

## **First Quarter 2022 – January, February, March Operation, Maintenance, and Monitoring Report**

**CHEM-TROL Site  
NYSDEC Site No. 9-15-015  
Report.hw915015.2022-04-22.1Q2022OMM**

**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:**

SC Holdings, Inc.  
600 New Ludlow Road  
South Hadley, MA 01075

**Prepared by:**

AECOM  
1 John James Audubon Parkway, Suite 210  
Amherst, New York 14228

April 22, 2022

AECOM Project No. 60652207.3



AECOM  
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716 856 5636 tel  
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April 22, 2022

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  
First Quarter 2022 Operation, Maintenance, and Monitoring Report  
Chem-Trol Site, NYSDEC Site No. 9-15-015, Report.hw915015.2022-04-22.1Q2022OMM

Dear Mr. May:

Enclosed please find the First Quarter 2022 (1Q22 – January, February, March) Operation, Maintenance, and Monitoring Report for the “Chem-Trol” project site. AECOM is submitting this quarterly monitoring report on behalf of our client, SC Holdings, Inc.

The enclosed report contains the following information for 1Q22:

- 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 1Q22 is as follows:

#### January 2022

AECOM collected the monthly monitoring samples on January 5 2022; analytical data were received on January 18, 2022. As presented on Table 1 (January 5, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

#### February 2022

AECOM collected the monthly monitoring samples on February 23, 2022; analytical data were received on March 3, 2022. As presented on Table 1 (February 23, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

#### March 2022

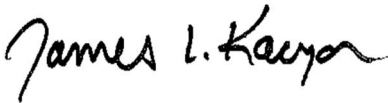
On March 17, 2022, AECOM performed pressure washing and mechanical cleaning of the air stripper trays.

AECOM collected the monthly monitoring samples on March 24, 2022; analytical data were received on April 7, 2022. As presented on Table 1 (March 24, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

On March 15, 2022, AECOM collected the 1Q22 quarterly groundwater levels.

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

Very truly yours,  
AECOM

A handwritten signature in black ink that reads "James L. Kaczor". The signature is written in a cursive, flowing style.

James L. Kaczor  
Project Manager

Enclosure

cc: Ryan Donovan (SC Holdings, Inc.) (electronic copy)  
60652207 Project File

January 2022

## 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: Overcast, 28 F

Date: 1/5/2022 Arrival Time: 16:00 Departure Time: 17:15

Reason for Service: Inspect system and perform monthly sampling

<u>Inspection Items:</u>	<u>OK:</u>	<u>Comments:</u>
Site Appearance/Condition	<u>X</u>	<u>See Notes/Explanations section.</u>
<b><i>Building Exterior</i></b>		
Overhead Door	<u>X</u>	<u>Wood lintel decaying, header exposed.</u>
Siding	<u>X</u>	<u>Metal trim missing from lintel.</u>
Roof and Discharge Pipe	<u>X</u>	<u></u>
<b><i>Building Interior</i></b>		
Indication of Spills or Leaks	<u></u>	<u>None</u>
Building Heater	<u>X</u>	<u>Heater is on.</u>
Phone System	<u>X</u>	<u>Disconnected</u>
Exhaust Fan	<u></u>	<u>Could not get fan to work.</u>
Fire Extinguisher	<u>X</u>	<u></u>
First Aid & Eye Wash	<u>X</u>	<u></u>

***Groundwater Treatment System***

Air Stripper	<b>X</b>	
Iron Removal Filter	<b>NA</b>	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	<b>X</b>	See Notes/Explanations section.
Gauges	<b>X</b>	
Stripper Blower	<b>X</b>	
Indication of Alarm	<b>X</b>	

***Groundwater Treatment Wells***

EW-1 Pump	<b>X</b>	Pump is currently down
EW-1 Transducer	<b>X</b>	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	<b>X</b>	
EW-2 Transducer	<b>X</b>	
EW- 2 Flow Meter	<b>X</b>	
EW-3 Pump	<b>X</b>	
EW-3 Transducer	<b>X</b>	
EW-3 Flow Meter	<b>X</b>	

***Effluent Discharge***

Outfall	<b>X</b>	
Cleanout	<b>X</b>	

**Instrumentation/Readings:**

***EW-1***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>294</u> Inches
Flow Meter Reading	<u>Not Working</u> Gallons

***EW-2***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>186</u> Inches
Flow Meter Reading	<u>28,528,922</u> Gallons

***EW-3***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>205</u> Inches
Flow Meter Reading	<u>15,696,383</u> Gallons

***Air Stripper***

Stripper Blower Pressure	<u>19.5</u> Inches H2O
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***Effluent Flow***

Total System Meter Reading	<u>72,663,348</u> 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	<u>7.0</u>	(field test strip)
Effluent pH	<u>7.0</u>	(field test strip)

### **Notes/Explanations**

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

The system was on upon arrival.

Total system flow was timed at 3.5 gpm on system totalizer flow meter. During the visit, EW-2, and EW-3 influent valves were individually closed 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 for EW-2 and EW-3. EW-1 is currently down.

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 (4Q2021) was collected on December 9, 2021.

The air stripper trays were last mechanically cleaned on December 1, 2021.

The monthly samples were collected today, January 5, 2021, by AECOM.



**Table 1**  
**January 5, 2022 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 *	2,567	2,567	144,000	gpd	NA	NA	NA
pH	7.2	7.9	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	2,100	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	1,370	927	3,000	ug/L	0.02	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.09		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 December 2, 2021 through January 5, 2022.

**Table 2**  
**January 5, 2022 Summary of Influent and Effluent Data**

**Chem-Trol Site**  
**Town of Hamburg, New York**

<b>Instrumentation/Readings:</b>		<b>Current Report</b>	<b>units</b>	<b>Prior Report</b>
<b><i>EW-1</i></b>		<b>1/5/2022</b>		<b>12/2/2021</b>
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	294	Inches	292
	Flow Meter Reading	NW	gallons	NW
<b><i>EW-2</i></b>				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	186	Inches	184
	Flow Meter Reading	28,528,922	gallons	28,528,920
<b><i>EW-3</i></b>				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	205	Inches	215
	Flow Meter Reading	15,696,383	gallons	15,696,383
<b><i>Air Stripper</i></b>				
	Stripper Blower Pressure	19.5	inches H <sub>2</sub> O	14.0
<b><i>Effluent Flow</i></b>				
	Total System Meter Reading	72,663,348	gallons	72,578,625
	Average System Flow Since Prior Report	2,567	gpd	
		107.0	gph	
		1.8	gpm	
	Influent o-Chlorotoluene concentration	2,100	ug/L	
	Current month mass removal	0.7	kilograms	

*Note: NA indicates Not Available.*

*NW - Not working*

*ug/L - micrograms per liter*

## ANALYTICAL REPORT

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

Laboratory Job ID: 480-193922-1

Client Project/Site: ChemTrol Site - Monthly  
Sampling Event: ChemTrol Monthly Groundwater

**For:**

Waste Management  
600 New Ludlow Road  
South Hadley, Massachusetts 01075

Attn: Ryan Donovan



Authorized for release by:

1/18/2022 2:28:23 PM

Joshua Velez, Project Management Assistant I  
[joshua.velez@eurofinset.com](mailto:joshua.velez@eurofinset.com)

Designee for

Ryan VanDette, Project Manager II  
(716)504-9830  
[Ryan.VanDette@Eurofinset.com](mailto:Ryan.VanDette@Eurofinset.com)

### LINKS

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

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

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



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## Definitions/Glossary

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

Job ID: 480-193922-1

### 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# Case Narrative

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

Job ID: 480-193922-1

**Job ID: 480-193922-1**

**Laboratory: Eurofins Buffalo**

## Narrative

### Job Narrative 480-193922-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 1/6/2022 1:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

#### GC/MS VOA

Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-193922-2). 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

Method 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 (480-193922-1) and Influent (480-193922-2).

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

Job ID: 480-193922-1

### Client Sample ID: Effluent

Lab Sample ID: 480-193922-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	927		50.0		ug/L	1		200.7 Rev 4.4	Total
									Recoverable
pH	7.9	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	22.3	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

### Client Sample ID: Influent

Lab Sample ID: 480-193922-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2100		13		ug/L	40		624.1	Total/NA
Iron	1370		50.0		ug/L	1		200.7 Rev 4.4	Total
									Recoverable
pH	7.2	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	22.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

### Client Sample ID: Trip Blank

Lab Sample ID: 480-193922-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Client Sample Results

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

Job ID: 480-193922-1

Client Sample ID: Effluent

Lab Sample ID: 480-193922-1

Date Collected: 01/05/22 16:10

Matrix: Water

Date Received: 01/06/22 13:00

## 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			01/06/22 17:38	1
1,1-Dichloroethane	ND		5.0		ug/L			01/06/22 17:38	1
1,1-Dichloroethene	ND		5.0		ug/L			01/06/22 17:38	1
Benzene	ND		5.0		ug/L			01/06/22 17:38	1
Chlorobenzene	ND		5.0		ug/L			01/06/22 17:38	1
Chloroethane	ND		5.0		ug/L			01/06/22 17:38	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			01/06/22 17:38	1
Toluene	ND		5.0		ug/L			01/06/22 17:38	1
Trichloroethene	ND		5.0		ug/L			01/06/22 17:38	1
o-Chlorotoluene	ND		5.0		ug/L			01/06/22 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		68 - 130		01/06/22 17:38	1
Dibromofluoromethane (Surr)	101		75 - 123		01/06/22 17:38	1
4-Bromofluorobenzene (Surr)	97		76 - 123		01/06/22 17:38	1
Toluene-d8 (Surr)	102		77 - 120		01/06/22 17:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	927		50.0		ug/L		01/07/22 09:21	01/07/22 17:00	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			01/07/22 12:56	1
pH	7.9	HF	0.1		SU			01/09/22 16:31	1
Temperature	22.3	HF	0.001		Degrees C			01/09/22 16:31	1



# Client Sample Results

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

Job ID: 480-193922-1

**Client Sample ID: Influent**

**Lab Sample ID: 480-193922-2**

**Date Collected: 01/05/22 16:30**

**Matrix: Water**

**Date Received: 01/06/22 13:00**

## 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			01/06/22 18:03	40
1,1-Dichloroethane	ND		24		ug/L			01/06/22 18:03	40
1,1-Dichloroethene	ND		34		ug/L			01/06/22 18:03	40
Benzene	ND		24		ug/L			01/06/22 18:03	40
Chlorobenzene	ND		19		ug/L			01/06/22 18:03	40
Chloroethane	ND		35		ug/L			01/06/22 18:03	40
cis-1,2-Dichloroethene	ND		23		ug/L			01/06/22 18:03	40
Toluene	ND		18		ug/L			01/06/22 18:03	40
Trichloroethene	ND		24		ug/L			01/06/22 18:03	40
<b>o-Chlorotoluene</b>	<b>2100</b>		13		ug/L			01/06/22 18:03	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		68 - 130		01/06/22 18:03	40
Dibromofluoromethane (Surr)	101		75 - 123		01/06/22 18:03	40
4-Bromofluorobenzene (Surr)	100		76 - 123		01/06/22 18:03	40
Toluene-d8 (Surr)	99		77 - 120		01/06/22 18:03	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>1370</b>		50.0		ug/L		01/07/22 09:21	01/07/22 17:04	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			01/07/22 12:56	1
<b>pH</b>	<b>7.2</b>	<b>HF</b>	0.1		SU			01/09/22 16:34	1
<b>Temperature</b>	<b>22.4</b>	<b>HF</b>	0.001		Degrees C			01/09/22 16:34	1

# Client Sample Results

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

Job ID: 480-193922-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 480-193922-3**

**Date Collected: 01/05/22 00:00**

**Matrix: Water**

**Date Received: 01/06/22 13:00**

## 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			01/06/22 18:26	1
1,1-Dichloroethane	ND		5.0		ug/L			01/06/22 18:26	1
1,1-Dichloroethene	ND		5.0		ug/L			01/06/22 18:26	1
Benzene	ND		5.0		ug/L			01/06/22 18:26	1
Chlorobenzene	ND		5.0		ug/L			01/06/22 18:26	1
Chloroethane	ND		5.0		ug/L			01/06/22 18:26	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			01/06/22 18:26	1
Toluene	ND		5.0		ug/L			01/06/22 18:26	1
Trichloroethene	ND		5.0		ug/L			01/06/22 18:26	1
o-Chlorotoluene	ND		5.0		ug/L			01/06/22 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		68 - 130		01/06/22 18:26	1
Dibromofluoromethane (Surr)	110		75 - 123		01/06/22 18:26	1
4-Bromofluorobenzene (Surr)	100		76 - 123		01/06/22 18:26	1
Toluene-d8 (Surr)	97		77 - 120		01/06/22 18:26	1

# QC Sample Results

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

Job ID: 480-193922-1

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

Lab Sample ID: MB 480-611000/8

Matrix: Water

Analysis Batch: 611000

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			01/06/22 16:11	1
1,1-Dichloroethane	ND		5.0		ug/L			01/06/22 16:11	1
1,1-Dichloroethene	ND		5.0		ug/L			01/06/22 16:11	1
Benzene	ND		5.0		ug/L			01/06/22 16:11	1
Chlorobenzene	ND		5.0		ug/L			01/06/22 16:11	1
Chloroethane	ND		5.0		ug/L			01/06/22 16:11	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			01/06/22 16:11	1
Toluene	ND		5.0		ug/L			01/06/22 16:11	1
Trichloroethene	ND		5.0		ug/L			01/06/22 16:11	1
o-Chlorotoluene	ND		5.0		ug/L			01/06/22 16:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		68 - 130		01/06/22 16:11	1
Dibromofluoromethane (Surr)	100		75 - 123		01/06/22 16:11	1
4-Bromofluorobenzene (Surr)	98		76 - 123		01/06/22 16:11	1
Toluene-d8 (Surr)	99		77 - 120		01/06/22 16:11	1

Lab Sample ID: LCS 480-611000/6

Matrix: Water

Analysis Batch: 611000

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	21.7		ug/L		108	52 - 162
1,1-Dichloroethane	20.0	21.4		ug/L		107	59 - 155
1,1-Dichloroethene	20.0	22.4		ug/L		112	1 - 234
Benzene	20.0	22.2		ug/L		111	37 - 151
Chlorobenzene	20.0	21.8		ug/L		109	37 - 160
Chloroethane	20.0	22.3		ug/L		111	14 - 230
Toluene	20.0	20.8		ug/L		104	47 - 150
Trichloroethene	20.0	21.8		ug/L		109	71 - 157

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		68 - 130
Dibromofluoromethane (Surr)	105		75 - 123
4-Bromofluorobenzene (Surr)	97		76 - 123
Toluene-d8 (Surr)	97		77 - 120

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

Lab Sample ID: MB 480-611005/1-A

Matrix: Water

Analysis Batch: 611211

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 611005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		01/07/22 09:21	01/07/22 16:04	1

Eurofins Buffalo

# QC Sample Results

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

Job ID: 480-193922-1

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

Lab Sample ID: LCS 480-611005/2-A  
Matrix: Water  
Analysis Batch: 611211

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 611005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	9835		ug/L		98	85 - 115

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

Lab Sample ID: MB 480-611118/1  
Matrix: Water  
Analysis Batch: 611118

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			01/07/22 12:56	1

Lab Sample ID: LCS 480-611118/2  
Matrix: Water  
Analysis Batch: 611118

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	292	286.4		mg/L		98	88 - 110

Lab Sample ID: 480-193922-1 DU  
Matrix: Water  
Analysis Batch: 611118

Client Sample ID: Effluent  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		4.80		mg/L		NC	10

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-611162/23  
Matrix: Water  
Analysis Batch: 611162

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	7.1		SU		101	99 - 101

# QC Association Summary

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

Job ID: 480-193922-1

## GC/MS VOA

### Analysis Batch: 611000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-193922-1	Effluent	Total/NA	Water	624.1	
480-193922-2	Influent	Total/NA	Water	624.1	
480-193922-3	Trip Blank	Total/NA	Water	624.1	
MB 480-611000/8	Method Blank	Total/NA	Water	624.1	
LCS 480-611000/6	Lab Control Sample	Total/NA	Water	624.1	

## Metals

### Prep Batch: 611005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-193922-1	Effluent	Total Recoverable	Water	200.7	
480-193922-2	Influent	Total Recoverable	Water	200.7	
MB 480-611005/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-611005/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

### Analysis Batch: 611211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-193922-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	611005
480-193922-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	611005
MB 480-611005/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	611005
LCS 480-611005/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	611005

## General Chemistry

### Analysis Batch: 611118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-193922-1	Effluent	Total/NA	Water	SM 2540D	
480-193922-2	Influent	Total/NA	Water	SM 2540D	
MB 480-611118/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-611118/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-193922-1 DU	Effluent	Total/NA	Water	SM 2540D	

### Analysis Batch: 611162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-193922-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-193922-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-611162/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

# Lab Chronicle

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

Job ID: 480-193922-1

## Client Sample ID: Effluent

Date Collected: 01/05/22 16:10

Date Received: 01/06/22 13:00

Lab Sample ID: 480-193922-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	611000	01/06/22 17:38	ATG	TAL BUF
Total Recoverable	Prep	200.7			611005	01/07/22 09:21	ADM	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	611211	01/07/22 17:00	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	611118	01/07/22 12:56	EJL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	611162	01/09/22 16:31	KEB	TAL BUF

## Client Sample ID: Influent

Date Collected: 01/05/22 16:30

Date Received: 01/06/22 13:00

Lab Sample ID: 480-193922-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	611000	01/06/22 18:03	ATG	TAL BUF
Total Recoverable	Prep	200.7			611005	01/07/22 09:21	ADM	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	611211	01/07/22 17:04	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	611118	01/07/22 12:56	EJL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	611162	01/09/22 16:34	KEB	TAL BUF

## Client Sample ID: Trip Blank

Date Collected: 01/05/22 00:00

Date Received: 01/06/22 13:00

Lab Sample ID: 480-193922-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	611000	01/06/22 18:26	ATG	TAL BUF

### Laboratory References:

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

# Accreditation/Certification Summary

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

Job ID: 480-193922-1

## Laboratory: Eurofins 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	04-01-22

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

Job ID: 480-193922-1

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



# Sample Summary

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

Job ID: 480-193922-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-193922-1	Effluent	Water	01/05/22 16:10	01/06/22 13:00
480-193922-2	Influent	Water	01/05/22 16:30	01/06/22 13:00
480-193922-3	Trip Blank	Water	01/05/22 00:00	01/06/22 13:00

1

2

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13

<b>Client Information</b> Client Contact: Chad Moose Phone: 716-691-2600 Fax: 716-691-1791			<b>Lab PM:</b> VanDette, Ryan T <b>E-Mail:</b> Ryan.VanDette@Eurofinset.com			<b>Carrier Tracking No(s):</b> 480-168539-28522.1 <b>Page:</b> Page 1 of 1		
<b>Company:</b> Waste Management Address: Tullytown Landfill 444 Oxford Valley Road City: Morrisville State, Zip: PA, 19067 Phone: 215-269-2114 (Tel) 215-699-8315 (Fax) Email: cmoose@wm.com			<b>Due Date Requested:</b> TAT Requested (days): 570 Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: 10132351 WO #: 48002447 Project #: 48002447 SSO#:			<b>Analysis Requested</b>		
<b>Sample Identification</b> Project Name: ChemTrol Monthly Groundwater Site: New York			<b>Sample Date</b> 1/5/23 1/5/22 1/5/22			<b>Sample Time</b> 1610 1630 -		
<b>Sample Type</b> (C=comp, G=grab) G G -			<b>Matrix</b> (Water, Solid, Overstool, BT=Tissue Analy) Water Water Water			<b>Field Filtered Sample (Yes or No)</b> Yes Yes Yes		
<b>Perform MS/MSD (Yes or No)</b> Yes Yes Yes			<b>200.7 Iron</b> 624.1 PREC - 624 2540B - Total Suspended Solids SM4500 H+ - pH			<b>Total Number of Containers</b>		
<b>Sample Instructions/Note:</b>			<b>Special Instructions/Note:</b>			<b>Preservation Codes:</b> 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 Other:		
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			<b>Deliverable Requested:</b> I, II, III, IV, Other (specify)			<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
<b>Relinquished by:</b> <i>[Signature]</i> <b>Relinquished by:</b> <b>Relinquished by:</b>			<b>Date:</b> 1/6/2023 1/6/2023 1/6/2023			<b>Method of Shipment</b>		
<b>Custody Seal No.:</b> A Yes <input type="checkbox"/> No <input type="checkbox"/>			<b>Custody Seal No.:</b> A Yes <input type="checkbox"/> No <input type="checkbox"/>			<b>Cooler Temperature(s) °C and Other Remarks:</b> 20.5°C		

February 2022

## 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: Emily Au Weather/Temperature: Overcast, 32 F  
Date: 2/23/2022 Arrival Time: 10:00 Departure Time: 11:00

Reason for Service: Inspect system and perform monthly sampling

<u>Inspection Items:</u>	<u>OK:</u>	<u>Comments:</u>
Site Appearance/Condition	<u>X</u>	<u>See Notes/Explanations section.</u>
<b><i>Building Exterior</i></b>		
Overhead Door	<u>X</u>	<u>Wood lintel decaying, header exposed.</u>
Siding	<u>X</u>	<u>Metal trim missing from lintel.</u>
Roof and Discharge Pipe	<u>X</u>	<u></u>
<b><i>Building Interior</i></b>		
Indication of Spills or Leaks	<u></u>	<u>None</u>
Building Heater	<u>X</u>	<u>Heater is on.</u>
Phone System	<u>X</u>	<u>Disconnected</u>
Exhaust Fan	<u></u>	<u>Could not get fan to work.</u>
Fire Extinguisher	<u>X</u>	<u></u>
First Aid & Eye Wash	<u>X</u>	<u></u>

***Groundwater Treatment System***

Air Stripper	<b>X</b>	
Iron Removal Filter	<b>NA</b>	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	<b>X</b>	See Notes/Explanations section.
Gauges	<b>X</b>	
Stripper Blower	<b>X</b>	
Indication of Alarm	<b>X</b>	

***Groundwater Treatment Wells***

EW-1 Pump	<b>X</b>	Pump is currently down
EW-1 Transducer	<b>X</b>	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	<b>X</b>	
EW-2 Transducer	<b>X</b>	
EW- 2 Flow Meter	<b>X</b>	
EW-3 Pump	<b>X</b>	
EW-3 Transducer	<b>X</b>	
EW-3 Flow Meter	<b>X</b>	

***Effluent Discharge***

Outfall	<b>X</b>	
Cleanout	<b>X</b>	

**Instrumentation/Readings:**

***EW-1***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>300</u> Inches
Flow Meter Reading	<u>Not Working</u> Gallons

***EW-2***

Pumping Rate	<u>1</u> GPM (see Notes section)
Water Level Above Transducer	<u>193</u> Inches
Flow Meter Reading	<u>28,537,930</u> Gallons

***EW-3***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>224</u> Inches
Flow Meter Reading	<u>15,696,383</u> Gallons

***Air Stripper***

Stripper Blower Pressure	<u>34</u> Inches H2O
--------------------------	----------------------

***Effluent Flow***

Total System Meter Reading	<u>72,843,287</u> 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	<u>7.0</u>	(field test strip)
Effluent pH	<u>7.0</u>	(field test strip)

### **Notes/Explanations**

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

The system was on upon arrival.

Total system flow was timed at 4.5 gpm on system totalizer flow meter. During the visit, EW-2, and EW-3 influent valves were individually closed 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 for EW-2 and EW-3. EW-1 is currently down.

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 (4Q2021) was collected on December 9, 2021.

The air stripper trays were last mechanically cleaned on December 1, 2021.

The monthly samples were collected today, February 23, 2022, by AECOM.

**Table 1**  
**February 23, 2022 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 *	3,749	3,749	144,000	gpd	NA	NA	NA
pH	7.0	8.1	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethane	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
o-Chlorotoluene	1,800	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Iron - Total	699	436	3,000	ug/L	0.01	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.13		lbs/day

*Notes:*

- 1) ***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 January 5, 2022 through February 23, 2022.



**Table 2**  
**February 23, 2022 Summary of Influent and Effluent Data**

**Chem-Trol Site**  
**Town of Hamburg, New York**

<b>Instrumentation/Readings:</b>		<b>Current Report</b>		<b>Prior Report</b>
		<b>2/23/2022</b>	<b>units</b>	<b>1/5/2022</b>
<b><i>EW-1</i></b>				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	300	Inches	294
	Flow Meter Reading	NW	gallons	NW
<b><i>EW-2</i></b>				
	Pumping Rate	1	GPM	0
	Water Level Above Transducer	193	Inches	186
	Flow Meter Reading	28,537,930	gallons	28,528,922
<b><i>EW-3</i></b>				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	224	Inches	205
	Flow Meter Reading	15,696,383	gallons	15,696,383
<b><i>Air Stripper</i></b>				
	Stripper Blower Pressure	34.0	inches H <sub>2</sub> O	19.5
<b><i>Effluent Flow</i></b>				
	Total System Meter Reading	72,843,287	gallons	72,663,348
	Average System Flow Since Prior Report	3,749	gpd	
		156.2	gph	
		2.6	gpm	
	Influent o-Chlorotoluene concentration	1,800	ug/L	
	Current month mass removal	1.2	kilograms	

*Note: NA indicates Not Available.*

*NW - Not working*

*ug/L - micrograms per liter*

## ANALYTICAL REPORT

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

Laboratory Job ID: 480-195265-1

Client Project/Site: ChemTrol Site - Monthly  
Sampling Event: ChemTrol Monthly Groundwater

**For:**

Waste Management  
600 New Ludlow Road  
South Hadley, Massachusetts 01075

Attn: Ryan Donovan



Authorized for release by:

3/3/2022 3:22:36 PM

Joshua Velez, Project Management Assistant I  
[joshua.velez@eurofinset.com](mailto:joshua.velez@eurofinset.com)

Designee for

Ryan VanDette, Project Manager II  
(716)504-9830  
[Ryan.VanDette@Eurofinset.com](mailto:Ryan.VanDette@Eurofinset.com)

### LINKS

Review your project  
results through

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

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

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



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# Definitions/Glossary

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

Job ID: 480-195265-1

## 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# Case Narrative

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

Job ID: 480-195265-1

**Job ID: 480-195265-1**

**Laboratory: Eurofins Buffalo**

## Narrative

### Job Narrative 480-195265-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/23/2022 11:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.2° C.

#### GC/MS VOA

Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-195265-2). 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: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: Effluent (480-195265-1) and Influent (480-195265-2).

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

Job ID: 480-195265-1

### Client Sample ID: Effluent

Lab Sample ID: 480-195265-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	436		50.0		ug/L	1		200.7 Rev 4.4	Total
pH	8.1	HF	0.1		SU	1		SM 4500 H+ B	Recoverable
Temperature	19.7	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

### Client Sample ID: Influent

Lab Sample ID: 480-195265-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	1800		13		ug/L	40		624.1	Total/NA
Iron	699		50.0		ug/L	1		200.7 Rev 4.4	Total
pH	7.0	HF	0.1		SU	1		SM 4500 H+ B	Recoverable
Temperature	20.1	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

### Client Sample ID: Trip Blank - 022322

Lab Sample ID: 480-195265-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Client Sample Results

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

Job ID: 480-195265-1

Client Sample ID: Effluent

Lab Sample ID: 480-195265-1

Date Collected: 02/23/22 09:50

Matrix: Water

Date Received: 02/23/22 11:30

## 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			02/23/22 16:50	1
1,1-Dichloroethane	ND		5.0		ug/L			02/23/22 16:50	1
1,1-Dichloroethene	ND		5.0		ug/L			02/23/22 16:50	1
Benzene	ND		5.0		ug/L			02/23/22 16:50	1
Chlorobenzene	ND		5.0		ug/L			02/23/22 16:50	1
Chloroethane	ND		5.0		ug/L			02/23/22 16:50	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			02/23/22 16:50	1
Toluene	ND		5.0		ug/L			02/23/22 16:50	1
Trichloroethene	ND		5.0		ug/L			02/23/22 16:50	1
o-Chlorotoluene	ND		5.0		ug/L			02/23/22 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		68 - 130		02/23/22 16:50	1
Dibromofluoromethane (Surr)	108		75 - 123		02/23/22 16:50	1
4-Bromofluorobenzene (Surr)	103		76 - 123		02/23/22 16:50	1
Toluene-d8 (Surr)	101		77 - 120		02/23/22 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	436		50.0		ug/L		02/25/22 09:19	02/25/22 23:08	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			02/26/22 17:52	1
pH	8.1	HF	0.1		SU			02/24/22 14:27	1
Temperature	19.7	HF	0.001		Degrees C			02/24/22 14:27	1

# Client Sample Results

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

Job ID: 480-195265-1

**Client Sample ID: Influent**

**Lab Sample ID: 480-195265-2**

**Date Collected: 02/23/22 10:10**

**Matrix: Water**

**Date Received: 02/23/22 11:30**

## 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			02/23/22 17:13	40
1,1-Dichloroethane	ND		24		ug/L			02/23/22 17:13	40
1,1-Dichloroethene	ND		34		ug/L			02/23/22 17:13	40
Benzene	ND		24		ug/L			02/23/22 17:13	40
Chlorobenzene	ND		19		ug/L			02/23/22 17:13	40
Chloroethane	ND		35		ug/L			02/23/22 17:13	40
cis-1,2-Dichloroethene	ND		23		ug/L			02/23/22 17:13	40
Toluene	ND		18		ug/L			02/23/22 17:13	40
Trichloroethene	ND		24		ug/L			02/23/22 17:13	40
<b>o-Chlorotoluene</b>	<b>1800</b>		13		ug/L			02/23/22 17:13	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		68 - 130		02/23/22 17:13	40
Dibromofluoromethane (Surr)	109		75 - 123		02/23/22 17:13	40
4-Bromofluorobenzene (Surr)	102		76 - 123		02/23/22 17:13	40
Toluene-d8 (Surr)	101		77 - 120		02/23/22 17:13	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>699</b>		50.0		ug/L		02/25/22 09:19	02/25/22 23:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			02/26/22 17:52	1
<b>pH</b>	<b>7.0</b>	<b>HF</b>	0.1		SU			02/24/22 14:28	1
<b>Temperature</b>	<b>20.1</b>	<b>HF</b>	0.001		Degrees C			02/24/22 14:28	1



# Client Sample Results

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

Job ID: 480-195265-1

**Client Sample ID: Trip Blank - 022322**

**Lab Sample ID: 480-195265-3**

**Date Collected: 02/23/22 00:00**

**Matrix: Water**

**Date Received: 02/23/22 11:30**

## 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			02/23/22 17:36	1
1,1-Dichloroethane	ND		5.0		ug/L			02/23/22 17:36	1
1,1-Dichloroethene	ND		5.0		ug/L			02/23/22 17:36	1
Benzene	ND		5.0		ug/L			02/23/22 17:36	1
Chlorobenzene	ND		5.0		ug/L			02/23/22 17:36	1
Chloroethane	ND		5.0		ug/L			02/23/22 17:36	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			02/23/22 17:36	1
Toluene	ND		5.0		ug/L			02/23/22 17:36	1
Trichloroethene	ND		5.0		ug/L			02/23/22 17:36	1
o-Chlorotoluene	ND		5.0		ug/L			02/23/22 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		68 - 130		02/23/22 17:36	1
Dibromofluoromethane (Surr)	112		75 - 123		02/23/22 17:36	1
4-Bromofluorobenzene (Surr)	104		76 - 123		02/23/22 17:36	1
Toluene-d8 (Surr)	101		77 - 120		02/23/22 17:36	1

# QC Sample Results

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

Job ID: 480-195265-1

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

Lab Sample ID: MB 480-615781/8

Matrix: Water

Analysis Batch: 615781

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			02/23/22 12:24	1
1,1-Dichloroethane	ND		5.0		ug/L			02/23/22 12:24	1
1,1-Dichloroethene	ND		5.0		ug/L			02/23/22 12:24	1
Benzene	ND		5.0		ug/L			02/23/22 12:24	1
Chlorobenzene	ND		5.0		ug/L			02/23/22 12:24	1
Chloroethane	ND		5.0		ug/L			02/23/22 12:24	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			02/23/22 12:24	1
Toluene	ND		5.0		ug/L			02/23/22 12:24	1
Trichloroethene	ND		5.0		ug/L			02/23/22 12:24	1
o-Chlorotoluene	ND		5.0		ug/L			02/23/22 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		68 - 130		02/23/22 12:24	1
Dibromofluoromethane (Surr)	107		75 - 123		02/23/22 12:24	1
4-Bromofluorobenzene (Surr)	104		76 - 123		02/23/22 12:24	1
Toluene-d8 (Surr)	101		77 - 120		02/23/22 12:24	1

Lab Sample ID: LCS 480-615781/6

Matrix: Water

Analysis Batch: 615781

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	19.2		ug/L		96	52 - 162
1,1-Dichloroethane	20.0	18.8		ug/L		94	59 - 155
1,1-Dichloroethene	20.0	17.0		ug/L		85	1 - 234
Benzene	20.0	18.8		ug/L		94	37 - 151
Chlorobenzene	20.0	19.3		ug/L		96	37 - 160
Chloroethane	20.0	19.7		ug/L		98	14 - 230
Toluene	20.0	19.1		ug/L		96	47 - 150
Trichloroethene	20.0	17.6		ug/L		88	71 - 157

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		68 - 130
Dibromofluoromethane (Surr)	105		75 - 123
4-Bromofluorobenzene (Surr)	100		76 - 123
Toluene-d8 (Surr)	102		77 - 120

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

Lab Sample ID: MB 480-615984/1-A

Matrix: Water

Analysis Batch: 616247

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 615984

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		02/25/22 09:19	02/25/22 21:29	1

Eurofins Buffalo

# QC Sample Results

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

Job ID: 480-195265-1

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

Lab Sample ID: LCS 480-615984/2-A  
Matrix: Water  
Analysis Batch: 616247

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 615984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10000	10240		ug/L		102	85 - 115

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

Lab Sample ID: MB 480-616182/1  
Matrix: Water  
Analysis Batch: 616182

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			02/26/22 17:52	1

Lab Sample ID: LCS 480-616182/2  
Matrix: Water  
Analysis Batch: 616182

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	5330	5310		mg/L		100	88 - 110

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-616012/21  
Matrix: Water  
Analysis Batch: 616012

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

Job ID: 480-195265-1

## GC/MS VOA

### Analysis Batch: 615781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195265-1	Effluent	Total/NA	Water	624.1	
480-195265-2	Influent	Total/NA	Water	624.1	
480-195265-3	Trip Blank - 022322	Total/NA	Water	624.1	
MB 480-615781/8	Method Blank	Total/NA	Water	624.1	
LCS 480-615781/6	Lab Control Sample	Total/NA	Water	624.1	

## Metals

### Prep Batch: 615984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195265-1	Effluent	Total Recoverable	Water	200.7	
480-195265-2	Influent	Total Recoverable	Water	200.7	
MB 480-615984/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-615984/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

### Analysis Batch: 616247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195265-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	615984
480-195265-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	615984
MB 480-615984/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	615984
LCS 480-615984/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	615984

## General Chemistry

### Analysis Batch: 616012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195265-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-195265-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-616012/21	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 616182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-195265-1	Effluent	Total/NA	Water	SM 2540D	
480-195265-2	Influent	Total/NA	Water	SM 2540D	
MB 480-616182/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-616182/2	Lab Control Sample	Total/NA	Water	SM 2540D	

# Lab Chronicle

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

Job ID: 480-195265-1

## Client Sample ID: Effluent

Date Collected: 02/23/22 09:50

Date Received: 02/23/22 11:30

## Lab Sample ID: 480-195265-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	615781	02/23/22 16:50	ATG	TAL BUF
Total Recoverable	Prep	200.7			615984	02/25/22 09:19	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	616247	02/25/22 23:08	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	616182	02/26/22 17:52	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	616012	02/24/22 14:27	PRD	TAL BUF

## Client Sample ID: Influent

Date Collected: 02/23/22 10:10

Date Received: 02/23/22 11:30

## Lab Sample ID: 480-195265-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	615781	02/23/22 17:13	ATG	TAL BUF
Total Recoverable	Prep	200.7			615984	02/25/22 09:19	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	616247	02/25/22 23:12	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	616182	02/26/22 17:52	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	616012	02/24/22 14:28	PRD	TAL BUF

## Client Sample ID: Trip Blank - 022322

Date Collected: 02/23/22 00:00

Date Received: 02/23/22 11:30

## Lab Sample ID: 480-195265-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	615781	02/23/22 17:36	ATG	TAL BUF

### Laboratory References:

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

# Accreditation/Certification Summary

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

Job ID: 480-195265-1

## Laboratory: Eurofins 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	04-01-22

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

Job ID: 480-195265-1

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

## Sample Summary

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

Job ID: 480-195265-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-195265-1	Effluent	Water	02/23/22 09:50	02/23/22 11:30
480-195265-2	Influent	Water	02/23/22 10:10	02/23/22 11:30
480-195265-3	Trip Blank - 022322	Water	02/23/22 00:00	02/23/22 11:30



## Chain of Custody Record

Environment Testing  
America

<b>Client Information</b>		Sampler: Emily Av		Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-169543-28522.1								
Client Contact: Chad Moose		Phone: 716-531-3312		E-Mail: Ryan.VanDette@Eurofinset.com	State of Origin:	Page: Page 1 of 1								
Company: Waste Management		PWSID:		Job #:										
Address: Tullytown Landfill 444 Oxford Valley Road		Analysis Requested												
City: Morrisville	Due Date Requested:													
State, Zip: PA, 19067	TAT Requested (days): SHD.													
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	Compliance Project: Δ Yes Δ No													
Email: cmoose@wm.com	PO #: 10132351													
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwater	WO #: 48002447													
Site: New York	SSOW#:													
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	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:
Effluent	2/23/22	950	G	Water	Water	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
Influent	2/23/22	1010	G	Water	Water	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
Trip Blank - 022322	2/23/22	-	TRIP	Water	Water	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
														480-195265 Chain of Custody
<b>Possible Hazard Identification</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)														
<b>Empty Kit Relinquished by:</b> Relinquished by: <i>Emily Av</i> Date: 2/23/22 Time: 1130 Relinquished by: Date: Date: Date: Company: AECOM Relinquished by: Date: Date: Date: Company: Company: Company:														
Custody Seal No.: Δ Yes Δ No Cooler Temperature(s) °C and Other Remarks: (022322) FCE														

March 2022

## 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: Emily Au Weather/Temperature: Overcast, 32 F

Date: 3/24/2022 Arrival Time: 9:30 Departure Time: 11:00

Reason for Service: Inspect system and perform monthly sampling

<u>Inspection Items:</u>	<u>OK:</u>	<u>Comments:</u>
Site Appearance/Condition	<u>X</u>	<u>See Notes/Explanations section.</u>
<b><i>Building Exterior</i></b>		
Overhead Door	<u>X</u>	<u>Wood lintel decaying, header exposed.</u>
Siding	<u>X</u>	<u>Metal trim missing from lintel.</u>
Roof and Discharge Pipe	<u>X</u>	<u></u>
<b><i>Building Interior</i></b>		
Indication of Spills or Leaks	<u></u>	<u>None</u>
Building Heater	<u>X</u>	<u>Heater is on.</u>
Phone System	<u>X</u>	<u>Disconnected</u>
Exhaust Fan	<u></u>	<u>Could not get fan to work.</u>
Fire Extinguisher	<u>X</u>	<u></u>
First Aid & Eye Wash	<u>X</u>	<u></u>

***Groundwater Treatment System***

Air Stripper	<b>X</b>	
Iron Removal Filter	<b>NA</b>	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	<b>X</b>	See Notes/Explanations section.
Gauges	<b>X</b>	
Stripper Blower	<b>X</b>	
Indication of Alarm	<b>X</b>	

***Groundwater Treatment Wells***

EW-1 Pump	<b>X</b>	Pump is currently down
EW-1 Transducer	<b>X</b>	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
EW-2 Pump	<b>X</b>	
EW-2 Transducer	<b>X</b>	
EW- 2 Flow Meter	<b>X</b>	
EW-3 Pump	<b>X</b>	
EW-3 Transducer	<b>X</b>	
EW-3 Flow Meter	<b>X</b>	

***Effluent Discharge***

Outfall	<b>X</b>	
Cleanout	<b>X</b>	

**Instrumentation/Readings:**

***EW-1***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>296</u> Inches
Flow Meter Reading	<u>Not Working</u> Gallons

***EW-2***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>189</u> Inches
Flow Meter Reading	<u>28,538,117</u> Gallons

***EW-3***

Pumping Rate	<u>0</u> GPM (see Notes section)
Water Level Above Transducer	<u>214</u> Inches
Flow Meter Reading	<u>15,696,383</u> Gallons

***Air Stripper***

Stripper Blower Pressure	<u>15</u> Inches H2O
--------------------------	----------------------

***Effluent Flow***

Total System Meter Reading	<u>72,999,200</u> 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	<u>7.0</u>	(field test strip)
Effluent pH	<u>7.0</u>	(field test strip)

### **Notes/Explanations**

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

The system was on upon arrival.

Total system flow was timed at 4.5 gpm on system totalizer flow meter. During the visit, EW-2, and EW-3 influent valves were individually closed 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 for EW-2 and EW-3. EW-1 is currently down.

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 (1Q2022) was collected on March 15, 2022.

The air stripper trays were last mechanically cleaned on March 17, 2022.

The monthly samples were collected today, March 24, 2022, by AECOM.

**Table 1**  
**March 24, 2022 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 *	5,029	5,029	144,000	gpd	NA	NA	NA
pH	6.9	7.7	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 18	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
Chlorobenzene	< 19	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
cis-1,2-Dichloroethene	< 23	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Benzene	< 24	< 5.0	5	ug/L	< 0.0002	0.006	lbs/day
1,1,1-Trichloroethane	< 15	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Chloroethane	< 35	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethane	30	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
1,1-Dichloroethene	< 34	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Trichloroethene	< 24	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
o-Chlorotoluene	2,500	< 5.0	10	ug/L	< 0.0002	0.012	lbs/day
Iron - Total	1,160	729	3,000	ug/L	0.03	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.17		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 February 23, 2022 through March 24, 2022.

**Table 2**  
**March 24, 2022 Summary of Influent and Effluent Data**

**Chem-Trol Site**  
**Town of Hamburg, New York**

<b>Instrumentation/Readings:</b>		<b>Current Report</b>		<b>Prior Report</b>
		<b>3/24/2022</b>	<b>units</b>	<b>2/23/2022</b>
<b><i>EW-1</i></b>				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	296	Inches	300
	Flow Meter Reading	NW	gallons	NW
<b><i>EW-2</i></b>				
	Pumping Rate	1	GPM	1
	Water Level Above Transducer	189	Inches	193
	Flow Meter Reading	28,538,117	gallons	28,537,930
<b><i>EW-3</i></b>				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	214	Inches	224
	Flow Meter Reading	15,696,383	gallons	15,696,383
<b><i>Air Stripper</i></b>				
	Stripper Blower Pressure	15.0	inches H <sub>2</sub> O	34.0
<b><i>Effluent Flow</i></b>				
	Total System Meter Reading	72,999,200	gallons	72,843,287
	Average System Flow Since Prior Report	5,029	gpd	
		209.6	gph	
		3.5	gpm	
	Influent o-Chlorotoluene concentration	2,500	ug/L	
	Current month mass removal	1.5	kilograms	

*Note: NA indicates Not Available.*

*NW - Not working*

*ug/L - micrograms per liter*



## ANALYTICAL REPORT

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

Laboratory Job ID: 480-196080-1

Client Project/Site: ChemTrol Site - Monthly  
Sampling Event: ChemTrol Monthly Groundwater

**For:**

Waste Management  
600 New Ludlow Road  
South Hadley, Massachusetts 01075

Attn: Ryan Donovan



Authorized for release by:

4/7/2022 5:20:59 PM

Joshua Velez, Project Management Assistant I

[Joshua.Velez@et.eurofinsus.com](mailto:Joshua.Velez@et.eurofinsus.com)

Designee for

Ryan VanDette, Project Manager II

(716)504-9830

[Ryan.VanDette@et.eurofinsus.com](mailto:Ryan.VanDette@et.eurofinsus.com)

### LINKS

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*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

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

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



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## Definitions/Glossary

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

Job ID: 480-196080-1

### 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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# Case Narrative

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

Job ID: 480-196080-1

**Job ID: 480-196080-1**

**Laboratory: Eurofins Buffalo**

## Narrative

### Job Narrative 480-196080-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/24/2022 12:10 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

#### GC/MS VOA

Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent (480-196080-2), (480-196080-D-2 MS) and (480-196080-D-2 MSD). Elevated reporting limits (RLs) are provided.

Method 624.1: Due to the high concentration of 2-Chlorotoluene, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 480-619017 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 624.1: The results reported for the following sample do not concur with results previously reported for this site: Influent (480-196080-2). Reanalysis was performed, and the result(s) confirmed.

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

#### Metals

Method 200.7 Rev 4.4: The method blank for preparation batch 480-619142 and analytical batch 480-620199 contained Total Iron above the reporting limit (RL). Associated sample Influent (480-196080-2) was not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

#### General Chemistry

Methods 9040B, 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 (480-196080-1) and Influent (480-196080-2).

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

Job ID: 480-196080-1

### Client Sample ID: Effluent

Lab Sample ID: 480-196080-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	729		50.0		ug/L	1		200.7 Rev 4.4	Total
pH	7.7	HF	0.1		SU	1		SM 4500 H+ B	Recoverable
Temperature	20.0	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

### Client Sample ID: Influent

Lab Sample ID: 480-196080-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	30		24		ug/L	40		624.1	Total/NA
o-Chlorotoluene	2500	F1	13		ug/L	40		624.1	Total/NA
Iron	1160		50.0		ug/L	1		200.7 Rev 4.4	Total
pH	6.9	HF	0.1		SU	1		SM 4500 H+ B	Recoverable
Temperature	19.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

### Client Sample ID: Trip Blank

Lab Sample ID: 480-196080-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

# Client Sample Results

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

Job ID: 480-196080-1

**Client Sample ID: Effluent**

**Lab Sample ID: 480-196080-1**

**Date Collected: 03/24/22 10:00**

**Matrix: Water**

**Date Received: 03/24/22 12:10**

## 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			03/25/22 00:18	1
1,1-Dichloroethane	ND		5.0		ug/L			03/25/22 00:18	1
1,1-Dichloroethene	ND		5.0		ug/L			03/25/22 00:18	1
Benzene	ND		5.0		ug/L			03/25/22 00:18	1
Chlorobenzene	ND		5.0		ug/L			03/25/22 00:18	1
Chloroethane	ND		5.0		ug/L			03/25/22 00:18	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			03/25/22 00:18	1
Toluene	ND		5.0		ug/L			03/25/22 00:18	1
Trichloroethene	ND		5.0		ug/L			03/25/22 00:18	1
o-Chlorotoluene	ND		5.0		ug/L			03/25/22 00:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		68 - 130		03/25/22 00:18	1
Dibromofluoromethane (Surr)	105		75 - 123		03/25/22 00:18	1
4-Bromofluorobenzene (Surr)	102		76 - 123		03/25/22 00:18	1
Toluene-d8 (Surr)	101		77 - 120		03/25/22 00:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	729		50.0		ug/L		04/06/22 09:28	04/06/22 17:52	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			03/30/22 10:27	1
pH	7.7	HF	0.1		SU			03/29/22 14:00	1
Temperature	20.0	HF	0.001		Degrees C			03/29/22 14:00	1

# Client Sample Results

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

Job ID: 480-196080-1

**Client Sample ID: Influent**

**Lab Sample ID: 480-196080-2**

**Date Collected: 03/24/22 10:15**

**Matrix: Water**

**Date Received: 03/24/22 12:10**

## 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			03/25/22 00:41	40
<b>1,1-Dichloroethane</b>	<b>30</b>		24		ug/L			03/25/22 00:41	40
1,1-Dichloroethene	ND		34		ug/L			03/25/22 00:41	40
Benzene	ND		24		ug/L			03/25/22 00:41	40
Chlorobenzene	ND		19		ug/L			03/25/22 00:41	40
Chloroethane	ND		35		ug/L			03/25/22 00:41	40
cis-1,2-Dichloroethene	ND		23		ug/L			03/25/22 00:41	40
Toluene	ND		18		ug/L			03/25/22 00:41	40
Trichloroethene	ND		24		ug/L			03/25/22 00:41	40
<b>o-Chlorotoluene</b>	<b>2500</b>	<b>F1</b>	13		ug/L			03/25/22 00:41	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		68 - 130		03/25/22 00:41	40
Dibromofluoromethane (Surr)	104		75 - 123		03/25/22 00:41	40
4-Bromofluorobenzene (Surr)	102		76 - 123		03/25/22 00:41	40
Toluene-d8 (Surr)	101		77 - 120		03/25/22 00:41	40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>1160</b>		50.0		ug/L		03/30/22 09:42	04/02/22 17:58	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			03/30/22 10:27	1
<b>pH</b>	<b>6.9</b>	<b>HF</b>	0.1		SU			03/29/22 14:01	1
<b>Temperature</b>	<b>19.4</b>	<b>HF</b>	0.001		Degrees C			03/29/22 14:01	1

# Client Sample Results

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

Job ID: 480-196080-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 480-196080-3**

**Date Collected: 03/24/22 00:00**

**Matrix: Water**

**Date Received: 03/24/22 12:10**

## 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			03/25/22 01:05	1
1,1-Dichloroethane	ND		5.0		ug/L			03/25/22 01:05	1
1,1-Dichloroethene	ND		5.0		ug/L			03/25/22 01:05	1
Benzene	ND		5.0		ug/L			03/25/22 01:05	1
Chlorobenzene	ND		5.0		ug/L			03/25/22 01:05	1
Chloroethane	ND		5.0		ug/L			03/25/22 01:05	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			03/25/22 01:05	1
Toluene	ND		5.0		ug/L			03/25/22 01:05	1
Trichloroethene	ND		5.0		ug/L			03/25/22 01:05	1
o-Chlorotoluene	ND		5.0		ug/L			03/25/22 01:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		68 - 130		03/25/22 01:05	1
Dibromofluoromethane (Surr)	109		75 - 123		03/25/22 01:05	1
4-Bromofluorobenzene (Surr)	102		76 - 123		03/25/22 01:05	1
Toluene-d8 (Surr)	100		77 - 120		03/25/22 01:05	1



# QC Sample Results

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

Job ID: 480-196080-1

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

Lab Sample ID: MB 480-619017/8

Matrix: Water

Analysis Batch: 619017

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			03/24/22 17:45	1
1,1-Dichloroethane	ND		5.0		ug/L			03/24/22 17:45	1
1,1-Dichloroethene	ND		5.0		ug/L			03/24/22 17:45	1
Benzene	ND		5.0		ug/L			03/24/22 17:45	1
Chlorobenzene	ND		5.0		ug/L			03/24/22 17:45	1
Chloroethane	ND		5.0		ug/L			03/24/22 17:45	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			03/24/22 17:45	1
Toluene	ND		5.0		ug/L			03/24/22 17:45	1
Trichloroethene	ND		5.0		ug/L			03/24/22 17:45	1
o-Chlorotoluene	ND		5.0		ug/L			03/24/22 17:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		68 - 130		03/24/22 17:45	1
Dibromofluoromethane (Surr)	105		75 - 123		03/24/22 17:45	1
4-Bromofluorobenzene (Surr)	103		76 - 123		03/24/22 17:45	1
Toluene-d8 (Surr)	100		77 - 120		03/24/22 17:45	1

Lab Sample ID: LCS 480-619017/6

Matrix: Water

Analysis Batch: 619017

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	22.5		ug/L		113	52 - 162
1,1-Dichloroethane	20.0	21.6		ug/L		108	59 - 155
1,1-Dichloroethene	20.0	22.1		ug/L		111	1 - 234
Benzene	20.0	21.3		ug/L		106	37 - 151
Chlorobenzene	20.0	21.1		ug/L		106	37 - 160
Chloroethane	20.0	23.1		ug/L		115	14 - 230
Toluene	20.0	21.2		ug/L		106	47 - 150
Trichloroethene	20.0	20.7		ug/L		103	71 - 157

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		68 - 130
Dibromofluoromethane (Surr)	104		75 - 123
4-Bromofluorobenzene (Surr)	100		76 - 123
Toluene-d8 (Surr)	100		77 - 120

Lab Sample ID: 480-196080-2 MS

Matrix: Water

Analysis Batch: 619017

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	752		ug/L		94	52 - 162
1,1-Dichloroethane	30		800	898		ug/L		109	59 - 155
1,1-Dichloroethene	ND		800	885		ug/L		111	1 - 234
Benzene	ND		800	856		ug/L		107	37 - 151
Chlorobenzene	ND		800	863		ug/L		108	37 - 160
Chloroethane	ND		800	935		ug/L		117	14 - 230

Eurofins Buffalo

# QC Sample Results

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

Job ID: 480-196080-1

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

Lab Sample ID: 480-196080-2 MS

Matrix: Water

Analysis Batch: 619017

Client Sample ID: Influent

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	ND		800	866		ug/L		108	47 - 150
Trichloroethene	ND		800	821		ug/L		103	71 - 157
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	99		68 - 130						
Dibromofluoromethane (Surr)	104		75 - 123						
4-Bromofluorobenzene (Surr)	101		76 - 123						
Toluene-d8 (Surr)	101		77 - 120						

Lab Sample ID: 480-196080-2 MSD

Matrix: Water

Analysis Batch: 619017

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	767		ug/L		96	52 - 162	2	15
1,1-Dichloroethane	30		800	903		ug/L		109	59 - 155	1	15
1,1-Dichloroethene	ND		800	919		ug/L		115	1 - 234	4	15
Benzene	ND		800	878		ug/L		110	37 - 151	3	15
Chlorobenzene	ND		800	871		ug/L		109	37 - 160	1	15
Chloroethane	ND		800	908		ug/L		113	14 - 230	3	15
Toluene	ND		800	881		ug/L		110	47 - 150	2	15
Trichloroethene	ND		800	858		ug/L		107	71 - 157	4	15
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	100		68 - 130								
Dibromofluoromethane (Surr)	104		75 - 123								
4-Bromofluorobenzene (Surr)	100		76 - 123								
Toluene-d8 (Surr)	101		77 - 120								

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

Lab Sample ID: MB 480-619142/1-A

Matrix: Water

Analysis Batch: 620199

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 619142

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	81.73		50.0		ug/L		03/30/22 09:42	04/02/22 16:32	1

Lab Sample ID: LCS 480-619142/2-A

Matrix: Water

Analysis Batch: 620199

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 619142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10450		ug/L		104	85 - 115

Eurofins Buffalo

# QC Sample Results

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

Job ID: 480-196080-1

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

Lab Sample ID: MB 480-620536/1-A  
Matrix: Water  
Analysis Batch: 620756

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 620536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		04/06/22 09:28	04/06/22 18:07	1

Lab Sample ID: LCS 480-620536/2-A  
Matrix: Water  
Analysis Batch: 620756

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 620536

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9745		ug/L		97	85 - 115

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

Lab Sample ID: MB 480-619690/1  
Matrix: Water  
Analysis Batch: 619690

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			03/30/22 10:27	1

Lab Sample ID: LCS 480-619690/2  
Matrix: Water  
Analysis Batch: 619690

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	490	484.4		mg/L		99	88 - 110

Lab Sample ID: 480-196080-2 DU  
Matrix: Water  
Analysis Batch: 619690

Client Sample ID: Influent  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L		NC	10

## Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-619589/23  
Matrix: Water  
Analysis Batch: 619589

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	7.1		SU		101	99 - 101

# QC Association Summary

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

Job ID: 480-196080-1

## GC/MS VOA

### Analysis Batch: 619017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-1	Effluent	Total/NA	Water	624.1	
480-196080-2	Influent	Total/NA	Water	624.1	
480-196080-3	Trip Blank	Total/NA	Water	624.1	
MB 480-619017/8	Method Blank	Total/NA	Water	624.1	
LCS 480-619017/6	Lab Control Sample	Total/NA	Water	624.1	
480-196080-2 MS	Influent	Total/NA	Water	624.1	
480-196080-2 MSD	Influent	Total/NA	Water	624.1	

## Metals

### Prep Batch: 619142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-2	Influent	Total Recoverable	Water	200.7	
MB 480-619142/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-619142/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

### Analysis Batch: 620199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	619142
MB 480-619142/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	619142
LCS 480-619142/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	619142

### Prep Batch: 620536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-1	Effluent	Total Recoverable	Water	200.7	
MB 480-620536/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-620536/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

### Analysis Batch: 620756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	620536
MB 480-620536/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	620536
LCS 480-620536/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	620536

## General Chemistry

### Analysis Batch: 619589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-196080-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-619589/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 619690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196080-1	Effluent	Total/NA	Water	SM 2540D	
480-196080-2	Influent	Total/NA	Water	SM 2540D	
MB 480-619690/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-619690/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-196080-2 DU	Influent	Total/NA	Water	SM 2540D	

# Lab Chronicle

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

Job ID: 480-196080-1

## Client Sample ID: Effluent

Date Collected: 03/24/22 10:00

Date Received: 03/24/22 12:10

Lab Sample ID: 480-196080-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	619017	03/25/22 00:18	ATG	TAL BUF
Total Recoverable	Prep	200.7			620536	04/06/22 09:28	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	620756	04/06/22 17:52	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	619690	03/30/22 10:27	JGO	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	619589	03/29/22 14:00	KEB	TAL BUF

## Client Sample ID: Influent

Date Collected: 03/24/22 10:15

Date Received: 03/24/22 12:10

Lab Sample ID: 480-196080-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		40	619017	03/25/22 00:41	ATG	TAL BUF
Total Recoverable	Prep	200.7			619142	03/30/22 09:42	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	620199	04/02/22 17:58	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	619690	03/30/22 10:27	JGO	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	619589	03/29/22 14:01	KEB	TAL BUF

## Client Sample ID: Trip Blank

Date Collected: 03/24/22 00:00

Date Received: 03/24/22 12:10

Lab Sample ID: 480-196080-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	619017	03/25/22 01:05	ATG	TAL BUF

### Laboratory References:

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

# Accreditation/Certification Summary

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

Job ID: 480-196080-1

## Laboratory: Eurofins 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	03-31-23

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

Job ID: 480-196080-1

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

# Sample Summary

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

Job ID: 480-196080-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-196080-1	Effluent	Water	03/24/22 10:00	03/24/22 12:10
480-196080-2	Influent	Water	03/24/22 10:15	03/24/22 12:10
480-196080-3	Trip Blank	Water	03/24/22 00:00	03/24/22 12:10

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## Chain of Custody Record



<b>Client Information</b>		Sampler: <u>Emily Au</u>		Lab PM: <u>VanDette, Ryan T</u>	Carrier Tracking No(s): <u>480-170380-28522.1</u>
Client Contact: <u>Chad Moose</u>		Phone: <u>716-531-3312</u>		E-Mail: <u>Ryan.VanDette@Eurofinset.com</u>	State of Origin: _____
Waste Management		PWSID: _____		Page 1 of 1	
Address: <u>Tullytown Landfill 444 Oxford Valley Road</u>		Due Date Requested: _____		Job # _____	
City: <u>Morrisville</u>		TAT Requested (days): <u>Standard</u>		Analysis Requested	
State, Zip: <u>PA, 19067</u>		Compliance Project: <u>Δ Yes Δ No</u>		Preservation Codes:	
Phone: <u>215-269-2114(Tel) 215-699-8315(Fax)</u>		PO #: <u>10132351</u>		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 - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email: <u>cmoose@wm.com</u>		WO #: _____		Other: _____	
Project Name: <u>ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwater</u>		Project #: <u>48002447</u>		Total Number of Containers: _____	
Site: <u>New York</u>		SSOW#: _____		Special Instructions/Note:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)
Effluent		<u>3/24/22</u>	<u>1000</u>	<u>G</u>	<u>Water</u>
Influent		<u>3/24/22</u>	<u>1015</u>	<u>G</u>	<u>Water</u>
Tripp Blank		<u>3/24/22</u>	<u>-</u>	<u>TRIP</u>	<u>Water</u>
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are not returned to client)		Sample Disposal (A fee may be assessed if samples are not returned to client)	
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		480-196080 Chain of Custody	
Deliverable Requested: I, II, III, IV, Other (specify) <u>per contract</u>		Special Instructions/QC Requirements:		Barcode	
Empty Kit Relinquished by: <u>[Signature]</u>		Date: <u>3/24/22</u>		Time: _____	
Relinquished by: <u>[Signature]</u>		Date: <u>3/24/22</u>		Time: _____	
Relinquished by: <u>[Signature]</u>		Date: <u>3/24/22</u>		Time: _____	
Custody Seals Intact: <u>Δ Yes Δ No</u>		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: <u>29 ICE</u>	