11566-1	
aboratory	
AL BUF	
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Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (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: Waste Management Project/Site: ChemTrol Site TestAmerica Job ID: 480-11588-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-11588-1	DUP	Water	10/20/11 13:50	10/20/11 16:30
480-11588-2	MW-13R	Water	10/20/11 13:16	10/20/11 16:30
480-11588-3	MW-15R	Water	10/20/11 13:10	10/20/11 16:30
480-11588-4	MW-3S	Water	10/20/11 14:05	10/20/11 16:30
480-11588-5	MW-7R	Water	10/20/11 13:50	10/20/11 16:30
480-11588-6	MW-8R	Water	10/20/11 13:30	10/20/11 16:30
480-11588-7	MW-9R	Water	10/20/11 13:40	10/20/11 16:30
480-11588-8	ТВ	Water	10/20/11 08:00	10/20/11 16:30

AUDRER, NY 14220-2230	10 Hazelwood Drive	TestAmerica Buffalo
AUDRESS NY 14220-2230	10 Hazelwood Drive	TestAmerica Buffalo

# **Chain of Custody Record**



Phone (716) 691-2600 Fax (716) 691-7981				101101					Conter Tra	kurki No(s)		CCC Not		Γ
Client Information	John St	adler, Chris	Krystofik	Duen	ette, Ryr	5						480-17517-42	273.1	Ţ
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State, Zp NY, 14450												F-MeOH	0 - Na2503 R - Na252503	
тноге. 585-223-6922(Tel) 713-286-7554(Fax)	Pole. Purchase Order	nol requir			(¢)						<u></u>	G - AmeNor H - Ascorbic Ap L Ins	X T-75P Dodec	ahytato
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MW-7R	10/20/11	1350	υ	Water		3					-	A s	up Taken	
MW-BR	10/20/11	1330	σ	Water		3				_		e7.		
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