

# Third Quarter 2022 – July, August, September Operation, Maintenance, and Monitoring Report

CHEM-TROL Site NYSDEC Site No. 9-15-015 Report.hw915015.2023-01-12.3Q2022OMM

## Site:

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

#### Submitted to:

NYSDEC Region 9 Office 700 Delaware Avenue Buffalo, NY 14209

#### 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

January 12, 2023

AECOM Project No. 60652207.3



AECOM 1 John James Audubon Pkwy Suite 210 Amherst, NY 14228 716 856 5636 tel www.aecom.com

January 12, 2023

SUBMITTED VIA ELECTRONIC MAIL

Mr. Glenn May, PG NYSDEC Region 9 Office 700 Delaware Avenue Buffalo, NY 14209

RE: S.C. Holdings, Inc., 4818 Lake Avenue, Blasdell, New York 14219

Third Quarter 2022 Operation, Maintenance, and Monitoring Report

Chem-Trol Site, NYSDEC Site No. 9-15-015, Report.hw915015.2023-01-12.3Q2022OMM

Dear Mr. May:

Enclosed please find the Third Quarter 2022 (3Q22 – July, August, September) 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 3Q22:

- 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 3Q22 is as follows:

#### July 2022

AECOM collected the monthly monitoring samples on July 27, 2022; analytical data were received on August 26, 2022. As presented on Table 1 (July 27, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

#### August 2022

On August 18, 2022 AECOM visited the site and found that the system was on; however, the totalizer was not moving. The system was shut down to prevent potential pump damage. AECOM returned on August 23, 2022 to perform system tests and troubleshooting; the system was restarted that day. It was determined that measured water levels in the three pumping wells were above the pump intakes and the wells were not running dry.

AECOM collected the monthly monitoring samples on August 29, 2022; analytical data were received on September 13, 2022. As presented on Table 1 (August 29, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

Mr. Glenn May, PG January 12, 2023 Page 2

# **AECOM**

#### September 2022

AECOM collected the monthly monitoring samples on September 12, 2022; analytical data were received on September 23, 2022. As presented on Table 1 (September 12, 2022), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

On September 15, 2022, AECOM performed pressure washing and mechanical cleaning of the air stripper trays.

On October 21, 2022 Matrix Environmental installed a new pump in EW-1 and adjusted the pumping flow for the system. On October 27, 2022, AECOM collected the 3Q22 quarterly groundwater levels, which were delayed from September 2022 pending the installation of the new pump in EW-1 and related adjustments to the pumping rate on the system.

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

Very truly yours, AECOM

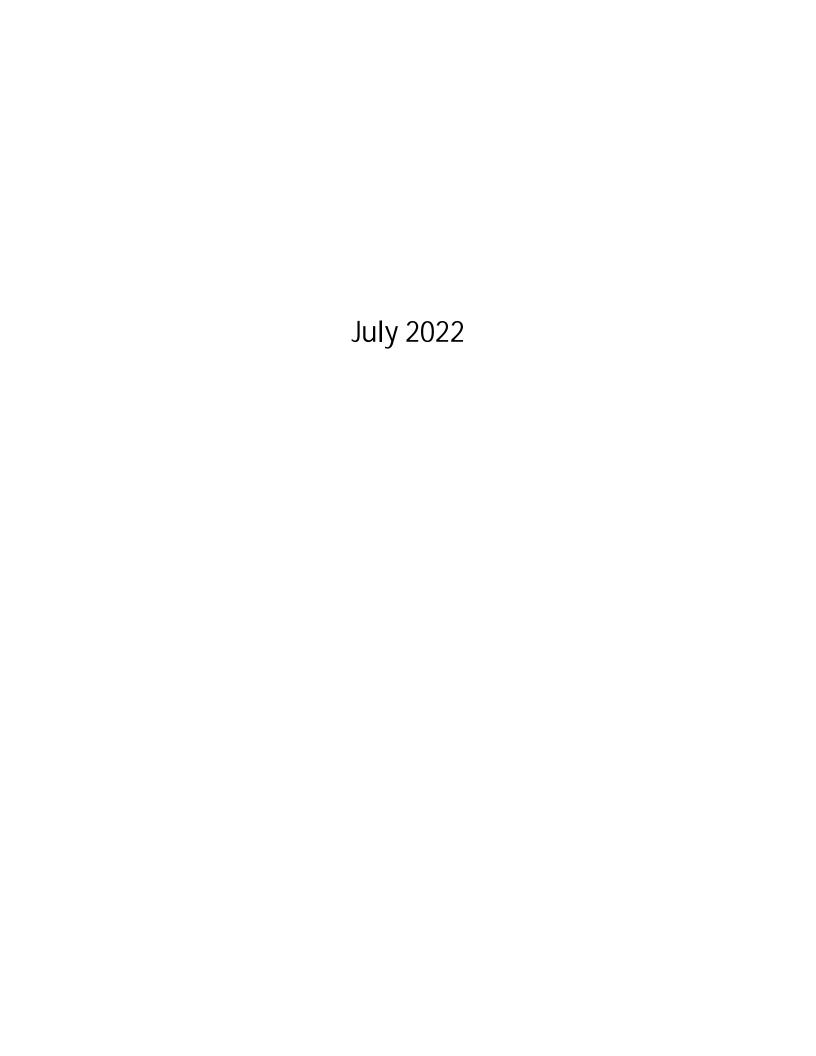
James L. Kaczor Project Manager

James L. Kayon

Enclosure

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

60652207 Project File



# **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.

Service by: Emily Au Weather/Temperature: Sunny, 77 F

# **General**

Date: <u>7/27/2022</u> Arrival Time: <u>0930</u>	) Departu	re Time: <u>1100</u>
Reason for Service: <u>Inspect system</u>	and perform	n monthly sampling
<b>Inspection Items:</b>	OK:	Comments:
Site Appearance/Condition	<u>X</u>	See Notes/Explanations 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		None
Building Heater	<u>X</u>	Turned heater off
Phone System	<u>X</u>	Disconnected
Exhaust Fan		Could not get fan to work.
Fire Extinguisher	<u>X</u>	
First Aid & Eye Wash	X	
	·	·

Grounawaier Treaimeni Sysiem		
Air Stripper	X	
Iron Removal Filter	NA	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	X	See Notes/Explanations section.
Gauges	X	
Stripper Blower	X	
Indication of Alarm	X	
Groundwater Treatment Wells		
EW-1 Pump		Pump is currently down
EW-1 Transducer	X	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
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	Good Flow

 $\mathbf{X}$ 

Cleanout

Instrumentation/Readings.	
EW-1	
Pumping Rate	0GPM (see Notes section)
Water Level Above Transducer	<u>278_</u> Inches
Flow Meter Reading	Not Working Gallons
EW-2	
Pumping Rate	0GPM (see Notes section)
Water Level Above Transducer	Inches
Flow Meter Reading	<u>28,538,192</u> Gallons
EW-3	
Pumping Rate	OGPM (see Notes section)
Water Level Above Transducer	184Inches
Flow Meter Reading	<u>15,696,383</u> Gallons
Air Stripper	
Stripper Blower Pressure	Inches H2O
Effluent Flow	
Total System Meter Reading	<u>73,452,250</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 7.0 (field test strip) Effluent pH 7.0 (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 0.5 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 (2Q2022) was collected on June 21, 2022.

The air stripper trays were last mechanically cleaned on July 26, 2022.

The monthly samples were collected today, July 27, 2022, by AECOM.

Table 1
July 27, 2022 Summary of Influent and Effluent Data

# Chem-Trol Site Town of Hamburg, New York

				Conce	Mass Loading				
Parameters		Influent	E	Effluent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Elow*		1 427		1 407	144 000	and	NIA	NI A	NI A
Flow <sup>*</sup> pH		1,427 7.3		1,427 8.1	144,000 6.5 to 8.5	gpd standard units	NA NA	NA 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		3,100	<	5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total		1,200		53	3,000	ug/L	0.00	3.61	lbs/day
TSS	<	4.0	<	4.0	20	mg/L	< 0.05		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.

<sup>\*</sup> Average daily flow as measured June 15, 2022 through July 27, 2022.

# Table 2 July 27, 2022 Summary of Influent and Effluent Data

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

Instrumen	atation/Readings:	Current Report 7/27/2022	units	Prior Report 6/15/2022
2,,, 1	Pumping Rate	0	GPM	0
	Water Level Above Transducer	278	Inches	287
	Flow Meter Reading	NW	gallons	NW
EW-2				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	180	Inches	170
	Flow Meter Reading	28,538,192	gallons	28,538,117
EW-3				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	184	Inches	188
	Flow Meter Reading	15,696,383	gallons	15,696,383
Air Strippe	er			
**	Stripper Blower Pressure	12.0	inches H <sub>2</sub> O	17.0
Effluent F	low			
33	Total System Meter Reading	73,452,250	gallons	73,392,310
	Average System Flow Since Prior Report	1,427	gpd	
		59.5	gph	
		1.0	gpm	
	Influent o-Chlorotoluene concentration	3,100	ug/L	
	Current month mass removal	0.7	kilograms	

Note: NA indicates Not Available.

NW - Not working

ug/L - micrograms per liter



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 480-200137-1

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: 8/26/2022 10:23:11 AM Joshua Velez, Project Management Assistant I Joshua.Velez@et.eurofinsus.com

Designee for

Ryan VanDette, Project Manager II (716)504-9830 Ryan.VanDette@et.eurofinsus.com

Review your project results through EOL.

Have a Question?

Ask
The

Visit us at:

www.eurofinsus.com/Env

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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Client: Waste Management Project/Site: ChemTrol Site - Monthly Laboratory Job ID: 480-200137-1

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# **Definitions/Glossary**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

#### **Qualifiers**

## **General Chemistry**

Qualifier Description

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

# **Glossary**

Appreviation	i nese commonly used appreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis

Listed under the D column to designate that the result is reported on a dry weight basi

%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

**Eurofins Buffalo** 

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### Case Narrative

Client: Waste Management

Job ID: 480-200137-1 Project/Site: ChemTrol Site - Monthly

Job ID: 480-200137-1

**Laboratory: Eurofins Buffalo** 

Narrative

Job Narrative 480-200137-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 7/27/2022 11:45 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 8.6° C.

#### GC/MS VOA

Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-200137-2). 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

Method 200.7 Rev 4.4: The method blank for preparation batch 480-637489 and analytical batch 480-638486 contained total Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 200.7 Rev 4.4: The Total Iron result reported for the following sample do not concur with results previously reported for this site: Effluent (480-200137-1). 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.

#### **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 (480-200137-1) and Influent (480-200137-2).

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

**Client Sample ID: Effluent** 

Lab Sample ID: 480-200137-1

Job ID: 480-200137-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	52.8		50.0		ug/L	1	_	200.7 Rev 4.4	Total
									Recoverable
рН	8.1	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	20.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

# Client Sample ID: Influent Lab Sample ID: 480-200137-2

Analyte	Result Qua	alifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	3100	13		ug/L	40	_	624.1	Total/NA
Iron	1200	50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pН	7.3 HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	20.4 HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

# Client Sample ID: Trip Blank Lab Sample ID: 480-200137-3

No Detections.

This Detection Summary does not include radiochemical test results.

# **Client Sample Results**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

Lab Sample ID: 480-200137-1 **Client Sample ID: Effluent** Date Collected: 07/27/22 10:00

**Matrix: Water** 

Date Received: 07/27/22 11:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			07/27/22 17:09	1
1,1-Dichloroethane	ND		5.0		ug/L			07/27/22 17:09	1
1,1-Dichloroethene	ND		5.0		ug/L			07/27/22 17:09	1
Benzene	ND		5.0		ug/L			07/27/22 17:09	1
Chlorobenzene	ND		5.0		ug/L			07/27/22 17:09	1
Chloroethane	ND		5.0		ug/L			07/27/22 17:09	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			07/27/22 17:09	1
Toluene	ND		5.0		ug/L			07/27/22 17:09	1
Trichloroethene	ND		5.0		ug/L			07/27/22 17:09	1
o-Chlorotoluene	ND		5.0		ug/L			07/27/22 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		68 - 130			-		07/27/22 17:09	1
Dibromofluoromethane (Surr)	95		75 - 123					07/27/22 17:09	1
4-Bromofluorobenzene (Surr)	95		76 - 123					07/27/22 17:09	1
Toluene-d8 (Surr)	100		77 - 120					07/27/22 17:09	1

Method: 200.7 Rev 4.4 - Metal	s (ICP) - Total Red	coverable					
Analyte	Result Qualif	ier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	52.8	50.0	ug/L		08/24/22 09:05	08/24/22 22:57	1

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			08/01/22 09:43	1
pH	8.1	HF	0.1		SU			07/28/22 14:39	1
Temperature	20.4	HF	0.001		Degrees C			07/28/22 14:39	1

# **Client Sample Results**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

Analyte

Iron

**Client Sample ID: Influent** Lab Sample ID: 480-200137-2

Date Collected: 07/27/22 10:25 **Matrix: Water** Date Received: 07/27/22 11:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			07/27/22 17:33	40
1,1-Dichloroethane	ND		24		ug/L			07/27/22 17:33	40
1,1-Dichloroethene	ND		34		ug/L			07/27/22 17:33	40
Benzene	ND		24		ug/L			07/27/22 17:33	40
Chlorobenzene	ND		19		ug/L			07/27/22 17:33	40
Chloroethane	ND		35		ug/L			07/27/22 17:33	40
cis-1,2-Dichloroethene	ND		23		ug/L			07/27/22 17:33	40
Toluene	ND		18		ug/L			07/27/22 17:33	40
Trichloroethene	ND		24		ug/L			07/27/22 17:33	40
o-Chlorotoluene	3100		13		ug/L			07/27/22 17:33	40
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		68 - 130			-		07/27/22 17:33	40
Dibromofluoromethane (Surr)	98		75 - 123					07/27/22 17:33	40
4-Bromofluorobenzene (Surr)	95		76 - 123					07/27/22 17:33	40
Toluene-d8 (Surr)	102		77 - 120					07/27/22 17:33	40

General Chemistry Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L		·	08/01/22 09:43	1
pH	7.3	HF	0.1		SU			07/28/22 14:42	1
Temperature	20.4	HE	0.001		Degrees C			07/28/22 14:42	1

RL

50.0

MDL Unit

ug/L

Prepared

Analyzed

Result Qualifier

1200

Dil Fac

# **Client Sample Results**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Trip Blank** 

Date Collected: 07/27/22 00:00 Date Received: 07/27/22 11:45 Lab Sample ID: 480-200137-3

**Matrix: Water** 

Method: 624.1 - Volatile Or	ganic Compou	nds (GC/N	IS)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			07/27/22 17:57	1
1,1-Dichloroethane	ND		5.0		ug/L			07/27/22 17:57	1
1,1-Dichloroethene	ND		5.0		ug/L			07/27/22 17:57	1
Benzene	ND		5.0		ug/L			07/27/22 17:57	1
Chlorobenzene	ND		5.0		ug/L			07/27/22 17:57	1
Chloroethane	ND		5.0		ug/L			07/27/22 17:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			07/27/22 17:57	1
Toluene	ND		5.0		ug/L			07/27/22 17:57	1
Trichloroethene	ND		5.0		ug/L			07/27/22 17:57	1
o-Chlorotoluene	ND		5.0		ug/L			07/27/22 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		68 - 130			-		07/27/22 17:57	1
Dibromofluoromethane (Surr)	95		75 - 123					07/27/22 17:57	1
4-Bromofluorobenzene (Surr)	95		76 - 123					07/27/22 17:57	1
Toluene-d8 (Surr)	103		77 - 120					07/27/22 17:57	1

8/26/2022

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1:

Client: Waste Management

Job ID: 480-200137-1 Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: MB 480-635063/8

**Matrix: Water** 

1,1,1-Trichloroethane

1,1-Dichloroethane

1,1-Dichloroethene

Analyte

Analysis Batch: 635063

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

MB MB Result Qualifier RL **MDL** Unit D Analyzed Dil Fac Prepared ND 5.0 ug/L 07/27/22 13:01 ND 5.0 ug/L 07/27/22 13:01

Benzene Chlorobenzene Chloroethane ND 5.0 ug/L 07/27/22 13:01 cis-1,2-Dichloroethene ND 5.0 07/27/22 13:01 ug/L Toluene ND 5.0 ug/L 07/27/22 13:01 Trichloroethene ND 5.0 ug/L 07/27/22 13:01 o-Chlorotoluene ND 5.0 ug/L 07/27/22 13:01

MB MB

	Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	94		68 - 130	_		07/27/22 13:01	1
	Dibromofluoromethane (Surr)	98		75 - 123			07/27/22 13:01	1
	4-Bromofluorobenzene (Surr)	96		76 - 123			07/27/22 13:01	1
١	Toluene-d8 (Surr)	102		77 - 120			07/27/22 13:01	1

Lab Sample ID: LCS 480-635063/6

**Matrix: Water** 

Analysis Batch: 635063

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	18.9		ug/L		95	52 - 162	
1,1-Dichloroethane	20.0	20.2		ug/L		101	59 - 155	
1,1-Dichloroethene	20.0	20.2		ug/L		101	1 - 234	
Benzene	20.0	20.4		ug/L		102	37 - 151	
Chlorobenzene	20.0	19.9		ug/L		99	37 - 160	
Chloroethane	20.0	18.2		ug/L		91	14 - 230	
Toluene	20.0	20.3		ug/L		102	47 - 150	
Trichloroethene	20.0	20.3		ug/L		101	71 - 157	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		68 - 130
Dibromofluoromethane (Surr)	93		75 - 123
4-Bromofluorobenzene (Surr)	94		76 - 123
Toluene-d8 (Surr)	101		77 - 120

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-635538/1-A

**Matrix: Water** 

**Analyte** 

Iron

**Analysis Batch: 635821** 

**Client Sample ID: Method Blank Prep Type: Total Recoverable** Prep Batch: 635538

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed 50.0 08/01/22 08:48 08/01/22 20:22 ND ug/L

**Eurofins Buffalo** 

Client: Waste Management Job ID: 480-200137-1

LCS LCS

9780

RL

50.0

RL

Result Qualifier

**MDL** Unit

LCS LCS

9345

Result Qualifier

MDL Unit

LCS LCS

LCSD LCSD

9113

Result Qualifier

9389

Result Qualifier

ug/L

ug/L

Unit

ug/L

Unit

ug/L

Unit

ug/L

Unit

ug/L

D

Spike

Added

10000

Spike

Added

10000

Spike

Added

10000

Spike

Added

10000

ND

MB MB

ND

Result Qualifier

Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: LCS 480-635538/2-A **Matrix: Water** 

Analysis Batch: 635821

Analyte Iron

Lab Sample ID: MB 480-636074/1-A **Matrix: Water** 

**Analysis Batch: 636338** 

Iron

Iron

Iron

Iron

MB MB Result Qualifier Analyte

Lab Sample ID: LCS 480-636074/2-A **Matrix: Water** 

**Analysis Batch: 636338** 

Analyte

Lab Sample ID: MB 480-638749/1-A

**Matrix: Water** 

Analysis Batch: 639054

Analyte

Lab Sample ID: LCS 480-638749/2-A

**Matrix: Water** 

Analysis Batch: 639054

Analyte

Lab Sample ID: LCSD 480-638749/3-A

**Matrix: Water** 

Analysis Batch: 639054

Analyte

Iron

Lab Sample ID: MB 480-635644/1 **Matrix: Water** 

Analysis Batch: 635644

**Total Suspended Solids** 

Result Qualifier ND

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

MR MR

RL 4.0 **RL** Unit mg/L D

Prepared

Analyzed

08/01/22 09:43

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

%Rec

Limits

85 - 115

Client Sample ID: Method Blank

08/04/22 09:08 08/04/22 19:45

**Client Sample ID: Lab Control Sample** 

%Rec

Limits

85 - 115

Client Sample ID: Method Blank

08/24/22 09:05 08/24/22 22:42

**Client Sample ID: Lab Control Sample** 

%Rec

Limits

%Rec

Limits

85 - 115

Client Sample ID: Method Blank

85 - 115

**Prep Type: Total Recoverable** 

**Prep Type: Total Recoverable** 

Analyzed

**Prep Type: Total Recoverable** 

**Prep Type: Total Recoverable** 

Analyzed

**Prep Type: Total Recoverable** 

%Rec

Prepared

%Rec

Prepared

%Rec

%Rec

91

D

94

Client Sample ID: Lab Control Sample Dup

93

98

**Prep Type: Total Recoverable** 

Prep Batch: 635538

**Prep Batch: 636074** 

**Prep Batch: 636074** 

**Prep Batch: 638749** 

**Prep Batch: 638749** 

**Prep Batch: 638749** 

**RPD** 

Dil Fac

Dil Fac

**RPD** 

Limit

Dil Fac

20

**Eurofins Buffalo** 

# **QC Sample Results**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: LCS 480-635644/2 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** Analysis Batch: 635644

LCS LCS Spike %Rec

Result Qualifier Analyte Added Unit D %Rec Limits **Total Suspended Solids** 351 342.4 mg/L 97 88 - 110

Lab Sample ID: 480-200137-1 DU **Client Sample ID: Effluent** 

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

Analysis Batch: 635644

Sample Sample DU DU **RPD** Result Qualifier Result Qualifier Unit D RPD Limit

**Total Suspended Solids** ND ND mg/L NC 10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-635356/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 635356

Spike LCS LCS %Rec

Analyte Added Result Qualifier Unit Limits D %Rec рН 7.00 7.0 SU 101 99 - 101

# **QC Association Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-200137-1

# **GC/MS VOA**

# Analysis Batch: 635063

Lab Sample ID 480-200137-1	Client Sample ID Effluent	Prep Type Total/NA	Matrix Water	Method 624.1	Prep Batc
480-200137-2	Influent	Total/NA	Water	624.1	
480-200137-3	Trip Blank	Total/NA	Water	624.1	
MB 480-635063/8	Method Blank	Total/NA	Water	624.1	
LCS 480-635063/6	Lab Control Sample	Total/NA	Water	624.1	

## **Metals**

# **Prep Batch: 635538**

_	ab Sample ID 80-200137-2	Client Sample ID Influent	Prep Type Total Recoverable	Matrix Water	Method 200.7	Prep Batch
N	MB 480-635538/1-A	Method Blank	Total Recoverable	Water	200.7	
L	CS 480-635538/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

## Analysis Batch: 635821

Lab Sample ID 480-200137-2	Client Sample ID Influent	Prep Type  Total Recoverable	Matrix Water	Method 200.7 Rev 4.4	Prep Batch 635538
MB 480-635538/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	635538
LCS 480-635538/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	635538

# **Prep Batch: 636074**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-636074/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-636074/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

## **Analysis Batch: 636338**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-636074/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	636074
LCS 480-636074/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	636074

# **Prep Batch: 638749**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200137-1	Effluent	Total Recoverable	Water	200.7	
MB 480-638749/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-638749/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 480-638749/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	

# Analysis Batch: 639054

Lab Sample ID 480-200137-1	Client Sample ID Effluent	Prep Type  Total Recoverable	Matrix Water	Method 200.7 Rev 4.4	Prep Batch 638749
MB 480-638749/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	638749
LCS 480-638749/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	638749
LCSD 480-638749/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	638749

# **General Chemistry**

# **Analysis Batch: 635356**

Lab Sample ID 480-200137-1	Client Sample ID Effluent	Prep Type Total/NA	Matrix Water	Method SM 4500 H+ B	Prep Batch
480-200137-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-635356/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

**Eurofins Buffalo** 

8/26/2022

Page 12 of 18

# **QC Association Summary**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

# **General Chemistry**

# Analysis Batch: 635644

Lab Sample ID 480-200137-1	Client Sample ID Effluent	Prep Type  Total/NA	Matrix Water	Method SM 2540D	Prep Batch
480-200137-2	Influent	Total/NA	Water	SM 2540D	
MB 480-635644/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-635644/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-200137-1 DU	Effluent	Total/NA	Water	SM 2540D	

# **Lab Chronicle**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Effluent** 

Date Collected: 07/27/22 10:00 Date Received: 07/27/22 11:45 Lab Sample ID: 480-200137-1

**Matrix: Water** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		1	635063	LCH	EET BUF	07/27/22 17:09
Total Recoverable	Prep	200.7			638749	NVK	EET BUF	08/24/22 09:05
Total Recoverable	Analysis	200.7 Rev 4.4		1	639054	LMH	EET BUF	08/24/22 22:57
Total/NA	Analysis	SM 2540D		1	635644	SAK	EET BUF	08/01/22 09:43
Total/NA	Analysis	SM 4500 H+ B		1	635356	ARR	EET BUF	07/28/22 14:39

Client Sample ID: Influent

Date Collected: 07/27/22 10:25

Lab Sample ID: 480-200137-2

Matrix: Water

Date Collected: 07/27/22 10:25 Date Received: 07/27/22 11:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		40	635063	LCH	EET BUF	07/27/22 17:33
Total Recoverable	Prep	200.7			635538	NVK	EET BUF	08/01/22 08:48
Total Recoverable	Analysis	200.7 Rev 4.4		1	635821	BMB	EET BUF	08/01/22 20:34
Total/NA	Analysis	SM 2540D		1	635644	SAK	EET BUF	08/01/22 09:43
Total/NA	Analysis	SM 4500 H+ B		1	635356	ARR	EET BUF	07/28/22 14:42

Client Sample ID: Trip Blank

Date Collected: 07/27/22 00:00

Lab Sample ID: 480-200137-3

Matrix: Water

Date Collected: 07/27/22 00:00 Date Received: 07/27/22 11:45

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number A	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		1	635063 L	LCH	EET BUF	07/27/22 17:57

Laboratory References:

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

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# **Accreditation/Certification Summary**

Client: Waste Management Job ID: 480-200137-1

Project/Site: ChemTrol Site - Monthly

# **Laboratory: Eurofins Buffalo**

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

Authority	P	rogram	Identification Number	Expiration Date	
New York	N	ELAP	10026	03-31-23	
The following analyte:	s are included in this rep	ort, but the laboratory is i	not certified by the governing authority.	This list may include analytes for whic	
the agency does not o		Matrix	Anglyte	, ,	
Analysis Method	offer certification. Prep Method	Matrix	Analyte		
0 ,		Matrix Water	Analyte o-Chlorotoluene		
Analysis Method					

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# **Method Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-200137-1

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

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

**5** 

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# **Sample Summary**

Job ID: 480-200137-1 Client: Waste Management Project/Site: ChemTrol Site - Monthly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-200137-1	Effluent	Water	07/27/22 10:00	07/27/22 11:45
480-200137-2	Influent	Water	07/27/22 10:25	07/27/22 11:45
480-200137-3	Trip Blank	Water	07/27/22 00:00	07/27/22 11:45

200

Cooler Temperature(s) °C and Other Remarks

Received by:

Company

Date/Time

**Analysis Requested** E-Mail: Ryan.VanDette@et.eurofinsus.com Hd - +H 009+WS 2540D - Total Suspended Solids Ś 3 624.1\_PREC - 624 Lab PM VanDette, Ryan T Chain of Custody Record 2 2 Perform MS/MSD (Yes, or No) Field Filtered Sample (Yes or No) 3T=Tissue, A=Air (Winvater, Sisolid, Oinvaste/oil, Water Preservation Code Matrix Water Water G=grab) (C=comp, 2188 Sample Type TRIP  ${\cal P}$ compliance Project: △ Yes △ No 577 Sample 000 1025 TAT Requested (days): Due Date Requested: 716-July J 7/27/22 72/48/E Sample Date 72/12 PO# 11231631 WO#. Project # 48002447 SSOW# ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwate

Special Instructions/Note:

Total Number of co

**Environment Testing** 

🔆 eurofins

COC No: 480-173949-28522.

Carrier Tracking No(s) State of Origin

Page: Page 1 of 1 Job#:

M - Hexane N - None O - AsNaO2 P - Na2O4S

A - HCL B - NaOH C - Zn Acetate

Tullytown Landfill 444 Oxford Valley Road

Waste Management

215-269-2114(Tel) 215-699-8315(Fax)

State, Zip: PA, 19067 Morrisville

cmoose@wm.com

New York

Phone: 716-691-2600 Fax: 716-691-7991

Client Information

Client Contact: Chad Moose

10 Hazelwood Drive Amherst, NY 14228-2298

**Eurofins Buffalo** 

480-200137 Chain of Custody

Preservation Codes:

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

Return To Client Disposal By Lab Archive For MonSpecial Instructions/QC Requirements:

Method of Shipmen

me

Radiological

Unknown

Poison B

Skin Irritant

Deliverable Requested 1, II, III, IV, Other (specify)

Empty Kit Relinquished by

Non-Hazard Flammable Possible Hazard Identification

AE an

T

Date

P1122/52/4

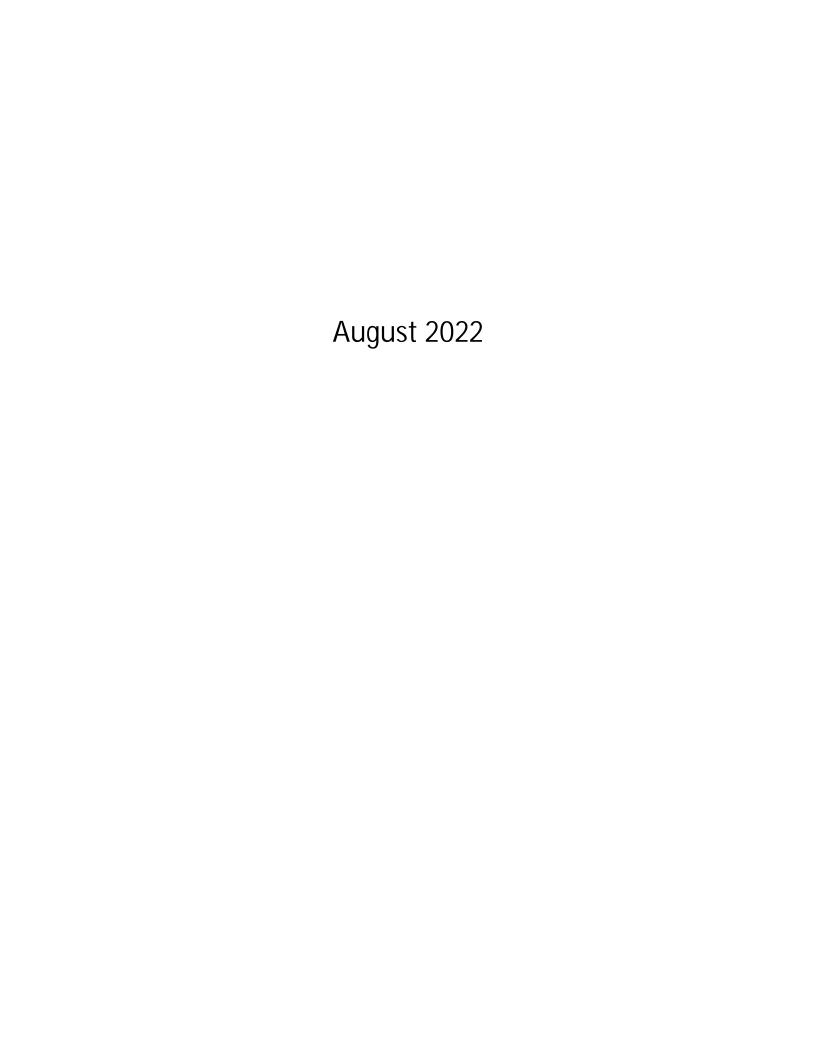
13

**Frip Blank** nfluent Effluent

Sample Identification

elinquished by elinquished by

Custody Seals Intact: Custody Seal No.



# **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.

Service by: <u>Emily Au</u> Weather/Temperature: <u>Partly Cloudy, 88 F</u> Date: 8/29/2022 Arrival Time: 1230 Departure Time: 1500

# **General**

	1	<del></del>
Reason for Service: <u>Inspect system ar</u>	nd perform	n monthly sampling
Inspection Items:	<u>OK:</u>	Comments:
Site Appearance/Condition	<u>X</u>	See Notes/Explanations 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		None
Building Heater	X	Turned heater 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	
Iron Removal Filter	NA	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	X	See Notes/Explanations section.
Gauges	X	
Stripper Blower	X	
Indication of Alarm	X	
Groundwater Treatment Wells		
EW-1 Pump		Pump is currently down
EW-1 Transducer	X	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
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	v	Outfall flowing slowly after system startup

 $\mathbf{X}$ 

Cleanout

O GPM (see Notes section)
Not Working Gallons
0GPM (see Notes section)
<u>169</u> Inches
<u>28,538,192</u> Gallons
GPM (see Notes section)
175Inches
_15,696,383 Gallons
15.5Inches H2O
<u>73,454,022</u> Gallons

#### **Influent/Effluent Sampling**

#### **AOUEOUS:**

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 7.0 (field test strip) Effluent pH 7.0 (field test strip)

### **Notes/Explanations**

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

The system was off upon arrival. Turned on system. System on at departure.

On August 18, 2022 AECOM visited the site and found that the system was on; however, the totalizer was not moving. Water was bubbling in air stripper but was not flowing in a measurable amount to outfall. The system was shut down to prevent pump damage due to unknown slow pumping. The weather had been recently dry with little precipitation, but it was unknown if that alone was the cause for the lack of pumping in the wells. AECOM returned on August 23, 2022 to perform system tests and troubleshooting. AECOM restarted the system which started at pump rates of approximately 1.3 gpm and measured water levels in the three pumping wells. AECOM compared depths to water to the water level above transducer readings from the building over several hours. The pumping rate was still low but it was determined that the water in the wells were drawn down but still above the pump set depths and that the pumps were not running dry. The system was left running at approximately 1 gpm.

Total system flow was timed at 1.1 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 (2Q2022) was collected on June 21, 2022.

The air stripper trays were last mechanically cleaned on July 26, 2022.

The monthly samples were collected today, August 29, 2022, by AECOM.

Table 1
August 29, 2022 Summary of Influent and Effluent Data

# Chem-Trol Site Town of Hamburg, New York

	Concentration					Mass Loading		
Parameters	Influer	t Eff1	luent	Discharge Limitations	Units	Effluent	Discharge Limitations	Units
Flow*	1,427	17	427	144,000	gpd	NA	NA	NA
рН	7.2	· · · · · · · · · · · · · · · · · · ·	'.9	6.5 to 8.5	standard units	NA NA	NA NA	NA NA
Toluene	< 18	3 <	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	3 <	5.0	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 24	4 <	5.0	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 15	5 <	5.0	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 35	5 <	5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	< 24	4 <	5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 34	4 <	5.0	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 24	4 <	5.0	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	2,500	<	5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	254	24	42	3,000	ug/L	0.00	3.61	lbs/day
TSS	< 4.0	< 4	.0	20	mg/L	< 0.05		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.

<sup>\*</sup> Average daily flow as measured July 27, 2022 through August 29, 2022.

# Table 2 August 29, 2022 Summary of Influent and Effluent Data

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

Instrumen EW-1	tation/Readings:	Current Report 8/29/2022	units	Prior Report 7/27/2022	
2,,, 1	Pumping Rate	0	GPM	0	
	Water Level Above Transducer	270	Inches	278	
	Flow Meter Reading	NW	gallons	NW	
EW-2					
	Pumping Rate	0	GPM	0	
	Water Level Above Transducer	169	Inches	180	
	Flow Meter Reading	28,538,192	gallons	28,538,192	
EW-3					
	Pumping Rate	0	GPM	0	
	Water Level Above Transducer	175	Inches	184	
	Flow Meter Reading	15,696,383	gallons	15,696,383	
Air Strippe	r				
	Stripper Blower Pressure	15.5	inches H <sub>2</sub> O	12.0	
Effluent F	low				
33	Total System Meter Reading	73,454,022	gallons	73,452,250	
	Average System Flow Since Prior Report	55	gpd		
		2.3	gph		
		0.0	gpm		
	Influent o-Chlorotoluene concentration	2,500	ug/L		
	Current month mass removal	0.0	kilograms		

Note: NA indicates Not Available.

NW - Not working

ug/L - micrograms per liter



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 480-201102-1

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: 9/13/2022 9:45:59 AM

Ryan VanDette, Project Manager II

(716)504-9830

Ryan.VanDette@et.eurofinsus.com

Review your project results through EOL

Have a Question?

Ask
The Expert

www.eurofinsus.com/Env

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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Client: Waste Management Project/Site: ChemTrol Site - Monthly Laboratory Job ID: 480-201102-1

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### **Definitions/Glossary**

Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

### **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
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

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### Case Narrative

Client: Waste Management

Job ID: 480-201102-1 Project/Site: ChemTrol Site - Monthly

Job ID: 480-201102-1

**Laboratory: Eurofins Buffalo** 

Narrative

Job Narrative 480-201102-1

### Comments

No additional comments.

### Receipt

The samples were received on 8/29/2022 3:30 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 7.4° C.

### **GC/MS VOA**

Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-201102-2). 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

Method 200.7 Rev 4.4: The Total Iron result reported for the following sample do not concur with results previously reported for this site: Influent (480-201102-2). 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.

### **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 sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Effluent (480-201102-1).

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 sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Influent (480-201102-2).

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

Lab Sample ID: 480-201102-1

Job ID: 480-201102-1

Total/NA

Client Sample ID: Effluent								
Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Meth	
242		50.0		ug/L	1	_	200.7	
	Result	Result Qualifier	Result Qualifier RL	Result Qualifier RL MDL	Result Qualifier RL MDL Unit	Result Qualifier RL MDL Unit Dil Fac	Result Qualifier RL MDL Unit Dil Fac D	

7.9 HF

19.2 HF

### **Client Sample ID: Influent**

**Client Sample ID: Trip Blank** 

Lab	Sample	ID.	480-201102-2
	Cullipic		TOO EUTIOE E

SM 4500 H+ B

Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2500		13		ug/L	40	_	624.1	Total/NA
254		50.0		ug/L	1		200.7 Rev 4.4	Total
								Recoverable
7.2	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
19.9	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA
	2500 254 7.2		2500 13 254 50.0 7.2 HF 0.1	2500 13 254 50.0 7.2 HF 0.1	2500 13 ug/L 254 50.0 ug/L 7.2 HF 0.1 SU	2500 13 ug/L 40 254 50.0 ug/L 1 7.2 HF 0.1 SU 1	2500 13 ug/L 40 254 50.0 ug/L 1 7.2 HF 0.1 SU 1	2500 13 ug/L 40 624.1 254 50.0 ug/L 1 200.7 Rev 4.4 7.2 HF 0.1 SU 1 SM 4500 H+ B

0.1

0.001

SU

Degrees C

Lab Sample ID: 480-201102-3

No Detections.

рΗ

Temperature

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This Detection Summary does not include radiochemical test results.

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Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Effluent** 

Lab Sample ID: 480-201102-1

09/02/22 11:01

09/01/22 09:37 09/01/22 09:37

**Matrix: Water** 

Date Collected: 08/29/22 14:00 Date Received: 08/29/22 15:30

Total Suspended Solids

Temperature

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			08/30/22 14:40	1
1,1-Dichloroethane	ND		5.0		ug/L			08/30/22 14:40	1
1,1-Dichloroethene	ND		5.0		ug/L			08/30/22 14:40	1
Benzene	ND		5.0		ug/L			08/30/22 14:40	1
Chlorobenzene	ND		5.0		ug/L			08/30/22 14:40	1
Chloroethane	ND		5.0		ug/L			08/30/22 14:40	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			08/30/22 14:40	1
Toluene	ND		5.0		ug/L			08/30/22 14:40	1
Trichloroethene	ND		5.0		ug/L			08/30/22 14:40	1
o-Chlorotoluene	ND		5.0		ug/L			08/30/22 14:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		68 - 130					08/30/22 14:40	1
Dibromofluoromethane (Surr)	104		75 - 123					08/30/22 14:40	1
4-Bromofluorobenzene (Surr)	102		76 - 123					08/30/22 14:40	1
Toluene-d8 (Surr)	98		77 - 120					08/30/22 14:40	1
Method: 200.7 Rev 4.4 - Metals	s (ICP) - Total Red	overable							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	242		50.0		ug/L		08/31/22 08:47	08/31/22 22:27	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

4.0

0.1

0.001

mg/L

SU

Degrees C

ND

7.9 HF

19.2 HF

Eurofins Buffalo

9/13/2022

Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

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

**Client Sample ID: Influent** Date Collected: 08/29/22 14:20

Date Received: 08/29/22 15:30

Analyte

Lab Sample ID: 480-201102-2

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			08/30/22 15:03	40
1,1-Dichloroethane	ND		24		ug/L			08/30/22 15:03	40
1,1-Dichloroethene	ND		34		ug/L			08/30/22 15:03	40
Benzene	ND		24		ug/L			08/30/22 15:03	40
Chlorobenzene	ND		19		ug/L			08/30/22 15:03	40
Chloroethane	ND		35		ug/L			08/30/22 15:03	40
cis-1,2-Dichloroethene	ND		23		ug/L			08/30/22 15:03	40
Toluene	ND		18		ug/L			08/30/22 15:03	40
Trichloroethene	ND		24		ug/L			08/30/22 15:03	40
o-Chlorotoluene	2500		13		ug/L			08/30/22 15:03	40
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		68 - 130			-		08/30/22 15:03	40
Dibromofluoromethane (Surr)	109		75 - 123					08/30/22 15:03	40
4-Bromofluorobenzene (Surr)	102		76 - 123					08/30/22 15:03	40
Toluene-d8 (Surr)	98		77 - 120					08/30/22 15:03	40

			50.0		ug/L		08/31/22 08:47	08/31/22 22:46	
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/02/22 11:01	1
рН	7.2	HF	0.1		SU			09/06/22 09:26	1
Temperature	19.9	HF	0.001		Degrees C			09/06/22 09:26	1
/ 	Analyte  Fotal Suspended Solids  DH	Analyte Result Fotal Suspended Solids ND pH 7.2	Analyte Result Qualifier  Fotal Suspended Solids ND  OH 7.2 HF	Analyte Result Qualifier RL Fotal Suspended Solids ND 4.0 pH 7.2 HF 0.1	Analyte         Result         Qualifier         RL         RL           Fotal Suspended Solids         ND         4.0           pH         7.2         HF         0.1	Analyte         Result         Qualifier         RL         RL         Unit           Fotal Suspended Solids         ND         4.0         mg/L           pH         7.2         HF         0.1         SU	Analyte         Result         Qualifier         RL         RL         Unit         D           Fotal Suspended Solids         ND         4.0         mg/L           pH         7.2         HF         0.1         SU	Analyte Result Qualifier RL RL Unit D Prepared  Fotal Suspended Solids ND 4.0 mg/L  OH 7.2 HF 0.1 SU	Analyte         Result         Qualifier         RL         RL         Unit         D         Prepared         Analyzed           Fotal Suspended Solids         ND         4.0         mg/L         09/02/22 11:01           pH         7.2         HF         0.1         SU         09/06/22 09:26

MDL Unit

Prepared

Result Qualifier

Dil Fac

Analyzed

Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Trip Blank** 

Lab Sample ID: 480-201102-3

Matrix: Water

Date Collected: 08/29/22 14:05 Date Received: 08/29/22 15:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			08/30/22 15:27	1
1,1-Dichloroethane	ND		5.0		ug/L			08/30/22 15:27	1
1,1-Dichloroethene	ND		5.0		ug/L			08/30/22 15:27	1
Benzene	ND		5.0		ug/L			08/30/22 15:27	1
Chlorobenzene	ND		5.0		ug/L			08/30/22 15:27	1
Chloroethane	ND		5.0		ug/L			08/30/22 15:27	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			08/30/22 15:27	1
Toluene	ND		5.0		ug/L			08/30/22 15:27	1
Trichloroethene	ND		5.0		ug/L			08/30/22 15:27	1
o-Chlorotoluene	ND		5.0		ug/L			08/30/22 15:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		68 - 130			_		08/30/22 15:27	1
Dibromofluoromethane (Surr)	107		75 - 123					08/30/22 15:27	1
4-Bromofluorobenzene (Surr)	101		76 - 123					08/30/22 15:27	1
Toluene-d8 (Surr)	98		77 - 120					08/30/22 15:27	1

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Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: MB 480-639624/8

**Matrix: Water** Analysis Batch: 639624

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

MB MB Dil Fac Analyte Result Qualifier RL MDL Unit D Prepared Analyzed 1,1,1-Trichloroethane ND 5.0 ug/L 08/30/22 13:19 1,1-Dichloroethane ND 5.0 ug/L 08/30/22 13:19 ND 08/30/22 13:19 1,1-Dichloroethene 5.0 ug/L Benzene ND 5.0 ug/L 08/30/22 13:19 Chlorobenzene ND 5.0 ug/L 08/30/22 13:19 Chloroethane ND 5.0 ug/L 08/30/22 13:19 cis-1,2-Dichloroethene ND 5.0 ug/L 08/30/22 13:19 ND 5.0 ug/L 08/30/22 13:19 Trichloroethene ND 5.0 ug/L 08/30/22 13:19 o-Chlorotoluene ND 5.0 ug/L 08/30/22 13:19

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		68 - 130			08/30/22 13:19	1
Dibromofluoromethane (Surr)	105		75 - 123			08/30/22 13:19	1
4-Bromofluorobenzene (Surr)	102		76 - 123			08/30/22 13:19	1
Toluene-d8 (Surr)	99		77 - 120			08/30/22 13:19	1

Lab Sample ID: LCS 480-639624/6

**Matrix: Water** 

Analysis Batch: 639624

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	23.2		ug/L		116	52 - 162	
1,1-Dichloroethane	20.0	20.6		ug/L		103	59 - 155	
1,1-Dichloroethene	20.0	21.7		ug/L		109	1 - 234	
Benzene	20.0	20.0		ug/L		100	37 _ 151	
Chlorobenzene	20.0	20.1		ug/L		100	37 - 160	
Chloroethane	20.0	21.8		ug/L		109	14 - 230	
Toluene	20.0	20.1		ug/L		101	47 - 150	
Trichloroethene	20.0	20.5		ug/L		103	71 - 157	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	116		68 - 130
Dibromofluoromethane (Surr)	105		75 - 123
4-Bromofluorobenzene (Surr)	103		76 - 123
Toluene-d8 (Surr)	100		77 - 120

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

Lab Sample ID: MB 480-639716/1-A

**Matrix: Water** 

Analysis Batch: 639997

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 639716** 

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		08/31/22 08:47	08/31/22 21:44	1

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Job ID: 480-201102-1

**Client Sample ID: Effluent** 

**Prep Type: Total Recoverable** 

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: LCS 480-639716/2-A **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 639997 **Prep Batch: 639716** 

Spike LCS LCS Analyte Added Result Qualifier %Rec Limits Unit D Iron 10000 9911 ug/L 99 85 - 115

Lab Sample ID: 480-201102-1 MS **Matrix: Water** 

**Analysis Batch: 639997** 

**Prep Batch: 639716** Sample Sample Spike MS MS %Rec Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits Iron 242 10000 10060 ug/L 98 70 - 130

Lab Sample ID: 480-201102-1 MSD **Client Sample ID: Effluent Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 639997 **Prep Batch: 639716** 

RPD Spike MSD MSD %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 242 10000 Iron 9940 ug/L 70 - 130 20

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

Lab Sample ID: MB 480-640183/1 Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 640183

мв мв Analyte Qualifier **RL** Unit Dil Fac Result Prepared Analyzed Total Suspended Solids 4.0 09/02/22 11:01 ND mq/L

Lab Sample ID: LCS 480-640183/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 640183

LCS LCS %Rec Spike Added Result Qualifier Unit %Rec Limits Total Suspended Solids 330 326.4 88 - 110 mg/L

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-640007/1 Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 640007

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

Lab Sample ID: LCS 480-640354/1 Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 640354

Spike LCS LCS %Rec Added Result Qualifier Limits Analyte Unit %Rec 7.0 7.00 SU 100 рΗ 99 \_ 101

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# **QC Association Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-201102-1

### **GC/MS VOA**

### Analysis Batch: 639624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total/NA	Water	624.1	
480-201102-2	Influent	Total/NA	Water	624.1	
480-201102-3	Trip Blank	Total/NA	Water	624.1	
MB 480-639624/8	Method Blank	Total/NA	Water	624.1	
LCS 480-639624/6	Lab Control Sample	Total/NA	Water	624.1	

### **Metals**

### **Prep Batch: 639716**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total Recoverable	Water	200.7	
480-201102-2	Influent	Total Recoverable	Water	200.7	
MB 480-639716/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-639716/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
480-201102-1 MS	Effluent	Total Recoverable	Water	200.7	
480-201102-1 MSD	Effluent	Total Recoverable	Water	200.7	

### Analysis Batch: 639997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	639716
480-201102-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	639716
MB 480-639716/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	639716
LCS 480-639716/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	639716
480-201102-1 MS	Effluent	Total Recoverable	Water	200.7 Rev 4.4	639716
480-201102-1 MSD	Effluent	Total Recoverable	Water	200.7 Rev 4.4	639716

### **General Chemistry**

### Analysis Batch: 640007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total/NA	Water	SM 4500 H+ B	
LCS 480-640007/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 640183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-1	Effluent	Total/NA	Water	SM 2540D	
480-201102-2	Influent	Total/NA	Water	SM 2540D	
MB 480-640183/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-640183/2	Lab Control Sample	Total/NA	Water	SM 2540D	

### Analysis Batch: 640354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201102-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-640354/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Lab Chronicle

Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Effluent** 

Lab Sample ID: 480-201102-1 Date Collected: 08/29/22 14:00

Matrix: Water

Date Received: 08/29/22 15:30

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		1	639624	ATG	EET BUF	08/30/22 14:40
Total Recoverable	Prep	200.7			639716	VAK	EET BUF	08/31/22 08:47
Total Recoverable	Analysis	200.7 Rev 4.4		1	639997	LMH	EET BUF	08/31/22 22:27
Total/NA	Analysis	SM 2540D		1	640183	SAK	EET BUF	09/02/22 11:01
Total/NA	Analysis	SM 4500 H+ B		1	640007	ARR	EET BUF	09/01/22 09:37

**Client Sample ID: Influent** 

Lab Sample ID: 480-201102-2 Date Collected: 08/29/22 14:20

**Matrix: Water** 

Date Received: 08/29/22 15:30

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		40	639624	ATG	EET BUF	08/30/22 15:03
Total Recoverable	Prep	200.7			639716	VAK	EET BUF	08/31/22 08:47
Total Recoverable	Analysis	200.7 Rev 4.4		1	639997	LMH	EET BUF	08/31/22 22:46
Total/NA	Analysis	SM 2540D		1	640183	SAK	EET BUF	09/02/22 11:01
Total/NA	Analysis	SM 4500 H+ B		1	640354	ARR	EET BUF	09/06/22 09:26

Client Sample ID: Trip Blank

Lab Sample ID: 480-201102-3 Date Collected: 08/29/22 14:05 **Matrix: Water** 

Date Received: 08/29/22 15:30

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		1	639624	ATG	EET BUF	08/30/22 15:27

**Laboratory References:** 

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

# **Accreditation/Certification Summary**

Client: Waste Management Job ID: 480-201102-1

Project/Site: ChemTrol Site - Monthly

### **Laboratory: Eurofins Buffalo**

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

Authority			Identification Number	Expiration Date 03-31-23	
New York			10026		
The following analytes the agency does not of		but the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for which	
Analysis Method	Prep Method	Matrix	Analyte		
624.1		Water	o-Chlorotoluene		
SM 4500 H+ B		Water	рН		
SM 4500 H+ B		Water	Temperature		

Eurofins Buffalo

# **Method Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-201102-1

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

EET 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: 480-201102-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201102-1	Effluent	Water	08/29/22 14:00	08/29/22 15:30
480-201102-2	Influent	Water	08/29/22 14:20	08/29/22 15:30
480-201102-3	Trip Blank	Water	08/29/22 14:05	08/29/22 15:30

9

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9

10

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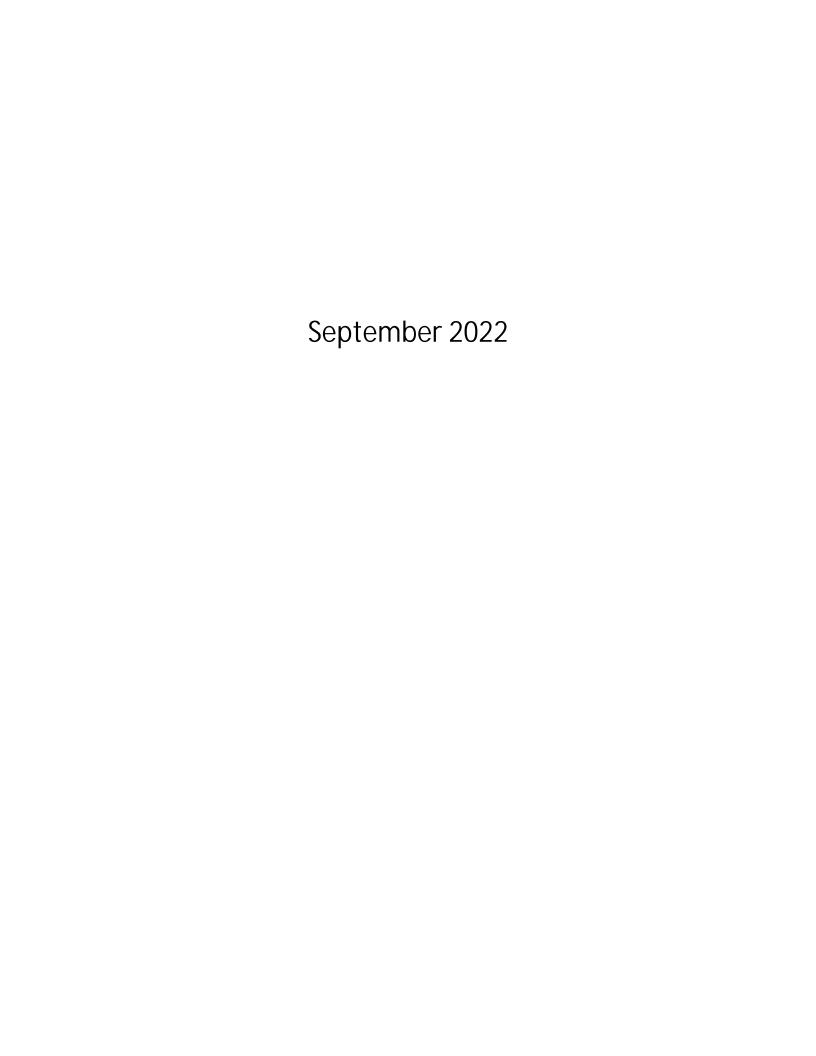
# **Chain of Custody Record**

Amherst, NY 14228-2298 Phone: 716-691-2600 Fax: 716-691-7991

**Eurofins Buffalo** 10 Hazelwood Drive

Seurofins Environment Testing America

	Sampler	II ab PM		Carrier Tracking No(s)	COC No
Client Information	- Cais A	VanDe	VanDette, Ryan T		480-174869-28522.1
Client Contact.	Phone 71/2 - 021	-32/7 E-Mail	E-Mail: Rvan VanDette@et eurofinsus com	State of Origin	Page: Page 1 of 1
Company	7				Job#:
Waste Management			Analysis	Analysis Requested	
Address Tullytown Landfill 444 Oxford Valley Road	Due Date Requested:	0			Code
City. Morrisville	TAT Requested (days): S70				B - NaOH O - AsNaO2
State, Zp. PA 19067	Compliance Project: A Yes A No	No			D - Nitric Acid Q - Na2SO3 E - NaHSO4 R - Na2SO3
Phone: Ph	1		200		G - Amchlor T - TSP Dodecahydrate
Email Email Comments of the Co	WO#	0,0	(0)		1 - Ice J - DI Water
Project Name:	Project #		N JO I	neute	
ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groun	dwate 48002447		•• <b>从</b>	nuo	Other:
Site New York	SOCIANT.		nebei	0,00	
	Sample	Sample Matrix Type (wrwater, in	MS/M ms/MS/M ms/MS/M - Iron - 7. Iron - 7. Iron - 7. Iron - 1. Iro	el Number	
Sample Identification		BT=Tissue, A=Air)	254 200 200	ioT	Special Instructions/Note:
	X	Preservation Code:	z z d	_	
Effluent	20/122 1900	Nater Water	- 3		
Influent	829/12 1450	Water	1311		
Trip Blank	8/29/22 1405	TRIP Water			
				of Custody	
				480-201102 Chair	
Ossible Hazard Identification  On-Hazard	Poison B Unknown R	Radiological	Sample Disposal ( A fee may  Return To Client	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client  Mon	tained longer than 1 month) Archive For Months
Other (specify)			Special Instructions/QC Requirements	ments:	
Empty Kit Relinquished by:	Date:	П	Time:	Method of Shipment	1
Reinquished by	Date 725 1530		Received K. Dw. OW.	MI Date Time 199	122 SZOPOWATO
Relinquished by	Date/Time: 1	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Custody Seals Intact Custody Seal No.			Cooler Temperature(s) °C and Other Remarks	T h. C	まっていま
					Ver: 06/08/2021



### **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.

Service by: <u>Emily Au</u> Weather/Temperature: <u>light rain, 74 F</u>
Date: <u>9/12/2022</u> Arrival Time: <u>0930</u> Departure Time: <u>1030</u>

### **General**

<b>Inspection Items:</b>	<u>OK:</u>	Comments:
Site Appearance/Condition	X	See Notes/Explanations 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		None
Building Heater	X	Turned heater 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	
Iron Removal Filter	NA	As of June 2021, there is no longer an iron removal filter tank.
Flow Meters	X	See Notes/Explanations section.
Gauges	X	
Stripper Blower	X	
Indication of Alarm	X	
Groundwater Treatment Wells		
EW-1 Pump	X	Pump is currently down
EW-1 Transducer	X	
EW-1 Flow Meter		EW-1 flow meter/totalizer screen no longer functioning.
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	

Flowing slowly

X

Outfall

Cleanout

Instrumentation/Readings:	
EW-1	
Pumping Rate	0GPM (see Notes section)
Water Level Above Transducer	<u>274</u> Inches
Flow Meter Reading	Not Working Gallons
EW-2	
Pumping Rate	0GPM (see Notes section)
Water Level Above Transducer	179Inches
Flow Meter Reading	<u>28,538,192</u> Gallons
EW-3	
Pumping Rate	OGPM (see Notes section)
Water Level Above Transducer	<u>197</u> Inches
Flow Meter Reading	<u>15,696,383</u> Gallons
Air Stripper	
Stripper Blower Pressure	Inches H2O
Effluent Flow	
Total System Meter Reading	<u>73,458,671</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 7.0 (field test strip) Effluent pH 7.0 (field test strip)

### **Notes/Explanations**

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

The system was on at arrival.

Total system flow was timed at 1.2 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 (2Q2022) was collected on June 21, 2022.

The air stripper trays were last mechanically cleaned on July 26, 2022.

The monthly samples were collected today, September 12, 2022, by AECOM.

The annual grass mowing has been completed since the last monthly sampling.

The flow through the system has been slow recently. AECOM called subcontractor Matrix Environmental to schedule a site visit and troubleshoot.

Table 1
September 12, 2022 Summary of Influent and Effluent Data

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

				Conce	Mass Loading				
Parameters	Influent		Effluent		Discharge Limitations	Units	Effluent	Discharge Limitations	Units
*		250		250	144,000	1	NIA	NIA	NI A
Flow <sup>*</sup> pH		358 6.9		358 7.8	144,000 6.5 to 8.5	gpd standard units	NA NA	NA NA	NA NA
Toluene	<	18	<	5.0	5	ug/L	< 0.0000	0.006	lbs/day
Chlorobenzene	<	19	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
cis-1,2-Dichloroethene	<	23	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
Benzene	<	24	<	5.0	5	ug/L	< 0.0000	0.006	lbs/day
1,1,1-Trichloroethane	<	15	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
Chloroethane	<	35	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
1,1-Dichloroethane	<	24	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
1,1-Dichloroethene	<	34	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
Trichloroethene	<	24	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
o-Chlorotoluene		2,000	<	5.0	10	ug/L	< 0.0000	0.012	lbs/day
Iron - Total		2,820	<	50	3,000	ug/L	< 0.00	3.61	lbs/day
TSS	<	4.0	<	4.0	20	mg/L	< 0.01		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.

<sup>\*</sup> Average daily flow as measured August 29, 2022 through September 12, 2022.

Table 2 September 12, 2022 Summary of Influent and Effluent Data

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

Instrumer	ntation/Readings:	Current Report 9/12/2022	units	Prior Report 8/29/2022
2,,, 1	Pumping Rate	0	GPM	0
	Water Level Above Transducer	274	Inches	270
	Flow Meter Reading	NW	gallons	NW
EW-2				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	179	Inches	169
	Flow Meter Reading	28,538,192	gallons	28,538,192
EW-3				
	Pumping Rate	0	GPM	0
	Water Level Above Transducer	197	Inches	175
	Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripp	er			
	Stripper Blower Pressure	15.5	inches H <sub>2</sub> O	15.5
Effluent F	llow			
	Total System Meter Reading	73,458,671	gallons	73,454,022
	Average System Flow Since Prior Report	358	gpd	
		14.9	gph	
		0.2	gpm	
	Influent o-Chlorotoluene concentration	2,500	ug/L	
	Current month mass removal	0.0	kilograms	

Note: NA indicates Not Available.

NW - Not working

ug/L - micrograms per liter



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 480-201517-1

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: 9/23/2022 9:04:47 AM

Ryan VanDette, Project Manager II

(716)504-9830

Ryan.VanDette@et.eurofinsus.com

Review your project results through EOL.

Have a Question?

Ask
The
Expert

www.eurofinsus.com/Env

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.

Client: Waste Management Project/Site: ChemTrol Site - Monthly Laboratory Job ID: 480-201517-1

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### **Definitions/Glossary**

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

### **Qualifiers**

### **General Chemistry**

Qualifier **Qualifier Description** 

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" Minimum Detectable Activity (Radiochemistry) MDA 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 **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) Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

**Eurofins Buffalo** 

### **Case Narrative**

Client: Waste Management

Job ID: 480-201517-1 Project/Site: ChemTrol Site - Monthly

Job ID: 480-201517-1

**Laboratory: Eurofins Buffalo** 

Narrative

Job Narrative 480-201517-1

### Comments

No additional comments.

### Receipt

The samples were received on 9/12/2022 11:00 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 4.6° C.

### **GC/MS VOA**

Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-201517-2). 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

Method 200.7 Rev 4.4: The total Iron results reported for the following samples do not concur with results previously reported for this site: Effluent (480-201517-1) and Influent (480-201517-2). 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.

### **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 (480-201517-1) and Influent (480-201517-2).

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

# **Detection Summary**

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Effluent** Lab Sample ID: 480-201517-1

Analyte	Result	Qualifier	RL	RL Unit	Dil Fac [	) Method	Prep Type
рН	7.8	HF	0.1	SU	1	SM 4500 H+ B	Total/NA
Temperature	21.2	HF	0.001	Degrees C	1	SM 4500 H+ B	Total/NA

**Client Sample ID: Influent** Lab Sample ID: 480-201517-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2000		13		ug/L	40	_	624.1	Total/NA
Iron	2820		50.0		ug/L	1		200.7 Rev 4.4	Total
									Recoverable
рН	6.9	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	21.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Lab Sample ID: 480-201517-3 **Client Sample ID: Trip Blank** 

No Detections.

This Detection Summary does not include radiochemical test results.

9/23/2022

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Effluent** 

Lab Sample ID: 480-201517-1 Date Collected: 09/12/22 09:40

Matrix: Water

09/14/22 12:00

Date Received: 09/12/22 11:00

Temperature

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/12/22 18:50	1
1,1-Dichloroethane	ND		5.0		ug/L			09/12/22 18:50	1
1,1-Dichloroethene	ND		5.0		ug/L			09/12/22 18:50	1
Benzene	ND		5.0		ug/L			09/12/22 18:50	1
Chlorobenzene	ND		5.0		ug/L			09/12/22 18:50	1
Chloroethane	ND		5.0		ug/L			09/12/22 18:50	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/12/22 18:50	1
Toluene	ND		5.0		ug/L			09/12/22 18:50	1
Trichloroethene	ND		5.0		ug/L			09/12/22 18:50	1
o-Chlorotoluene	ND		5.0		ug/L			09/12/22 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		68 - 130					09/12/22 18:50	1
Dibromofluoromethane (Surr)	107		75 - 123					09/12/22 18:50	1
4-Bromofluorobenzene (Surr)	103		76 - 123					09/12/22 18:50	1
Toluene-d8 (Surr)	99		77 - 120					09/12/22 18:50	1
Method: 200.7 Rev 4.4 - Metals	s (ICP) - Total Red	overable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		09/14/22 08:58	09/14/22 19:16	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			09/16/22 11:05	1

0.001

21.2 HF

Degrees C

Eurofins Buffalo

9/23/2022

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

Client Sample ID: Influent Date Collected: 09/12/22 10:05

Date Received: 09/12/22 11:00

Iron

Analyte

Temperature

**General Chemistry** 

Total Suspended Solids

Lab Sample ID: 480-201517-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15		ug/L			09/12/22 19:14	40
1,1-Dichloroethane	ND		24		ug/L			09/12/22 19:14	40
1,1-Dichloroethene	ND		34		ug/L			09/12/22 19:14	40
Benzene	ND		24		ug/L			09/12/22 19:14	40
Chlorobenzene	ND		19		ug/L			09/12/22 19:14	40
Chloroethane	ND		35		ug/L			09/12/22 19:14	40
cis-1,2-Dichloroethene	ND		23		ug/L			09/12/22 19:14	40
Toluene	ND		18		ug/L			09/12/22 19:14	40
Trichloroethene	ND		24		ug/L			09/12/22 19:14	40
o-Chlorotoluene	2000		13		ug/L			09/12/22 19:14	40
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		68 - 130			_		09/12/22 19:14	40
Dibromofluoromethane (Surr)	108		75 - 123					09/12/22 19:14	40
4-Bromofluorobenzene (Surr)	103		76 - 123					09/12/22 19:14	40
Toluene-d8 (Surr)	98		77 - 120					09/12/22 19:14	40
Method: 200.7 Rev 4.4 - Metals	s (ICP) - Total Reco	overable							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

50.0

RL

4.0

0.1

0.001

ug/L

mg/L

SU

Degrees C

RL Unit

09/14/22 08:58

Prepared

D

09/14/22 19:20

Analyzed

09/16/22 11:05

09/14/22 12:00

09/14/22 12:00

2820

ND

Result Qualifier

6.9 HF

21.2 HF

Eurofins Buffalo

9/23/2022

Dil Fac

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Trip Blank** 

Lab Sample ID: 480-201517-3

Matrix: Water

Date Collected: 09/12/22 00:00 Date Received: 09/12/22 11:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			09/12/22 19:39	1
1,1-Dichloroethane	ND		5.0		ug/L			09/12/22 19:39	1
1,1-Dichloroethene	ND		5.0		ug/L			09/12/22 19:39	1
Benzene	ND		5.0		ug/L			09/12/22 19:39	1
Chlorobenzene	ND		5.0		ug/L			09/12/22 19:39	1
Chloroethane	ND		5.0		ug/L			09/12/22 19:39	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			09/12/22 19:39	1
Toluene	ND		5.0		ug/L			09/12/22 19:39	1
Trichloroethene	ND		5.0		ug/L			09/12/22 19:39	1
o-Chlorotoluene	ND		5.0		ug/L			09/12/22 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		68 - 130			-		09/12/22 19:39	1
Dibromofluoromethane (Surr)	108		75 - 123					09/12/22 19:39	1
4-Bromofluorobenzene (Surr)	102		76 - 123					09/12/22 19:39	1
Toluene-d8 (Surr)	99		77 - 120					09/12/22 19:39	1

9/23/2022

5

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12

1

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: MB 480-641042/8

**Matrix: Water** 

1,1,1-Trichloroethane

1,1-Dichloroethane

1,1-Dichloroethene

cis-1,2-Dichloroethene

Chlorobenzene

Trichloroethene

o-Chlorotoluene

Chloroethane

Analyte

Benzene

Analysis Batch: 641042

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

09/12/22 16:52

09/12/22 16:52

09/12/22 16:52

MB MB Dil Fac Result Qualifier RL MDL Unit D Prepared Analyzed ND 5.0 ug/L 09/12/22 16:52 ND 5.0 ug/L 09/12/22 16:52 ND 09/12/22 16:52 5.0 ug/L ND 5.0 ug/L 09/12/22 16:52 ND 5.0 ug/L 09/12/22 16:52 ND 5.0 09/12/22 16:52 ug/L ND 5.0 ug/L 09/12/22 16:52

ug/L

ug/L

ug/L

MB MB

ND

ND

ND

ı							
	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	113		68 - 130		09/12/22 16:52	1
	Dibromofluoromethane (Surr)	107		75 <sub>-</sub> 123		09/12/22 16:52	1
	4-Bromofluorobenzene (Surr)	102		76 - 123		09/12/22 16:52	1
	Toluene-d8 (Surr)	98		77 - 120		09/12/22 16:52	1

5.0

5.0

5.0

Lab Sample ID: LCS 480-641042/6

**Matrix: Water** 

Analysis Batch: 641042

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	52 - 162	
1,1-Dichloroethane	20.0	20.8		ug/L		104	59 - 155	
1,1-Dichloroethene	20.0	20.6		ug/L		103	1 - 234	
Benzene	20.0	20.0		ug/L		100	37 _ 151	
Chlorobenzene	20.0	19.7		ug/L		98	37 - 160	
Chloroethane	20.0	21.8		ug/L		109	14 - 230	
Toluene	20.0	20.1		ug/L		100	47 - 150	
Trichloroethene	20.0	20.7		ug/L		104	71 - 157	

LCS LCS

Surrogate	%Recovery Qualif	ier Limits
1,2-Dichloroethane-d4 (Surr)	113	68 - 130
Dibromofluoromethane (Surr)	107	75 <sub>-</sub> 123
4-Bromofluorobenzene (Surr)	101	76 - 123
Toluene-d8 (Surr)	98	77 - 120

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

Lab Sample ID: MB 480-641276/1-A

**Matrix: Water** 

Analysis Batch: 641541

Client Sample ID: Method Blank **Prep Type: Total Recoverable** Prep Batch: 641276

	MB MB						
Analyte	Result Qualifie	r RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND	50.0	ug/L		09/14/22 08:58	09/14/22 18:53	1

**Eurofins Buffalo** 

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### QC Sample Results

Spike

Added

10000

Client: Waste Management Job ID: 480-201517-1

LCS LCS

10340

Result Qualifier

Unit

ug/L

Project/Site: ChemTrol Site - Monthly

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

Lab Sample ID: LCS 480-641276/2-A

**Matrix: Water** 

Analysis Batch: 641541

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total Recoverable** 

Prep Batch: 641276

%Rec Limits 103 85 - 115

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

Lab Sample ID: MB 480-641739/1

**Matrix: Water** 

Analyte

Iron

Analysis Batch: 641739

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

MB MB Result Qualifier RL **RL** Unit Prepared Dil Fac D Analyzed 4.0 09/16/22 11:05 ND Total Suspended Solids mg/L

Lab Sample ID: LCS 480-641739/2 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 641739

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Total Suspended Solids 317 312.0 mg/L 88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-641384/1

**Matrix: Water** 

Analysis Batch: 641384

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

**Eurofins Buffalo** 

# **QC Association Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-201517-1

### **GC/MS VOA**

### Analysis Batch: 641042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total/NA	Water	624.1	
480-201517-2	Influent	Total/NA	Water	624.1	
480-201517-3	Trip Blank	Total/NA	Water	624.1	
MB 480-641042/8	Method Blank	Total/NA	Water	624.1	
LCS 480-641042/6	Lab Control Sample	Total/NA	Water	624.1	

### Metals

### **Prep Batch: 641276**

Lab Sample ID 480-201517-1	Client Sample ID Effluent	Prep Type  Total Recoverable	Matrix Water	Method 200.7	Prep Batch
480-201517-2	Influent	Total Recoverable	Water	200.7	
MB 480-641276/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-641276/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

### Analysis Batch: 641541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	641276
480-201517-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	641276
MB 480-641276/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	641276
LCS 480-641276/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	641276

### **General Chemistry**

### Analysis Batch: 641384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201517-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-201517-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-641384/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 641739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Pre	p Batch
480-201517-1	Effluent	Total/NA	Water	SM 2540D	
480-201517-2	Influent	Total/NA	Water	SM 2540D	
MB 480-641739/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-641739/2	Lab Control Sample	Total/NA	Water	SM 2540D	

### **Lab Chronicle**

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

**Client Sample ID: Effluent** 

Date Collected: 09/12/22 09:40 Date Received: 09/12/22 11:00 Lab Sample ID: 480-201517-1

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		1	641042	ATG	EET BUF	09/12/22 18:50
Total Recoverable	Prep	200.7			641276	VAK	EET BUF	09/14/22 08:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	641541	LMH	EET BUF	09/14/22 19:16
Total/NA	Analysis	SM 2540D		1	641739	SAK	EET BUF	09/16/22 11:05
Total/NA	Analysis	SM 4500 H+ B		1	641384	ARR	EET BUF	09/14/22 12:00

**Client Sample ID: Influent** 

Date Collected: 09/12/22 10:05

Date Received: 09/12/22 11:00

Lab Sample	ID: 480-201517-2
	Matrix: Water

Lab Sample ID: 480-201517-3

**Matrix: Water** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		40	641042	ATG	EET BUF	09/12/22 19:14
Total Recoverable	Prep	200.7			641276	VAK	EET BUF	09/14/22 08:58
Total Recoverable	Analysis	200.7 Rev 4.4		1	641541	LMH	EET BUF	09/14/22 19:20
Total/NA	Analysis	SM 2540D		1	641739	SAK	EET BUF	09/16/22 11:05
Total/NA	Analysis	SM 4500 H+ B		1	641384	ARR	EET BUF	09/14/22 12:00

**Client Sample ID: Trip Blank** 

Date Collected: 09/12/22 00:00

Date Received: 09/12/22 11:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	624.1		1	641042	ATG	EET BUF	09/12/22 19:39

Laboratory References:

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

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**Eurofins Buffalo** 

# **Accreditation/Certification Summary**

Client: Waste Management Job ID: 480-201517-1

Project/Site: ChemTrol Site - Monthly

### **Laboratory: Eurofins Buffalo**

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

Authority	Pr	ogram	Identification Number	Expiration Date
New York	NI	ELAP	10026	03-31-23
The following analytes the agency does not of Analysis Method	. ,	ut the laboratory is not certif Matrix	ied by the governing authority. This list ma	ay include analytes for which
624.1	i rep ivietiloù	Water	o-Chlorotoluene	
SM 4500 H+ B		Water	рН	

# **Method Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-201517-1

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

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

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# **Sample Summary**

Client: Waste Management

Project/Site: ChemTrol Site - Monthly

Job ID: 480-201517-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201517-1	Effluent	Water	09/12/22 09:40	09/12/22 11:00
480-201517-2	Influent	Water	09/12/22 10:05	09/12/22 11:00
480-201517-3	Trip Blank	Water	09/12/22 00:00	09/12/22 11:00

- 0

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Months

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

Return To Client Disposal By Lab Archive For Mont

Special Instructions/QC Requirements:

Radiological

Unknown

Poison B

Skin Irritant

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

Empty Kit Relinquished by:

Possible Hazard Identification

480-201517 Chain of Custody

Water Water

THP

1000

Company

Date/Time Date/Time

Received by:

AECOM Conhpany

Company

Date/Time

Time

Date

Method of Shipment

3

62-21-60

	Sampler			Lab PM	N.						Γ	Carrier Trackii
lient Information	CMI C	12 A		Van	Dette	VanDette, Ryan T	٦					
lent Conlact had Moose	Phone: 76	1-165-9	-3312	E-Mail. Ryan.	n Va	nDett	e@et.	E-Mail. Ryan VanDette@et.eurofinsus.com	nsus.c	mo		State of Origin
mpany. aste Management			PWSID						Ang	llysis	Req	Analysis Requested
iddiess: ullytown Landfill 444 Oxford Valley Road	Due Date Requested:	:pe				ODA						
by: lornsville	TAT Requested (days):	ys):			(1/4)	180						
ate, Zip. A, 19067	Compliance Project:	A Yes	A No			SHOW						
15-269-2114(Tel) 215-699-8315(Fax)	PO# 11231631				(0	D - 12						
nail noose@wn.com	,#OM					(ON		spil				
oject Name: Project # Project # hemTrol Monthly Groundwate 48002447	Project #: ate 48002447					10 80	_	loč bel				
te: ew York	SSOW#				gms2	Y) OSI	77	ouadsn	н			_
amole Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Sample (www.ter. Seconds. C-comp, Ownerstoods. C-comp, Ownerstoods. C-comp)	Field Filtered		200.7 - Iron 624.1_PREC - 6	2 IBJOT - GOA2S	Iq - +H_0024MS			
		$\bigvee$	Preserva	Preservation Code:	$\boxtimes$	$\frac{\circ}{\sim}$	4	z	z			
	9/12/27	025	P	Water	3	5	in	-	_			

N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2SO3
T - TSP Dodecahydrate
U - Acetone
V - MCAA

A - HCL
B - NaOH
C - Zn Acetate
C - Nitric Acid
E - NahSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid

Z - other (specify)

Total Number of containers

I - Ice J - Di Water K - EDTA L - EDA

Special Instructions/Note:

Environment Testing America

🔆 eurofins

Chain of Custody Record

COC No. 480-176190-28522.1 Page: Page 1 of 1

Preservation Codes:

inquished by.

Custody Seal No.

Custody Seals Intact.
A Yes A No