AECOM Environment

Second Quarter 2020 – April, May, June Operation, Maintenance, and Monitoring Report

CHEM-TROL Site
NYSDEC Site No. 9-15-015
Report.hw915015.2020-08-27.2Q2020OMM

Site:
CHEM-TROL Site
4800 Lake Avenue
Blasdell, New York 14219

Submitted to:
NYSDEC
Region 9 Office
270 Michigan Avenue
Buffalo, NY 14203

Prepared for:
Waste Management
100 Brandywine Boulevard, Suite 300
Newtown, PA 18940

Prepared by:
AECOM
257 West Genesee Street, Suite 400
Buffalo, New York 14202

August 27, 2020

AECOM Project No. 60592091.1

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716 856 2545 fax

August 27, 2020

SUBMITTED VIA ELECTRONIC MAIL

Mr. Glenn May, PG
NYSDEC
Region 9 Office
270 Michigan Avenue
Buffalo, NY 14203

RE: S.C. Holdings, Inc., 4818 Lake Avenue, Blasdell, New York 14219
Second Quarter 2020 Operation, Maintenance, and Monitoring Report
Chem-Trol Site, NYSDEC Site No. 9-15-015, Report.hw915015.2020-08-27.2Q2020OMM

Dear Mr. May:

Enclosed please find the Second Quarter 2020 (2Q20 – April, May, June) Operation, Maintenance, and Monitoring Report for the "Chem-Trol" project site. AECOM is submitting this quarterly monitoring report on behalf of our client, S.C. Holdings, Inc.

The enclosed report contains the following information for 2Q20:

- Operation, Maintenance and Monitoring Checklists
- Summary Tables of Analytical Results and Flow Readings
- Copies of Analytical Results and Chain-of-Custody Forms

A summary of each month within 2Q20 is as follows:

April 2020

AECOM collected the monthly monitoring samples on April 2, 2020; analytical data were received on April 6, 2020. As presented on Table 1 (April 2, 2020), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

May 2020

AECOM collected the monthly monitoring samples on May 5, 2020; analytical data were received on May 19, 2020. As presented on Table 1 (May 5, 2020), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month. On May 27, 2020, AECOM performed a flush-and-rinse acid wash of the system.

June 2020

AECOM collected the monthly monitoring samples on June 2, 2020; analytical data were received on June 8, 2020. As presented on Table 1 (June 2, 2020), an exceedance of the treatment requirement for o-chlorotoluene was observed in the aqeous effluent sample based on concentration but not mass loading.

On June 16, 2020 AECOM subcontractor Matrix Environmental Technologies, Inc. visited the site and performed maintenance on the system, which included addressing a problem with the discharge line. Additional action (jet cleaning) is scheduled for 3Q20. Additionally, on July 17, 2020 AECOM performed a flush-and-rinse acid wash of the system. AECOM returned to site on July 22, 2020 and the system was sampled; analytical data were received on July 31, 2020. There were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples from the July 22, 2020 sampling event.

AECOM also collected quarterly groundwater levels on June 2, 2020.

If you have any questions regarding the information presented in this report please contact me at (716) 923-1300.

Very truly yours,
AECOM

James L. Kaczor

James L. Kaczor
Project Manager

Enclosure

cc: Mr. Chad Moose (Waste Management) (electronic copy)
Mr. Brian Sadowski, NYSDEC (electronic copy)
60592091 Project File

April 2020

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Sean P. Connelly Weather/Temperature: Partly Cloudy, 43 degrees F
Date: 4/2/2020 Arrival Time: 09:00 Departure Time: 10:45

Reason for Service: Inspect system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See comments section.
Building Exterior		
Overhead Door	X	Wood lintel decaying, header exposed.
Siding	X	Metal trim missing from lintel
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks		Condensation on the floor
Building Heater	X	Breaker turned on. Heater was off.
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	Ratchet straps are used to keep the trays together. Several of the clips for the trays are rusted/broken.
Iron Removal Filter	**X**	Tank in-line but filter media removed; not required.
Flow Meters	**X**	See Notes.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter	**X**	Reading 0 but well pumping at low rate.
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	Reading 0 but well pumping at low rate.
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter	**X**	Reading 0 but well pumping at low rate.

Effluent Discharge

Outfall	**X**	
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	285 Inches
Flow Meter Reading	8,444,686 Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	179 Inches
Flow Meter Reading	28,528,520 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	204 Inches
Flow Meter Reading	15,696,380 Gallons

Air Stripper

Stripper Blower Pressure	16 Inches H2O

Effluent Flow

Total System Meter Reading	70,669,305 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7 (field test strip)
Effluent pH 7 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

Collected April 2020 monthly influent and effluent samples on April 2, 2020; hand-delivered iced samples in a secure cooler under chain of custody to TestAmerica, Amherst, NY on April 2, 2020.

Total system flow on system totalizer flow meter timed at 5 gpm. During visit, individually closed EW-1, EW-2, and EW-3 influent valve to test flow by reading response on transducer elevation; noted rise in transducer elevation when valve was closed and drop when valve was opened confirming well was pumping.

The SVE building overhead door flashing has wind and header damage.

The AS building overhead door flashing needs replacement.

The most recent round of water levels (1Q2020) were collected March 13, 2020.

The most recent acid wash was performed on March 12, 2020.

All wells were operational upon arrival and departure.

Table 1
April 2, 2020 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	7,286	7,286	144,000	gpd	NA	NA	NA
pH	7.5	8.1	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 9.1	< 5.0	5	ug/L	< 0.0003	0.006	lbs/day
Chlorobenzene	< 9.5	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
cis-1,2-Dichloroethene	< 11	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Benzene	< 12	< 5.0	5	ug/L	< 0.0003	0.006	lbs/day
1,1,1-Trichloroethane	< 7.7	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Chloroethane	23	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
1,1-Dichloroethane	< 12	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
1,1-Dichloroethene	< 17	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Trichloroethene	< 12	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
o-Chlorotoluene	1,500	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Iron - Total	979	788	3,000	ug/L	0.05	3.61	lbs/day
TSS	< 4.0	6.0	20	mg/L	0.37		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured March 13, 2020 through April 2, 2020.*

Table 2
April 2, 2020 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 4/2/2020	units	Prior Report 3/13/2020
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	285	Inches	286
Flow Meter Reading	8,444,686	gallons	8,444,686
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	179	Inches	182
Flow Meter Reading	28,528,520	gallons	28,528,520
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	204	Inches	207
Flow Meter Reading	15,696,380	gallons	15,696,380
Air Stripper			
Stripper Blower Pressure	16.0	inches H_2O	17.0
Effluent Flow			
Total System Meter Reading	70,669,305	gallons	70,530,866
Average System Flow Since Prior Report	7,286	gpd	
	303.6	gph	
	5.1	gpm	
Influent o-Chlorotoluene concentration	1,500	ug/L	
Current month mass removal	0.8	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-168086-1
Client Project/Site: ChemTrol Site: Monthly GW
Sampling Event: ChemTrol Monthly Groundwater

For:
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Attn: Ryan Donovan

Katelyn Ferguson

Authorized for release by:
4/6/2020 2:41:08 PM

Katelyn Ferguson, Project Management Assistant I
(716)691-2600
katelyn.ferguson@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Waste Management
Job ID: 480-168086-1
Project/Site: ChemTrol Site: Monthly GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Job ID: 480-168086-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-168086-1

Comments
No additional comments.

Receipt
The samples were received on 4/2/2020 11:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA
Method 624.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-524166 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The affected samples are: (480-168086-D-2 MS) and (480-168086-D-2 MSD).

Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent (480-168086-2), (480-168086-D-2 MS) and (480-168086-D-2 MSD). 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.

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

General Chemistry
Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-168086-1) and Influent (480-168086-2).

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

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Client Sample ID: Effluent — Lab Sample ID: 480-168086-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	788		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	6.0		4.0		mg/L	1		SM 2540D	Total/NA
pH	8.1	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	19.3	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-168086-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	23		17		ug/L	20		624.1	Total/NA
o-Chlorotoluene	1500	F1	6.6		ug/L	20		624.1	Total/NA
Iron	979		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.5	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	19.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-168086-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Client Sample ID: Effluent

Date Collected: 04/02/20 09:30
Date Received: 04/02/20 11:40

Lab Sample ID: 480-168086-1

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/03/20 15:48	1
1,1-Dichloroethane	ND		5.0		ug/L			04/03/20 15:48	1
1,1-Dichloroethene	ND		5.0		ug/L			04/03/20 15:48	1
Benzene	ND		5.0		ug/L			04/03/20 15:48	1
Chlorobenzene	ND		5.0		ug/L			04/03/20 15:48	1
Chloroethane	ND		5.0		ug/L			04/03/20 15:48	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/03/20 15:48	1
Toluene	ND		5.0		ug/L			04/03/20 15:48	1
Trichloroethene	ND		5.0		ug/L			04/03/20 15:48	1
o-Chlorotoluene	ND		5.0		ug/L			04/03/20 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*68 - 130*		*04/03/20 15:48*	*1*
4-Bromofluorobenzene (Surr)	*105*		*76 - 123*		*04/03/20 15:48*	*1*
Toluene-d8 (Surr)	*89*		*77 - 120*		*04/03/20 15:48*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**788**		50.0		ug/L		04/02/20 20:10	04/03/20 18:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**6.0**		4.0		mg/L			04/02/20 15:17	1
pH	**8.1**	**HF**	0.1		SU			04/05/20 17:36	1
Temperature	**19.3**	**HF**	0.001		Degrees C			04/05/20 17:36	1

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Client Sample ID: Influent

Date Collected: 04/02/20 10:00
Date Received: 04/02/20 11:40

Lab Sample ID: 480-168086-2

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		7.7		ug/L			04/03/20 16:11	20
1,1-Dichloroethane	ND		12		ug/L			04/03/20 16:11	20
1,1-Dichloroethene	ND		17		ug/L			04/03/20 16:11	20
Benzene	ND		12		ug/L			04/03/20 16:11	20
Chlorobenzene	ND		9.5		ug/L			04/03/20 16:11	20
Chloroethane	**23**		17		ug/L			04/03/20 16:11	20
cis-1,2-Dichloroethene	ND		11		ug/L			04/03/20 16:11	20
Toluene	ND		9.1		ug/L			04/03/20 16:11	20
Trichloroethene	ND		12		ug/L			04/03/20 16:11	20
o-Chlorotoluene	**1500**	**F1**	6.6		ug/L			04/03/20 16:11	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*		*04/03/20 16:11*	*20*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*		*04/03/20 16:11*	*20*
Toluene-d8 (Surr)	*91*		*77 - 120*		*04/03/20 16:11*	*20*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**979**		50.0		ug/L		04/02/20 20:10	04/03/20 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/02/20 15:17	1
pH	**7.5**	**HF**	0.1		SU			04/05/20 17:39	1
Temperature	**19.2**	**HF**	0.001		Degrees C			04/05/20 17:39	1

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Client Sample ID: Trip Blank
Date Collected: 04/02/20 10:10
Date Received: 04/02/20 11:40

Lab Sample ID: 480-168086-3
Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/03/20 16:36	1
1,1-Dichloroethane	ND		5.0		ug/L			04/03/20 16:36	1
1,1-Dichloroethene	ND		5.0		ug/L			04/03/20 16:36	1
Benzene	ND		5.0		ug/L			04/03/20 16:36	1
Chlorobenzene	ND		5.0		ug/L			04/03/20 16:36	1
Chloroethane	ND		5.0		ug/L			04/03/20 16:36	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/03/20 16:36	1
Toluene	ND		5.0		ug/L			04/03/20 16:36	1
Trichloroethene	ND		5.0		ug/L			04/03/20 16:36	1
o-Chlorotoluene	ND		5.0		ug/L			04/03/20 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*68 - 130*		*04/03/20 16:36*	*1*
4-Bromofluorobenzene (Surr)	*109*		*76 - 123*		*04/03/20 16:36*	*1*
Toluene-d8 (Surr)	*92*		*77 - 120*		*04/03/20 16:36*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-524165/7
Matrix: Water
Analysis Batch: 524165

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/03/20 12:13	1
1,1-Dichloroethane	ND		5.0		ug/L			04/03/20 12:13	1
1,1-Dichloroethene	ND		5.0		ug/L			04/03/20 12:13	1
Benzene	ND		5.0		ug/L			04/03/20 12:13	1
Chlorobenzene	ND		5.0		ug/L			04/03/20 12:13	1
Chloroethane	ND		5.0		ug/L			04/03/20 12:13	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/03/20 12:13	1
Toluene	ND		5.0		ug/L			04/03/20 12:13	1
Trichloroethene	ND		5.0		ug/L			04/03/20 12:13	1
o-Chlorotoluene	ND		5.0		ug/L			04/03/20 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*68 - 130*		*04/03/20 12:13*	*1*
4-Bromofluorobenzene (Surr)	*107*		*76 - 123*		*04/03/20 12:13*	*1*
Toluene-d8 (Surr)	*91*		*77 - 120*		*04/03/20 12:13*	*1*

Lab Sample ID: LCS 480-524165/5
Matrix: Water
Analysis Batch: 524165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	52 - 162
1,1-Dichloroethane	20.0	24.3		ug/L		122	59 - 155
1,1-Dichloroethene	20.0	24.0		ug/L		120	1 - 234
Benzene	20.0	23.5		ug/L		118	37 - 151
Chlorobenzene	20.0	19.9		ug/L		99	37 - 160
Chloroethane	20.0	24.0		ug/L		120	14 - 230
Toluene	20.0	19.5		ug/L		97	47 - 150
Trichloroethene	20.0	23.0		ug/L		115	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*
4-Bromofluorobenzene (Surr)	*112*		*76 - 123*
Toluene-d8 (Surr)	*94*		*77 - 120*

Lab Sample ID: 480-168086-2 MS
Matrix: Water
Analysis Batch: 524165

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		400	454		ug/L		113	52 - 162
1,1-Dichloroethane	ND		400	503		ug/L		126	59 - 155
1,1-Dichloroethene	ND		400	475		ug/L		119	1 - 234
Benzene	ND		400	472		ug/L		118	37 - 151
Chlorobenzene	ND		400	397		ug/L		99	37 - 160
Chloroethane	23		400	537		ug/L		129	14 - 230
Toluene	ND		400	379		ug/L		95	47 - 150
Trichloroethene	ND		400	455		ug/L		114	71 - 157

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		68 - 130
4-Bromofluorobenzene (Surr)	110		76 - 123
Toluene-d8 (Surr)	90		77 - 120

Lab Sample ID: 480-168086-2 MSD — **Client Sample ID: Influent**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 524165

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		400	434		ug/L		109	52 - 162	4	15
1,1-Dichloroethane	ND		400	499		ug/L		125	59 - 155	1	15
1,1-Dichloroethene	ND		400	476		ug/L		119	1 - 234	0	15
Benzene	ND		400	475		ug/L		119	37 - 151	1	15
Chlorobenzene	ND		400	391		ug/L		98	37 - 160	2	15
Chloroethane	23		400	537		ug/L		129	14 - 230	0	15
Toluene	ND		400	381		ug/L		95	47 - 150	1	15
Trichloroethene	ND		400	456		ug/L		114	71 - 157	0	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		68 - 130
4-Bromofluorobenzene (Surr)	109		76 - 123
Toluene-d8 (Surr)	90		77 - 120

Lab Sample ID: MB 480-524166/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 524166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			04/03/20 12:13	1
1,1-Dichloroethane	ND		5.0		ug/L			04/03/20 12:13	1
1,1-Dichloroethene	ND		5.0		ug/L			04/03/20 12:13	1
Benzene	ND		5.0		ug/L			04/03/20 12:13	1
Chlorobenzene	ND		5.0		ug/L			04/03/20 12:13	1
Chloroethane	ND		5.0		ug/L			04/03/20 12:13	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			04/03/20 12:13	1
Toluene	ND		5.0		ug/L			04/03/20 12:13	1
Trichloroethene	ND		5.0		ug/L			04/03/20 12:13	1
o-Chlorotoluene	ND		5.0		ug/L			04/03/20 12:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		68 - 130		04/03/20 12:13	1
4-Bromofluorobenzene (Surr)	107		76 - 123		04/03/20 12:13	1
Toluene-d8 (Surr)	91		77 - 120		04/03/20 12:13	1

Lab Sample ID: LCS 480-524166/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 524166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	52 - 162
1,1-Dichloroethane	20.0	24.3		ug/L		122	59 - 155

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-524166/5
Matrix: Water
Analysis Batch: 524166

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	24.0		ug/L		120	1 - 234
Benzene	20.0	23.5		ug/L		118	37 - 151
Chlorobenzene	20.0	19.9		ug/L		99	37 - 160
Chloroethane	20.0	24.0		ug/L		120	14 - 230
Toluene	20.0	19.5		ug/L		97	47 - 150
Trichloroethene	20.0	23.0		ug/L		115	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*68 - 130*
4-Bromofluorobenzene (Surr)	*112*		*76 - 123*
Toluene-d8 (Surr)	*94*		*77 - 120*

Lab Sample ID: 480-168086-2 MS
Matrix: Water
Analysis Batch: 524166

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		400	454		ug/L		113	52 - 162
1,1-Dichloroethane	ND		400	503		ug/L		126	59 - 155
1,1-Dichloroethene	ND		400	475		ug/L		119	1 - 234
Benzene	ND		400	472		ug/L		118	37 - 151
Chlorobenzene	ND		400	397		ug/L		99	37 - 160
Chloroethane	23		400	537		ug/L		129	14 - 230
Toluene	ND		400	379		ug/L		95	47 - 150
Trichloroethene	ND		400	455		ug/L		114	71 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*68 - 130*
4-Bromofluorobenzene (Surr)	*110*		*76 - 123*
Toluene-d8 (Surr)	*90*		*77 - 120*

Lab Sample ID: 480-168086-2 MSD
Matrix: Water
Analysis Batch: 524166

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		400	434		ug/L		109	52 - 162	4	15
1,1-Dichloroethane	ND		400	499		ug/L		125	59 - 155	1	15
1,1-Dichloroethene	ND		400	476		ug/L		119	1 - 234	0	15
Benzene	ND		400	475		ug/L		119	37 - 151	1	15
Chlorobenzene	ND		400	391		ug/L		98	37 - 160	2	15
Chloroethane	23		400	537		ug/L		129	14 - 230	0	15
Toluene	ND		400	381		ug/L		95	47 - 150	1	15
Trichloroethene	ND		400	456		ug/L		114	71 - 157	0	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*
4-Bromofluorobenzene (Surr)	*109*		*76 - 123*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-168086-2 MSD
Matrix: Water
Analysis Batch: 524166

Client Sample ID: Influent
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	*90*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-524119/1-A
Matrix: Water
Analysis Batch: 524481

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 524119

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		04/02/20 20:10	04/03/20 17:10	1

Lab Sample ID: LCS 480-524119/2-A
Matrix: Water
Analysis Batch: 524481

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 524119

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	20000	20430		ug/L		102	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-524083/1
Matrix: Water
Analysis Batch: 524083

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			04/02/20 15:17	1

Lab Sample ID: LCS 480-524083/2
Matrix: Water
Analysis Batch: 524083

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	295	296.0		mg/L		100	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-524450/45
Matrix: Water
Analysis Batch: 524450

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: 480-168086-2 DU
Matrix: Water
Analysis Batch: 524450

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.5	HF	7.5		SU		0.4	5
Temperature	19.2	HF	19.1		Degrees C		0.4	10

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

GC/MS VOA

Analysis Batch: 524165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-524165/7	Method Blank	Total/NA	Water	624.1	
LCS 480-524165/5	Lab Control Sample	Total/NA	Water	624.1	
480-168086-2 MS	Influent	Total/NA	Water	624.1	
480-168086-2 MSD	Influent	Total/NA	Water	624.1	

Analysis Batch: 524166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-168086-1	Effluent	Total/NA	Water	624.1	
480-168086-2	Influent	Total/NA	Water	624.1	
480-168086-3	Trip Blank	Total/NA	Water	624.1	
MB 480-524166/7	Method Blank	Total/NA	Water	624.1	
LCS 480-524166/5	Lab Control Sample	Total/NA	Water	624.1	
480-168086-2 MS	Influent	Total/NA	Water	624.1	
480-168086-2 MSD	Influent	Total/NA	Water	624.1	

Metals

Prep Batch: 524119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-168086-1	Effluent	Total Recoverable	Water	200.7	
480-168086-2	Influent	Total Recoverable	Water	200.7	
MB 480-524119/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-524119/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 524481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-168086-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	524119
480-168086-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	524119
MB 480-524119/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	524119
LCS 480-524119/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	524119

General Chemistry

Analysis Batch: 524083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-168086-1	Effluent	Total/NA	Water	SM 2540D	
480-168086-2	Influent	Total/NA	Water	SM 2540D	
MB 480-524083/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-524083/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 524450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-168086-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-168086-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-524450/45	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-168086-2 DU	Influent	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Client Sample ID: Effluent

Lab Sample ID: 480-168086-1

Date Collected: 04/02/20 09:30
Matrix: Water
Date Received: 04/02/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	524166	04/03/20 15:48	WJD	TAL BUF
Total Recoverable	Prep	200.7			524119	04/02/20 20:10	NSW	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	524481	04/03/20 18:13	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	524083	04/02/20 15:17	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	524450	04/05/20 17:36	BEF	TAL BUF

Client Sample ID: Influent

Lab Sample ID: 480-168086-2

Date Collected: 04/02/20 10:00
Matrix: Water
Date Received: 04/02/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		20	524166	04/03/20 16:11	WJD	TAL BUF
Total Recoverable	Prep	200.7			524119	04/02/20 20:10	NSW	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	524481	04/03/20 18:17	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	524083	04/02/20 15:17	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	524450	04/05/20 17:39	BEF	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 480-168086-3

Date Collected: 04/02/20 10:10
Matrix: Water
Date Received: 04/02/20 11:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	524166	04/03/20 16:36	WJD	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Waste Management
Job ID: 480-168086-1
Project/Site: ChemTrol Site: Monthly GW

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-02-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Recoverable Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-168086-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-168086-1	Effluent	Water	04/02/20 09:30	04/02/20 11:40	
480-168086-2	Influent	Water	04/02/20 10:00	04/02/20 11:40	
480-168086-3	Trip Blank	Water	04/02/20 10:10	04/02/20 11:40	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: S. Connelly	Lab PM: Ferguson, Katelyn M	Carrier Tracking No(s):	COC No: 480-140452-28522.1
Client Contact: Mr. Dino Zack	Phone:	E-Mail: katelyn.ferguson@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 257 West Genesee Street Suite 400	Due Date Requested:			
City: Buffalo	TAT Requested (days):			
State, Zip: NY, 14202-2657				
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 5070005494			
Email: dino.zack@aecom.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwat	Project #: 48002447			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	4/2/20	0930	G	Water			1	3	1	1		
Influent	↓	1000	G	Water			1	3	1	1		
Trip Blank	↓	1010	-	Water				3				

480-168086 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/2/20 1140	Aecom	[signature]	4/2/20 1140	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.4 #1 ICE

Ver: 01/16/2019

May 2020

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Chris Bourne Weather/Temperature: Partly Cloudy, 45F
Date: 5/5/2020 Arrival Time: 1130 Departure Time: 1245

Reason for Service: Inspect system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See comments section.
Building Exterior		
Overhead Door	X	Wood lintel decaying, header exposed.
Siding	X	Metal trim missing from lintel
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks		Condensation on the floor
Building Heater	X	Breaker turned on. Heater was off.
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	Ratchet straps are used to keep the trays together. Several of the clips for the trays are rusted/broken.
Iron Removal Filter	**X**	Tank in-line but filter media removed; not required.
Flow Meters	**X**	See Notes.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter	**X**	
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter	**X**	

Effluent Discharge

Outfall	**X**	
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	279 Inches
Flow Meter Reading	8444686 Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	173 Inches
Flow Meter Reading	28528520 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	196 Inches
Flow Meter Reading	15696380 Gallons

Air Stripper

Stripper Blower Pressure	16.5 Inches H2O

Effluent Flow

Total System Meter Reading	70,890,500 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7 (field test strip)
Effluent pH 7 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

Stripper blower pressure was at 17 inches H20 upon arrival, but fluctuated throughout from 16.0 to 18.0 inches H20. Pressure remained steady at 16.5 inches H20 before and after sampling.

Total system flow on system totalizer flow meter timed at 5 gpm. During visit, individually closed EW-1, EW-2, and EW-3 influent valve to test flow by reading response on transducer elevation; noted rise in transducer elevation when valve was closed and drop when valve was opened confirming well was pumping.

The SVE building overhead door flashing has wind and header damage.

The AS building overhead door flashing needs replacement.

The most recent round of water levels (1Q2020) were collected March 13, 2020.

The most recent acid wash was performed on March 12, 2020.

All wells were operational upon arrival and departure.

Table 1
May 5, 2020 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	6,703	6,703	144,000	gpd	NA	NA	NA
pH	7.3	8.2	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 9.1	< 5.0	5	ug/L	< 0.0003	0.006	lbs/day
Chlorobenzene	< 9.5	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
cis-1,2-Dichloroethene	< 11	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Benzene	< 12	< 5.0	5	ug/L	< 0.0003	0.006	lbs/day
1,1,1-Trichloroethane	< 7.7	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Chloroethane	26	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
1,1-Dichloroethane	< 12	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
1,1-Dichloroethene	< 17	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Trichloroethene	< 12	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
o-Chlorotoluene	1,700	7.3	10	ug/L	0.0004	0.012	lbs/day
Iron - Total	1,190	1,050	3,000	ug/L	0.06	3.61	lbs/day
TSS	< 4.0	10	20	mg/L	0.56		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured April 2, 2020 through May 5, 2020.*

Table 2
May 5, 2020 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 5/5/2020	units	Prior Report 4/2/2020
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	279	Inches	285
Flow Meter Reading	8,444,686	gallons	8,444,686
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	173	Inches	179
Flow Meter Reading	28,528,520	gallons	28,528,520
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	196	Inches	204
Flow Meter Reading	15,696,380	gallons	15,696,380
Air Stripper			
Stripper Blower Pressure	16.5	inches H_2O	16.0
Effluent Flow			
Total System Meter Reading	70,890,500	gallons	70,669,305
Average System Flow Since Prior Report	6,703	gpd	
	279.3	gph	
	4.7	gpm	
Influent o-Chlorotoluene concentration	1,700	ug/L	
Current month mass removal	1.4	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 480-169456-1
Client Project/Site: ChemTrol Site: Monthly GW
Sampling Event: ChemTrol Monthly Groundwater

For:
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Attn: Ryan Donovan

Roxanne Cisneros

Authorized for release by:
5/19/2020 11:14:06 AM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Case Narrative

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Job ID: 480-169456-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-169456-1

Comments
No additional comments.

Receipt
The samples were received on 5/5/2020 1:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 10.6º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-169456-2). Elevated reporting limits (RLs) are provided.

Method 624.1: The results reported for the following sample do not concur with results previously reported for this site: Effluent (480-169456-1). Reanalysis was performed, and the results confirmed.

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples have been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-169456-1) and Influent (480-169456-2).

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

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Client Sample ID: Effluent — Lab Sample ID: 480-169456-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	7.3		5.0		ug/L	1		624.1	Total/NA
Iron	1050		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	10		4.0		mg/L	1		SM 2540D	Total/NA
pH	8.2	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	17.8	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-169456-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	26		17		ug/L	20		624.1	Total/NA
o-Chlorotoluene	1700		6.6		ug/L	20		624.1	Total/NA
Iron	1190		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.3	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	17.9	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-169456-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Client Sample ID: Effluent

Date Collected: 05/05/20 12:15
Date Received: 05/05/20 13:30

Lab Sample ID: 480-169456-1

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/06/20 12:12	1
1,1-Dichloroethane	ND		5.0		ug/L			05/06/20 12:12	1
1,1-Dichloroethene	ND		5.0		ug/L			05/06/20 12:12	1
Benzene	ND		5.0		ug/L			05/06/20 12:12	1
Chlorobenzene	ND		5.0		ug/L			05/06/20 12:12	1
Chloroethane	ND		5.0		ug/L			05/06/20 12:12	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/06/20 12:12	1
Toluene	ND		5.0		ug/L			05/06/20 12:12	1
Trichloroethene	ND		5.0		ug/L			05/06/20 12:12	1
o-Chlorotoluene	**7.3**		5.0		ug/L			05/06/20 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*		*05/06/20 12:12*	*1*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*05/06/20 12:12*	*1*
Toluene-d8 (Surr)	*97*		*77 - 120*		*05/06/20 12:12*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1050**		50.0		ug/L		05/08/20 10:27	05/11/20 20:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**10**		4.0		mg/L			05/06/20 12:04	1
pH	**8.2**	**HF**	0.1		SU			05/07/20 15:36	1
Temperature	**17.8**	**HF**	0.001		Degrees C			05/07/20 15:36	1

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Client Sample ID: Influent

Date Collected: 05/05/20 12:00
Date Received: 05/05/20 13:30

Lab Sample ID: 480-169456-2

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		7.7		ug/L			05/06/20 12:36	20
1,1-Dichloroethane	ND		12		ug/L			05/06/20 12:36	20
1,1-Dichloroethene	ND		17		ug/L			05/06/20 12:36	20
Benzene	ND		12		ug/L			05/06/20 12:36	20
Chlorobenzene	ND		9.5		ug/L			05/06/20 12:36	20
Chloroethane	**26**		17		ug/L			05/06/20 12:36	20
cis-1,2-Dichloroethene	ND		11		ug/L			05/06/20 12:36	20
Toluene	ND		9.1		ug/L			05/06/20 12:36	20
Trichloroethene	ND		12		ug/L			05/06/20 12:36	20
o-Chlorotoluene	**1700**		6.6		ug/L			05/06/20 12:36	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*68 - 130*		*05/06/20 12:36*	*20*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*05/06/20 12:36*	*20*
Toluene-d8 (Surr)	*97*		*77 - 120*		*05/06/20 12:36*	*20*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1190**		50.0		ug/L		05/08/20 10:27	05/11/20 20:08	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			05/06/20 12:04	1
pH	**7.3**	**HF**	0.1		SU			05/07/20 15:37	1
Temperature	**17.9**	**HF**	0.001		Degrees C			05/07/20 15:37	1

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Client Sample ID: Trip Blank

Date Collected: 05/05/20 12:30
Date Received: 05/05/20 13:30

Lab Sample ID: 480-169456-3

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/06/20 13:00	1
1,1-Dichloroethane	ND		5.0		ug/L			05/06/20 13:00	1
1,1-Dichloroethene	ND		5.0		ug/L			05/06/20 13:00	1
Benzene	ND		5.0		ug/L			05/06/20 13:00	1
Chlorobenzene	ND		5.0		ug/L			05/06/20 13:00	1
Chloroethane	ND		5.0		ug/L			05/06/20 13:00	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/06/20 13:00	1
Toluene	ND		5.0		ug/L			05/06/20 13:00	1
Trichloroethene	ND		5.0		ug/L			05/06/20 13:00	1
o-Chlorotoluene	ND		5.0		ug/L			05/06/20 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*68 - 130*		*05/06/20 13:00*	*1*
4-Bromofluorobenzene (Surr)	*103*		*76 - 123*		*05/06/20 13:00*	*1*
Toluene-d8 (Surr)	*97*		*77 - 120*		*05/06/20 13:00*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-529897/7
Matrix: Water
Analysis Batch: 529897

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			05/06/20 11:07	1
1,1-Dichloroethane	ND		5.0		ug/L			05/06/20 11:07	1
1,1-Dichloroethene	ND		5.0		ug/L			05/06/20 11:07	1
Benzene	ND		5.0		ug/L			05/06/20 11:07	1
Chlorobenzene	ND		5.0		ug/L			05/06/20 11:07	1
Chloroethane	ND		5.0		ug/L			05/06/20 11:07	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			05/06/20 11:07	1
Toluene	ND		5.0		ug/L			05/06/20 11:07	1
Trichloroethene	ND		5.0		ug/L			05/06/20 11:07	1
o-Chlorotoluene	ND		5.0		ug/L			05/06/20 11:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*68 - 130*		*05/06/20 11:07*	*1*
4-Bromofluorobenzene (Surr)	*105*		*76 - 123*		*05/06/20 11:07*	*1*
Toluene-d8 (Surr)	*97*		*77 - 120*		*05/06/20 11:07*	*1*

Lab Sample ID: LCS 480-529897/5
Matrix: Water
Analysis Batch: 529897

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.8		ug/L		89	52 - 162
1,1-Dichloroethane	20.0	20.1		ug/L		101	59 - 155
1,1-Dichloroethene	20.0	18.9		ug/L		95	1 - 234
Benzene	20.0	19.4		ug/L		97	37 - 151
Chlorobenzene	20.0	17.6		ug/L		88	37 - 160
Chloroethane	20.0	19.3		ug/L		97	14 - 230
Toluene	20.0	17.2		ug/L		86	47 - 150
Trichloroethene	20.0	19.1		ug/L		95	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*
4-Bromofluorobenzene (Surr)	*105*		*76 - 123*
Toluene-d8 (Surr)	*98*		*77 - 120*

Lab Sample ID: 480-169456-2 MS
Matrix: Water
Analysis Batch: 529897

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		400	374		ug/L		94	52 - 162
1,1-Dichloroethane	ND		400	454		ug/L		113	59 - 155
1,1-Dichloroethene	ND		400	410		ug/L		103	1 - 234
Benzene	ND		400	423		ug/L		106	37 - 151
Chlorobenzene	ND		400	381		ug/L		95	37 - 160
Chloroethane	26		400	497		ug/L		118	14 - 230
Toluene	ND		400	368		ug/L		92	47 - 150
Trichloroethene	ND		400	415		ug/L		104	71 - 157

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*107*		*68 - 130*
4-Bromofluorobenzene (Surr)	*106*		*76 - 123*
Toluene-d8 (Surr)	*97*		*77 - 120*

Lab Sample ID: 480-169456-2 MSD
Matrix: Water
Analysis Batch: 529897

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		400	370		ug/L		93	52 - 162	1	15
1,1-Dichloroethane	ND		400	449		ug/L		112	59 - 155	1	15
1,1-Dichloroethene	ND		400	399		ug/L		100	1 - 234	3	15
Benzene	ND		400	411		ug/L		103	37 - 151	3	15
Chlorobenzene	ND		400	372		ug/L		93	37 - 160	2	15
Chloroethane	26		400	477		ug/L		113	14 - 230	4	15
Toluene	ND		400	356		ug/L		89	47 - 150	4	15
Trichloroethene	ND		400	403		ug/L		101	71 - 157	3	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*105*		*68 - 130*
4-Bromofluorobenzene (Surr)	*105*		*76 - 123*
Toluene-d8 (Surr)	*98*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-530150/1-A
Matrix: Water
Analysis Batch: 531085

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 530150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		05/08/20 10:27	05/11/20 19:26	1

Lab Sample ID: LCS 480-530150/2-A
Matrix: Water
Analysis Batch: 531085

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 530150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	9882		ug/L		99	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-529970/1
Matrix: Water
Analysis Batch: 529970

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			05/06/20 12:04	1

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 480-529970/2
Matrix: Water
Analysis Batch: 529970

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	275	270.0		mg/L		98	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-530349/23
Matrix: Water
Analysis Batch: 530349

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		101	99 - 101

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

GC/MS VOA

Analysis Batch: 529897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-169456-1	Effluent	Total/NA	Water	624.1	
480-169456-2	Influent	Total/NA	Water	624.1	
480-169456-3	Trip Blank	Total/NA	Water	624.1	
MB 480-529897/7	Method Blank	Total/NA	Water	624.1	
LCS 480-529897/5	Lab Control Sample	Total/NA	Water	624.1	
480-169456-2 MS	Influent	Total/NA	Water	624.1	
480-169456-2 MSD	Influent	Total/NA	Water	624.1	

Metals

Prep Batch: 530150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-169456-1	Effluent	Total Recoverable	Water	200.7	
480-169456-2	Influent	Total Recoverable	Water	200.7	
MB 480-530150/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-530150/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 531085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-169456-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	530150
480-169456-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	530150
MB 480-530150/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	530150
LCS 480-530150/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	530150

General Chemistry

Analysis Batch: 529970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-169456-1	Effluent	Total/NA	Water	SM 2540D	
480-169456-2	Influent	Total/NA	Water	SM 2540D	
MB 480-529970/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-529970/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 530349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-169456-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-169456-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-530349/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Waste Management
Job ID: 480-169456-1
Project/Site: ChemTrol Site: Monthly GW

Client Sample ID: Effluent
Lab Sample ID: 480-169456-1
Date Collected: 05/05/20 12:15
Matrix: Water
Date Received: 05/05/20 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	529897	05/06/20 12:12	WJD	TAL BUF
Total Recoverable	Prep	200.7			530150	05/08/20 10:27	NSW	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	531085	05/11/20 20:04	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	529970	05/06/20 12:04	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	530349	05/07/20 15:36	DLG	TAL BUF

Client Sample ID: Influent
Lab Sample ID: 480-169456-2
Date Collected: 05/05/20 12:00
Matrix: Water
Date Received: 05/05/20 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		20	529897	05/06/20 12:36	WJD	TAL BUF
Total Recoverable	Prep	200.7			530150	05/08/20 10:27	NSW	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	531085	05/11/20 20:08	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	529970	05/06/20 12:04	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	530349	05/07/20 15:37	DLG	TAL BUF

Client Sample ID: Trip Blank
Lab Sample ID: 480-169456-3
Date Collected: 05/05/20 12:30
Matrix: Water
Date Received: 05/05/20 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	529897	05/06/20 13:00	WJD	TAL BUF

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

Accreditation/Certification Summary

Client: Waste Management
Job ID: 480-169456-1
Project/Site: ChemTrol Site: Monthly GW

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-02-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Recoverable Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-169456-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-169456-1	Effluent	Water	05/05/20 12:15	05/05/20 13:30	
480-169456-2	Influent	Water	05/05/20 12:00	05/05/20 13:30	
480-169456-3	Trip Blank	Water	05/05/20 12:30	05/05/20 13:30	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Chris Bourne	Lab PM: Ferguson, Katelyn M	Carrier Tracking No(s):	COC No: 480-143620-28522.1
Client Contact: Mr. Dino Zack	Phone: 716-783-6286	E-Mail: katelyn.ferguson@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:

Address: 257 West Genesee Street Suite 400	Due Date Requested:	Analysis Requested
City: Buffalo	TAT Requested (days): Standard	
State, Zip: NY, 14202-2657		
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 5070005494	
Email: dino.zack@aecom.com	WO #:	
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwat	Project #: 48002447	
Site: New York	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	5/5/20	1215	G	Water	N	N	1	3	1	1		
Influent	5/5/20	1200	G	Water	N	N	1	3	1	1		
Trip Blank	5/5/20	1230	-	Water	N	N		1				

480-169456 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/5/20	Company Aecom	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: FEDEX	Date/Time: 5/5/20 1330	Company TAB

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 10.6 # (ICE

Ver: 01/16/2019

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5/19/2020

June 2020

Operation, Maintenance & Monitoring Checklist

Groundwater Treatment System
CHEM-TROL Site
Town of Hamburg, New York

This summary inspection checklist is to be completed during each site inspection. Note all items, which require repair or maintenance. Use the last page to note any additional comments or unusual events.

General

Service by: Chris Bourne & Tom Urban Weather/Temperature: Cloudy, 68F
Date: 6/2/2020 Arrival Time: 1300 Departure Time: 1530

Reason for Service: Inspect system

Inspection Items:	OK:	Comments:
Site Appearance/Condition	X	See comments section.
Building Exterior		
Overhead Door	X	Wood lintel decaying, header exposed.
Siding	X	Metal trim missing from lintel
Roof and Discharge Pipe	X	
Building Interior		
Indication of Spills or Leaks		Condensation on the floor
Building Heater	X	Breaker turned on. Heater was off.
Phone System	X	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	X	
First Aid & Eye Wash	X	

Groundwater Treatment System

Air Stripper	**X**	Ratchet straps are used to keep the trays together. Several of the clips for the trays are rusted/broken.
Iron Removal Filter	**X**	Tank in-line but filter media removed; not required.
Flow Meters	**X**	See Notes.
Gauges	**X**	
Stripper Blower	**X**	
Indication of Alarm	**X**	

Groundwater Treatment Wells

EW-1 Pump	**X**	
EW-1 Transducer	**X**	
EW-1 Flow Meter	**X**	
EW-2 Pump	**X**	
EW-2 Transducer	**X**	
EW- 2 Flow Meter	**X**	
EW-3 Pump	**X**	
EW-3 Transducer	**X**	
EW-3 Flow Meter	**X**	

Effluent Discharge

Outfall	**X**	
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	277 Inches
Flow Meter Reading	8,444,686 Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	169 Inches
Flow Meter Reading	28,528,520 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	188 Inches
Flow Meter Reading	15,696,380 Gallons

Air Stripper

Stripper Blower Pressure	16.0 Inches H2O

Effluent Flow

Total System Meter Reading	71,106,221 Gallons

Influent/Effluent Sampling

AQUEOUS:
Monthly monitoring samples of aqueous phase system influent and effluent were collected and submitted for the following analyses:

- VOCs by EPA Method 624 (CFR136 624)
- Iron by MCAWW 200.7
- TSS by MCAWW SM18-20 2540 D
- pH by MCAWW SM18-20 4500-H+B

pH measurements must be made in the field:

Influent pH 7 (field test strip)
Effluent pH 7 (field test strip)

Notes/Explanations
(Please include any additional information on those items that require attention as indicated above.)

Total system flow on system totalizer flow meter timed at 4.0 gpm. During visit, individually closed EW-1, EW-2, and EW-3 influent valve to test flow by reading response on transducer elevation; noted rise in transducer elevation when valve was closed and drop when valve was opened confirming well was pumping.

The SVE building overhead door flashing has wind and header damage.

The AS building overhead door flashing needs replacement.

The most recent round of water levels (2Q2020) were collected today, June 2, 2020.

The most recent acid wash was performed on May 27, 2020.

All wells were operational upon arrival and departure.

Table 1
June 2, 2020 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Parameters	Concentration				Mass Loading		
	Influent	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	7,990	7,990	144,000	gpd	NA	NA	NA
pH	7.3	7.9	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0003	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0003	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0003	0.012	lbs/day
o-Chlorotoluene	2,100	**13**	10	ug/L	0.0009	0.012	lbs/day
Iron - Total	1,480	1,410	3,000	ug/L	0.09	3.61	lbs/day
TSS	6.0	5.2	20	mg/L	0.35		lbs/day

Notes:

*1) **Bold** typeface denotes exceedance of treatment requirements in the effluent sample.*

2) < indicates Not Detected at or above the laboratory reporting limit.

3) NA indicates Not Applicable.

4) "J" indicates an estimated concentration below the method detection limit.

5) E - Estimated Value, result above calibration curve

6) D - Dilution

7) Revision of monitoring parameters (inorganics and TSS) and discharge limitation (iron) approved by NYSDEC letter dated July 27, 2007.

** Average daily flow as measured May 5, 2020 through June 2, 2020.*

Table 2
June 2, 2020 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 6/2/2020	units	Prior Report 5/5/2020
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	277	Inches	279
Flow Meter Reading	8,444,686	gallons	8,444,686
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	169	Inches	173
Flow Meter Reading	28,528,520	gallons	28,528,520
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	188	Inches	196
Flow Meter Reading	15,696,380	gallons	15,696,380
Air Stripper			
Stripper Blower Pressure	16.0	inches H_2O	16.5
Effluent Flow			
Total System Meter Reading	71,106,221	gallons	70,890,500
Average System Flow Since Prior Report	7,990	gpd	
	332.9	gph	
	5.5	gpm	
Influent o-Chlorotoluene concentration	2,100	ug/L	
Current month mass removal	1.7	kilograms	

Note: NA indicates Not Available.
NW - Not working
ug/L - micrograms per liter

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ANALYTICAL REPORT

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

Laboratory Job ID: 480-170684-1
Client Project/Site: ChemTrol Site: Monthly GW
Sampling Event: ChemTrol Monthly Groundwater

For:
Waste Management
600 New Ludlow Road
South Hadley, Massachusetts 01075

Attn: Ryan Donovan

Roxanne Cisneros

Authorized for release by:
6/8/2020 5:09:37 PM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

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

Job ID: 480-170684-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-170684-1

Comments
No additional comments.

Receipt
The samples were received on 6/2/2020 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent (480-170684-2), (480-170684-E-2 MS) and (480-170684-E-2 MSD). Elevated reporting limits (RLs) are provided.

Method 624.1: The results reported for the following sample does not concur with results previously reported for this site: Effluent (480-170684-1). Reanalysis was performed, and the result confirmed.

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

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

General Chemistry
Methods SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-170684-1) and Influent (480-170684-2).

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

Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Client Sample ID: Effluent — Lab Sample ID: 480-170684-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	13		5.0		ug/L	1		624.1	Total/NA
Iron	1410		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	5.2		4.0		mg/L	1		SM 2540D	Total/NA
pH	7.9	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-170684-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2100	F1	13		ug/L	40		624.1	Total/NA
Iron	1480		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	6.0		4.0		mg/L	1		SM 2540D	Total/NA
pH	7.3	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	16.7	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-170684-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Client Sample ID: Effluent

Date Collected: 06/02/20 15:00
Date Received: 06/02/20 16:00

Lab Sample ID: 480-170684-1

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/03/20 17:45	1
1,1-Dichloroethane	ND		5.0		ug/L			06/03/20 17:45	1
1,1-Dichloroethene	ND		5.0		ug/L			06/03/20 17:45	1
Benzene	ND		5.0		ug/L			06/03/20 17:45	1
Chlorobenzene	ND		5.0		ug/L			06/03/20 17:45	1
Chloroethane	ND		5.0		ug/L			06/03/20 17:45	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/03/20 17:45	1
Toluene	ND		5.0		ug/L			06/03/20 17:45	1
Trichloroethene	ND		5.0		ug/L			06/03/20 17:45	1
o-Chlorotoluene	**13**		5.0		ug/L			06/03/20 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*68 - 130*		*06/03/20 17:45*	*1*
4-Bromofluorobenzene (Surr)	*120*		*76 - 123*		*06/03/20 17:45*	*1*
Toluene-d8 (Surr)	*94*		*77 - 120*		*06/03/20 17:45*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1410**		50.0		ug/L		06/04/20 11:34	06/05/20 02:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**5.2**		4.0		mg/L			06/03/20 16:53	1
pH	**7.9**	**HF**	0.1		SU			06/07/20 14:56	1
Temperature	**16.4**	**HF**	0.001		Degrees C			06/07/20 14:56	1

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Client Sample ID: Influent

Date Collected: 06/02/20 14:40
Date Received: 06/02/20 16:00

Lab Sample ID: 480-170684-2

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			06/04/20 11:55	40
1,1-Dichloroethane	ND		24		ug/L			06/04/20 11:55	40
1,1-Dichloroethene	ND		34		ug/L			06/04/20 11:55	40
Benzene	ND		24		ug/L			06/04/20 11:55	40
Chlorobenzene	ND		19		ug/L			06/04/20 11:55	40
Chloroethane	ND		35		ug/L			06/04/20 11:55	40
cis-1,2-Dichloroethene	ND		23		ug/L			06/04/20 11:55	40
Toluene	ND		18		ug/L			06/04/20 11:55	40
Trichloroethene	ND		24		ug/L			06/04/20 11:55	40
o-Chlorotoluene	**2100**	**F1**	13		ug/L			06/04/20 11:55	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*68 - 130*		*06/04/20 11:55*	*40*
4-Bromofluorobenzene (Surr)	*115*		*76 - 123*		*06/04/20 11:55*	*40*
Toluene-d8 (Surr)	*93*		*77 - 120*		*06/04/20 11:55*	*40*

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1480**		50.0		ug/L		06/04/20 11:34	06/05/20 02:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**6.0**		4.0		mg/L			06/03/20 16:53	1
pH	**7.3**	**HF**	0.1		SU			06/07/20 14:59	1
Temperature	**16.7**	**HF**	0.001		Degrees C			06/07/20 14:59	1

Client Sample Results

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Client Sample ID: Trip Blank

Date Collected: 06/02/20 00:00
Date Received: 06/02/20 16:00

Lab Sample ID: 480-170684-3

Matrix: Water

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/03/20 18:33	1
1,1-Dichloroethane	ND		5.0		ug/L			06/03/20 18:33	1
1,1-Dichloroethene	ND		5.0		ug/L			06/03/20 18:33	1
Benzene	ND		5.0		ug/L			06/03/20 18:33	1
Chlorobenzene	ND		5.0		ug/L			06/03/20 18:33	1
Chloroethane	ND		5.0		ug/L			06/03/20 18:33	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/03/20 18:33	1
Toluene	ND		5.0		ug/L			06/03/20 18:33	1
Trichloroethene	ND		5.0		ug/L			06/03/20 18:33	1
o-Chlorotoluene	ND		5.0		ug/L			06/03/20 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*68 - 130*		*06/03/20 18:33*	*1*
4-Bromofluorobenzene (Surr)	*115*		*76 - 123*		*06/03/20 18:33*	*1*
Toluene-d8 (Surr)	*93*		*77 - 120*		*06/03/20 18:33*	*1*

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-534500/7
Matrix: Water
Analysis Batch: 534500

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/03/20 10:44	1
1,1-Dichloroethane	ND		5.0		ug/L			06/03/20 10:44	1
1,1-Dichloroethene	ND		5.0		ug/L			06/03/20 10:44	1
Benzene	ND		5.0		ug/L			06/03/20 10:44	1
Chlorobenzene	ND		5.0		ug/L			06/03/20 10:44	1
Chloroethane	ND		5.0		ug/L			06/03/20 10:44	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/03/20 10:44	1
Toluene	ND		5.0		ug/L			06/03/20 10:44	1
Trichloroethene	ND		5.0		ug/L			06/03/20 10:44	1
o-Chlorotoluene	ND		5.0		ug/L			06/03/20 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*68 - 130*		*06/03/20 10:44*	*1*
4-Bromofluorobenzene (Surr)	*115*		*76 - 123*		*06/03/20 10:44*	*1*
Toluene-d8 (Surr)	*95*		*77 - 120*		*06/03/20 10:44*	*1*

Lab Sample ID: LCS 480-534500/5
Matrix: Water
Analysis Batch: 534500

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	17.9		ug/L		89	52 - 162
1,1-Dichloroethane	20.0	19.5		ug/L		98	59 - 155
1,1-Dichloroethene	20.0	20.2		ug/L		101	1 - 234
Benzene	20.0	19.1		ug/L		95	37 - 151
Chlorobenzene	20.0	17.7		ug/L		89	37 - 160
Chloroethane	20.0	20.2		ug/L		101	14 - 230
Toluene	20.0	17.3		ug/L		86	47 - 150
Trichloroethene	20.0	18.0		ug/L		90	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*68 - 130*
4-Bromofluorobenzene (Surr)	*122*		*76 - 123*
Toluene-d8 (Surr)	*95*		*77 - 120*

Lab Sample ID: MB 480-534702/7
Matrix: Water
Analysis Batch: 534702

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/04/20 10:57	1
1,1-Dichloroethane	ND		5.0		ug/L			06/04/20 10:57	1
1,1-Dichloroethene	ND		5.0		ug/L			06/04/20 10:57	1
Benzene	ND		5.0		ug/L			06/04/20 10:57	1
Chlorobenzene	ND		5.0		ug/L			06/04/20 10:57	1
Chloroethane	ND		5.0		ug/L			06/04/20 10:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/04/20 10:57	1
Toluene	ND		5.0		ug/L			06/04/20 10:57	1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-534702/7
Matrix: Water
Analysis Batch: 534702

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0		ug/L			06/04/20 10:57	1
o-Chlorotoluene	ND		5.0		ug/L			06/04/20 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*68 - 130*		*06/04/20 10:57*	*1*
4-Bromofluorobenzene (Surr)	*117*		*76 - 123*		*06/04/20 10:57*	*1*
Toluene-d8 (Surr)	*92*		*77 - 120*		*06/04/20 10:57*	*1*

Lab Sample ID: LCS 480-534702/5
Matrix: Water
Analysis Batch: 534702

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.5		ug/L		98	52 - 162
1,1-Dichloroethane	20.0	21.0		ug/L		105	59 - 155
1,1-Dichloroethene	20.0	20.9		ug/L		104	1 - 234
Benzene	20.0	20.0		ug/L		100	37 - 151
Chlorobenzene	20.0	19.2		ug/L		96	37 - 160
Chloroethane	20.0	21.4		ug/L		107	14 - 230
Toluene	20.0	18.5		ug/L		92	47 - 150
Trichloroethene	20.0	20.1		ug/L		100	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*68 - 130*
4-Bromofluorobenzene (Surr)	*116*		*76 - 123*
Toluene-d8 (Surr)	*94*		*77 - 120*

Lab Sample ID: 480-170684-2 MS
Matrix: Water
Analysis Batch: 534702

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		800	773		ug/L		97	52 - 162
1,1-Dichloroethane	ND		800	891		ug/L		111	59 - 155
1,1-Dichloroethene	ND		800	862		ug/L		108	1 - 234
Benzene	ND		800	821		ug/L		103	37 - 151
Chlorobenzene	ND		800	773		ug/L		97	37 - 160
Chloroethane	ND		800	959		ug/L		120	14 - 230
Toluene	ND		800	760		ug/L		95	47 - 150
Trichloroethene	ND		800	812		ug/L		102	71 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*68 - 130*
4-Bromofluorobenzene (Surr)	*117*		*76 - 123*
Toluene-d8 (Surr)	*93*		*77 - 120*

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-170684-2 MSD
Matrix: Water
Analysis Batch: 534702

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		800	705		ug/L		88	52 - 162	9	15
1,1-Dichloroethane	ND		800	792		ug/L		99	59 - 155	12	15
1,1-Dichloroethene	ND		800	788		ug/L		98	1 - 234	9	15
Benzene	ND		800	790		ug/L		99	37 - 151	4	15
Chlorobenzene	ND		800	746		ug/L		93	37 - 160	4	15
Chloroethane	ND		800	876		ug/L		110	14 - 230	9	15
Toluene	ND		800	727		ug/L		91	47 - 150	4	15
Trichloroethene	ND		800	770		ug/L		96	71 - 157	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*
4-Bromofluorobenzene (Surr)	*115*		*76 - 123*
Toluene-d8 (Surr)	*94*		*77 - 120*

Lab Sample ID: MB 480-534704/7
Matrix: Water
Analysis Batch: 534704

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			06/04/20 10:57	1
1,1-Dichloroethane	ND		5.0		ug/L			06/04/20 10:57	1
1,1-Dichloroethene	ND		5.0		ug/L			06/04/20 10:57	1
Benzene	ND		5.0		ug/L			06/04/20 10:57	1
Chlorobenzene	ND		5.0		ug/L			06/04/20 10:57	1
Chloroethane	ND		5.0		ug/L			06/04/20 10:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			06/04/20 10:57	1
Toluene	ND		5.0		ug/L			06/04/20 10:57	1
Trichloroethene	ND		5.0		ug/L			06/04/20 10:57	1
o-Chlorotoluene	ND		5.0		ug/L			06/04/20 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*68 - 130*		*06/04/20 10:57*	*1*
4-Bromofluorobenzene (Surr)	*117*		*76 - 123*		*06/04/20 10:57*	*1*
Toluene-d8 (Surr)	*92*		*77 - 120*		*06/04/20 10:57*	*1*

Lab Sample ID: LCS 480-534704/5
Matrix: Water
Analysis Batch: 534704

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.5		ug/L		98	52 - 162
1,1-Dichloroethane	20.0	21.0		ug/L		105	59 - 155
1,1-Dichloroethene	20.0	20.9		ug/L		104	1 - 234
Benzene	20.0	20.0		ug/L		100	37 - 151
Chlorobenzene	20.0	19.2		ug/L		96	37 - 160
Chloroethane	20.0	21.4		ug/L		107	14 - 230
Toluene	20.0	18.5		ug/L		92	47 - 150
Trichloroethene	20.0	20.1		ug/L		100	71 - 157

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*87*		*68 - 130*
4-Bromofluorobenzene (Surr)	*116*		*76 - 123*
Toluene-d8 (Surr)	*94*		*77 - 120*

Lab Sample ID: 480-170684-2 MS
Matrix: Water
Analysis Batch: 534704

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		800	773		ug/L		97	52 - 162
1,1-Dichloroethane	ND		800	891		ug/L		111	59 - 155
1,1-Dichloroethene	ND		800	862		ug/L		108	1 - 234
Benzene	ND		800	821		ug/L		103	37 - 151
Chlorobenzene	ND		800	773		ug/L		97	37 - 160
Chloroethane	ND		800	959		ug/L		120	14 - 230
Toluene	ND		800	760		ug/L		95	47 - 150
Trichloroethene	ND		800	812		ug/L		102	71 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*88*		*68 - 130*
4-Bromofluorobenzene (Surr)	*117*		*76 - 123*
Toluene-d8 (Surr)	*93*		*77 - 120*

Lab Sample ID: 480-170684-2 MSD
Matrix: Water
Analysis Batch: 534704

Client Sample ID: Influent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		800	705		ug/L		88	52 - 162	9	15
1,1-Dichloroethane	ND		800	792		ug/L		99	59 - 155	12	15
1,1-Dichloroethene	ND		800	788		ug/L		98	1 - 234	9	15
Benzene	ND		800	790		ug/L		99	37 - 151	4	15
Chlorobenzene	ND		800	746		ug/L		93	37 - 160	4	15
Chloroethane	ND		800	876		ug/L		110	14 - 230	9	15
Toluene	ND		800	727		ug/L		91	47 - 150	4	15
Trichloroethene	ND		800	770		ug/L		96	71 - 157	5	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*
4-Bromofluorobenzene (Surr)	*115*		*76 - 123*
Toluene-d8 (Surr)	*94*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-534723/1-A
Matrix: Water
Analysis Batch: 534918

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 534723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		06/04/20 11:34	06/05/20 02:04	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-534723/2-A
Matrix: Water
Analysis Batch: 534918

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 534723

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10000	10220		ug/L		102	85 - 115		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-534655/1
Matrix: Water
Analysis Batch: 534655

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			06/03/20 16:53	1

Lab Sample ID: LCS 480-534655/2
Matrix: Water
Analysis Batch: 534655

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			244	238.0		mg/L		98	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-535201/1
Matrix: Water
Analysis Batch: 535201

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.0		SU		100	99 - 101		

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

GC/MS VOA

Analysis Batch: 534500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170684-1	Effluent	Total/NA	Water	624.1	
480-170684-3	Trip Blank	Total/NA	Water	624.1	
MB 480-534500/7	Method Blank	Total/NA	Water	624.1	
LCS 480-534500/5	Lab Control Sample	Total/NA	Water	624.1	

Analysis Batch: 534702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-534702/7	Method Blank	Total/NA	Water	624.1	
LCS 480-534702/5	Lab Control Sample	Total/NA	Water	624.1	
480-170684-2 MS	Influent	Total/NA	Water	624.1	
480-170684-2 MSD	Influent	Total/NA	Water	624.1	

Analysis Batch: 534704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170684-2	Influent	Total/NA	Water	624.1	
MB 480-534704/7	Method Blank	Total/NA	Water	624.1	
LCS 480-534704/5	Lab Control Sample	Total/NA	Water	624.1	
480-170684-2 MS	Influent	Total/NA	Water	624.1	
480-170684-2 MSD	Influent	Total/NA	Water	624.1	

Metals

Prep Batch: 534723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170684-1	Effluent	Total Recoverable	Water	200.7	
480-170684-2	Influent	Total Recoverable	Water	200.7	
MB 480-534723/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-534723/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 534918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170684-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	534723
480-170684-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	534723
MB 480-534723/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	534723
LCS 480-534723/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	534723

General Chemistry

Analysis Batch: 534655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170684-1	Effluent	Total/NA	Water	SM 2540D	
480-170684-2	Influent	Total/NA	Water	SM 2540D	
MB 480-534655/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-534655/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 535201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-170684-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-170684-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-535201/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Waste Management
Job ID: 480-170684-1
Project/Site: ChemTrol Site: Monthly GW

Client Sample ID: Effluent
Lab Sample ID: 480-170684-1
Date Collected: 06/02/20 15:00
Matrix: Water
Date Received: 06/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	534500	06/03/20 17:45	WJD	TAL BUF
Total Recoverable	Prep	200.7			534723	06/04/20 11:34	NSW	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	534918	06/05/20 02:41	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	534655	06/03/20 16:53	E1T	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	535201	06/07/20 14:56	BEF	TAL BUF

Client Sample ID: Influent
Lab Sample ID: 480-170684-2
Date Collected: 06/02/20 14:40
Matrix: Water
Date Received: 06/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	534704	06/04/20 11:55	WJD	TAL BUF
Total Recoverable	Prep	200.7			534723	06/04/20 11:34	NSW	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	534918	06/05/20 02:45	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	534655	06/03/20 16:53	E1T	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	535201	06/07/20 14:59	BEF	TAL BUF

Client Sample ID: Trip Blank
Lab Sample ID: 480-170684-3
Date Collected: 06/02/20 00:00
Matrix: Water
Date Received: 06/02/20 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	534500	06/03/20 18:33	WJD	TAL BUF

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

Accreditation/Certification Summary

Client: Waste Management
Job ID: 480-170684-1
Project/Site: ChemTrol Site: Monthly GW

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-02-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	o-Chlorotoluene
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Recoverable Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

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

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site: Monthly GW

Job ID: 480-170684-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-170684-1	Effluent	Water	06/02/20 15:00	06/02/20 16:00	
480-170684-2	Influent	Water	06/02/20 14:40	06/02/20 16:00	
480-170684-3	Trip Blank	Water	06/02/20 00:00	06/02/20 16:00	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: C. Bouse / T. Urban	Lab PM: Ferguson, Katelyn M	Carrier Tracking No(s):	COC No: 480-143621-28522.1
Client Contact: Mr. Dino Zack	Phone: 716-783-6286	E-Mail: katelyn.ferguson@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:

Address: 257 West Genesee Street Suite 400	Due Date Requested:	Analysis Requested	Preservation Codes: A - HCL M - Hexane
City: Buffalo	TAT Requested (days): Standard		
State, Zip: NY, 14202-2657			
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 5070005494		
Email: dino.zack@aecom.com	WO #:		
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwat	Project #: 48002447		
Site: New York	SSOW#:		Other:

480-170684 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	624.1_PREC - 624	2540D - Total Suspended Solids	SM4500_H+ - pH	Total Number of contai	Special Instructions/Note:
			Preservation Code:				D	A	N	N		
Effluent	6/2/20	1500	G	Water	N	N	1	3	1	1		
Influent	6/2/20	1440	G	Water	N	N	1	3	1	1		
Trip Blank	6/2/20	—	—	Water				1				

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 6/2/20	Company: Aecom	Received by: Unknown	Date/Time: 6/2/20	Company: TA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 3.4

Ver: 01/16/2019