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March 16, 2020

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

Subject: 2019 PERIODIC REVIEW REPORT
Chem-Trol Site, Registry No. 9-15-015,
Blasdell, Erie County

Dear Mr. Sadowski:

AECOM Technical Services, Inc. (AECOM), on behalf of SC Holdings, Inc. (SC Holdings), is submitting this Periodic Review Report (PRR) along with a completed Institutional Controls and Engineering Controls (IC/EC) Certification Form (Attachment A) for the Chem-Trol site for the reporting period of February 15, 2019 to February 15, 2020. This report is being submitted as requested by the New York State Department of Environmental Conservation (NYSDEC) in its letter dated January 9, 2020 to Mr. Mr. Chad Moose. The letter provides guidance for preparing the PRR and IC/EC form and requires that they be submitted to NYSDEC no later than March 16, 2020. Additionally, this report also includes data from January 2019 and February 2019 as the previous PRR was submitted for calendar year 2018 (i.e., through only December 31, 2018).

I. INTRODUCTION

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

As a result of historic waste processing activities, on-site soil and groundwater were impacted with heavy metals and volatile organic compounds (VOCs). In 1977, as part of the facility closure activities, Chem-Trol removed approximately 95 cubic yards of contaminated soils, placed clean soil cover and established vegetative cover over the area.

Investigative studies led to a Record of Decision (ROD) in 1996 that specified additional remedial activities. These included removal of additional soils, and construction of a soil vapor extraction (SVE) system and groundwater collection and treatment system. The SVE system includes a header pipe and eight subsurface laterals installed in a linear array within the area of remediated soils. The groundwater collection and treatment system includes a blast-fractured bedrock trench in which three

groundwater collection wells are installed, conveyance piping, and a shallow tray air stripper that removes VOCs from the collected groundwater. The treated groundwater is discharged through a pipe to the South Branch of Smokes Creek.

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

II. SITE OVERVIEW

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

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

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

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

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

Pre-design investigations and remedial design were completed between 1997 and 2000. Construction of the ROD-required remedial components was completed between 1999 and 2001. Operation, maintenance and monitoring of the remedial components began in 2001. In December 2004, the Chem-Trol site was re-classified to a class 4 site by NYSDEC. This classification indicates that remedial actions taken at the site to eliminate significant threats to public health and the environment have been properly constructed and implemented, and long-term operation, maintenance and monitoring of the in-place remedial systems is necessary to assure remedy effectiveness.

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

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

III. REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

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

SVE System

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

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

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

During this reporting period, the SVE system continued to operate passively. The lateral riser pipes were visually examined for damage during quarterly site visits. No damage was observed during these site visits.

Groundwater Collection and Treatment System

SC Holdings has the following actions performed by AECOM (items 1 through 5) and TestAmerica Laboratories, Inc. (Amherst, NY) (item 6) in order to monitor the performance of the groundwater collection system as required in the ROD:

1. Perform monthly operation and maintenance tasks on the system;
2. Perform quarterly acid wash of the air stripper, including a once-per-year dismantling of the air stripper to check seals and remove mineral accumulation in air stripper trays using mechanical means (scrubbing, re-drilling holes to full diameter, etc.);
3. Sample and analyze the groundwater collection and treatment system influent and effluent on a monthly basis for a site-specific list of 10 VOCs, Total Iron, Total Suspended Solids (TSS), and pH;
4. Measure and record water levels in groundwater extraction wells and groundwater monitoring wells on a quarterly basis;
5. Prepare bedrock groundwater contours based on quarterly water level measurements collected during the year; and,
6. Obtain annual groundwater samples for VOCs from six groundwater monitoring wells.

Effluent from the groundwater collection and treatment system (air stripper) discharges into the South Branch of Smokes Creek. Monthly aqueous effluent samples taken from the air stripper surface water discharge pipe are analyzed for surface water discharge parameter limit concentrations including VOCs by EPA Method 624.1, Total Iron by EPA Method 200.7, TSS by Standard Method (SM) 2540D, and pH by SM 4500 H+ B. Analytical test results show that discharge parameter concentrations in the air stripper effluent for calendar year 2019 and January and February 2020 were below the concentration and mass loading discharge limits established by NYSDEC for 12 of 14 months. O-chlorotoluene (OCT) exceeded the concentration but not the mass loading discharge limit in June 2019; iron and total suspended solids (TSS) exceeded the concentration but not the mass loading discharge limit in November 2019. Response actions for this event are presented in Section IV. Details for the events are as follows:

- June 2019 effluent sample – There was an OCT detection of 110 µg/L (vs. the concentration limit of 10 µg/L). Mass loading of 0.0084 pounds per day (lbs/day) was below the effluent criterion of 0.012 lbs/day. On June 18, 2019 AECOM performed a flush-and-rinse acid wash of the system. AECOM returned to site on July 15, 2019 to resample after the acid wash; however, the sample was not collected due to high blower pressure indicating a blockage in the stripper. Another flush-and-rinse acid wash of the system was performed on July 24, 2019. The system was sampled on July 26, 2019; analytical data were received on August 8, 2019. There were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples from the July 26, 2019 sampling event.
- November 2019 effluent sample – There was an iron detection of 8,450 µg/L (vs. the concentration limit of 3,000 µg/L) and a TSS detection of 33.2 mg/L (vs. the concentration limit of 20 mg/L). Mass loading of 0.65 lbs/day for iron was below the effluent criterion of 3.61 lbs/day; there is no mass loading criterion for TSS. On December 5, 2019 AECOM

performed a flush-and-rinse acid wash of the system. AECOM collected the monthly monitoring samples on December 6, 2019; analytical data were received on December 16, 2019. There were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples from the December 6, 2019 event.

Analytical test results for the 2019 monthly aqueous effluent samples are included in the Operation and Maintenance (O&M) reports submitted by AECOM to NYSDEC on a quarterly basis; results from the January and February 2020 samples will be submitted with the March 2020 sample data not later than April 15, 2020.

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

A summary of groundwater elevations measured in the groundwater monitoring wells and piezometers during 2019 is included in Table 1 - Summary of Groundwater Elevation Measurements. Quarterly groundwater elevation contours for 2019 are plotted on Figures 2 through 5. First quarter 2020 groundwater elevation data are scheduled to be collected in March 2020 and will be included in the 2020/2021 PRR.

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

VOC analytical test results of groundwater treatment system influent samples have historically shown o-chlorotoluene levels in higher concentrations than other organic compounds. Therefore, concentrations of o-chlorotoluene detected in groundwater treatment influent samples have been used to assess the performance of the treatment system in reducing organic compound concentrations in the groundwater. The o-chlorotoluene concentration data for influent groundwater samples was plotted versus time for the January 2003 through February 2020 sampling events (see Figure 6). The plot shows that the concentration of o-chlorotoluene in the influent groundwater samples has been reduced since initiation of treatment system operation. This indicates that the treatment system is meeting the remedial goal of reducing organic compound concentrations in the groundwater.

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

Annual Groundwater Monitoring

Annual groundwater monitoring was conducted by TestAmerica Laboratories, Inc. (TestAmerica), Amherst, NY, field services personnel on September 30, 2019. Groundwater samples were

successfully collected from MW-3S, MW-7R, MW-8R, MW-9R, MW-13R, and MW-15R and analyzed by TestAmerica Laboratories, Inc. (Amherst, NY) for VOCs by EPA Method 8260C. A summary of VOC detections for the annual 2019 groundwater-monitoring event is included as Table 2, Detection Summary. The complete 2019 groundwater sample analytical laboratory report is included as Attachment B. Historical concentration versus time trend plots for monitoring wells MW-3S, MW-8R, MW-9R, and MW-13R are included as Attachment C.

In addition to the routine annual sampling conducted in September 2019, TestAmerica also collected groundwater samples from MW-3S and MW-15R on June 7, 2019. These two samples were collected in spring 2019 because samples were not able to be collected from these wells in fall 2018 (MW-3S was dry and MW-15R was not located). In 2019, following spring melt and prior to foliage growing to seasonal maturity, AECOM located the two wells and marked them for TestAmerica to obtain groundwater samples to complete the 2018 round of sampling. Sample results were reported January 2020 under separate cover to NYSDEC and are not included herein.

IV. O&M PLAN COMPLIANCE

SC Holdings performed the following activities as part of the O&M Plan requirements:

Soil Vapor Extraction System

AECOM performed the following activity in 2019 as part of quarterly visits to the site:

- Visually observed each SVE passive vent riser for damage.

Groundwater Collection and Treatment System

AECOM performed the following activities in 2019 and January and February 2020 as part of routine monthly O&M visits:

- Verified that each extraction well was running and performing as designed;
- Observed that each pump was operating, documented pumping rates, total gallons pumped and insured that high and low water controls are functioning as designed;
- Performed monthly influent and effluent sample analytical testing;
- Observed that the air stripper was performing as designed;
- Performed monthly inspections of air stripper trays;
- Performed acid washes quarterly or more often if necessary to promote optimum removal of VOCs; and,
- Prepared and submitted 2019 O&M reports on a quarterly basis to NYSDEC.

The quarterly O&M reports submitted to NYSDEC provide further details on specific activities performed, analytical testing results, and observations made during the routine monthly O&M visits. Routine activities include general inspection and maintenance work performed on pumps, equipment, and sensors, as described in the monthly O&M reports.

In addition, the following non-routine maintenance activities were also performed and reported in the respective quarterly O&M reports this reporting period:

- February 19, 2019 – AECOM arrived on site and noted the computer panel screen that indicates inches of water above the transducer wasn't responding and had a locked screen that read "Error." AECOM contacted subcontractor Matrix Environmental Technologies, Inc. (Matrix), Orchard Park, NY, to troubleshoot the computer. On February 22, 2019 Matrix visited the site to troubleshoot the locked computer screen. They performed a system reset and the panel was working upon their departure.
- April 3, 2019 – In December 2018, AECOM diagnosed a failure of the EW-2 level transducer; a replacement was pending at the end of the 2018 reporting period. On April 3, 2019, the transducer at EW-2 was replaced and confirmed operational.
- April 11, 2019 – in December 2018, a tree had fallen and damaged a fence panel on the southwest side of the site, close to the outfall. On April 11, 2019, the section of fence damaged by a fallen tree limb was repaired and an access gate was installed close to the effluent sampling point to improve safety accessing the sampling point.

In a letter dated June 6, 2019, NYSDEC approved the 2018 PRR and associated IC/EC Certification. with request for submission of an addendum for groundwater sampling results for the two locations not sampled during the 2018 event (MW-3S was dry and MW-15R was unable to be located). The addendum letter and results of the sampling were submitted to NYSDEC on January 9, 2020.

V. CONCLUSIONS AND RECOMMENDATIONS

Groundwater Collection and Treatment

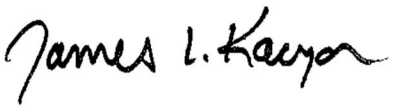
A comparison of the monthly influent vs. effluent analytical test results shows that the groundwater collection and treatment system continues to remove contaminants from groundwater at the Chem-Trol site. A plot of the influent o-chlorotoluene concentration versus time (see Figure 6) indicates that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

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

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

Please call the undersigned at AECOM (716-923-1300) or Mr. Chad Moose (215-269-2114) if you have any questions or require any additional information after reviewing this report.

Sincerely yours,



James L. Kaczor, P.G.
Project Manager
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Enclosures (Tables, Figures)

Attachments (IC/EC Form, 2019 Annual Groundwater Data Report, Historical Trend Plots)

cc: Chad Moose, P.G. (SC Holdings, Inc.), w/attachments
Daniel Servetas, P.E. (AECOM), w/attachments
60592091 Project File

TABLES

Table 1
Chem-Trol Site, Blasdell, NY
Summary of Groundwater Elevation Measurements 2019

Pumping Wells		1Q Date 3/21/2019		2Q Date 6/24/2019		3Q Date 9/19/2019		4Q Date 12/20/2019	
Well ID	Monitoring Point (TIC)	Depth To Water (ft)	1st Quarter Elevation (ft)	Depth To Water (ft)	2nd Quarter Elevation (ft)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
EW-1	624.07	19.08	604.99	18.72	605.35	20.55	603.52	15.22	608.85
EW-2	622.16	11.17	610.99	14.96	607.20	15.21	606.95	15.01	607.15
EW-3	621.10	18.43	602.67	14.70	606.40	22.40	598.70	15.17	605.93

East of Cap (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	1st Quarter Elevation (ft)	Depth To Water (ft)	2nd Quarter Elevation (ft)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
MW-6S	638.54	6.42	632.12	7.11	631.43	18.09	620.45	7.25	631.29
MW-6R	638.64	16.78	621.86	17.05	621.59	11.64	627.00	17.14	621.50
P-1S	642.80	4.63	638.17	4.95	637.85	6.96	635.84	4.75	638.05
MW-1R	645.36	6.55	638.81	6.80	638.56	8.70	636.66	6.68	638.68
MW-1S	645.40	4.73	640.67	4.95	640.45	8.01	637.39	4.64	640.76
MW-7S	642.85	3.60	639.25	4.55	638.30	9.94	632.91	3.98	638.87
MW-7R	642.28	4.62	637.66	4.84	637.44	7.02	635.26	4.86	637.42

Center of Cap (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	1st Quarter Elevation (ft)	Depth To Water (ft)	2nd Quarter Elevation (ft)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
P-5S	637.54	8.68	628.86	8.89	628.65	>13.45	<624.09	8.48	629.06
P-5R	637.88	18.76	619.12	19.03	618.85	20.29	617.59	18.98	618.90
MW-5S	636.28	10.92	625.36	9.99	626.29	13.69	622.59	10.31	625.97
P-2R	646.96	6.95	640.01	10.30	636.66	NM	--	5.72	641.24
P-2S	646.44	7.94	638.50	7.97	638.47	NM	--	7.91	638.53
MW-2S	644.85	5.75	639.10	NM	--	8.00	636.85	5.83	639.02

West of Cap (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	1st Quarter Elevation (ft)	Depth To Water (ft)	2nd Quarter Elevation (ft)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
MW-4S	637.18	12.82	624.36	12.45	624.73	15.06	<622.12	12.51	624.67
MW-4R	637.02	26.20	610.82	26.84	610.18	29.46	607.56	26.19	610.83
P-4S	636.54	14.73	621.81	14.56	621.98	16.14	620.40	14.64	621.90
MW-3S	637.64	16.59	621.05	NM	--	19.42	618.22	16.61	621.03
P-3R	639.92	20.14	619.78	20.34	619.58	20.10	619.82	19.39	620.53
P-3S	639.46	18.66	620.80	18.41	621.05	NM	--	18.41	621.05
OW-3R	638.78	23.55	615.23	23.65	615.13	24.56	614.22	22.26	616.52

West of Trench (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	1st Quarter Elevation (ft)	Depth To Water (ft)	2nd Quarter Elevation (ft)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
OW-1FR	620.42	9.43	610.99	10.04	610.38	12.60	607.82	9.42	611.00
P97-5	613.65	5.30	608.35	11.40	602.25	6.07	607.58	3.14	610.51
MW-10S	615.15*	3.62	611.53*	4.24	610.91*	>5.75	<609.40*	3.62	611.53*
MW-10R	615.47	4.25	611.22	4.80	610.67	7.58	607.89	4.13	611.34
P97-4	614.8	4.60	610.20	4.68	610.12	7.22	607.58	4.09	610.71
MW-8S	617.28	5.71	611.57	6.00	611.28	>7.30	<609.98	5.94	611.34
MW-8R	617.38	6.44	610.94	7.06	610.32	9.54	607.84	6.49	610.89
P97-3	617.66	6.60	611.06	7.15	610.51	9.98	607.68	6.54	611.12
MW-9RD	619.13	7.40	611.73	8.47	610.66	8.09	611.04	8.48	610.65
MW-9R	619.17	7.81	611.36	8.35	610.82	11.44	607.73	7.64	611.53
MW-9S	619.91	8.09	611.82	7.20	612.71	>10.70	<609.21	7.35	612.56
OW-2FR	624.14	12.66	611.48	13.30	610.84	16.37	607.77	12.48	611.66
P97-2	619.07	6.98	612.09	7.16	611.91	9.41	609.66	6.72	612.35
P97-1	619.97	7.00	612.97	7.10	612.87	8.92	611.05	6.48	613.49
MW-12R	621.59	8.48	613.11	4.62	616.97	11.91	609.68	8.76	612.83
MW-12S	621.17	4.31	616.86	8.97	612.20	>9.64	<611.53	3.61	617.56

West of Smokes Creek (North to South)

Well ID	Monitoring Point (TIC)	Depth To Water (ft)	1st Quarter Elevation (ft)	Depth To Water (ft)	2nd Quarter Elevation (ft)	Depth To Water (ft)	3rd Quarter Elevation (ft)	Depth To Water (ft)	4th Quarter Elevation (ft)
MW-13R	615.14	5.01	610.13	5.62	609.52	7.81	607.33	5.09	610.05
MW-14R	618.55	4.68	613.87	5.25	613.30	5.58	612.97	5.12	613.43

* MW-10S reference point and elevations estimated- well replaced in 2016.
NM - Not Measured

Table 2
Detection Summary

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: DUP — Lab Sample ID: 480-159949-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	210		6.6		ug/L	8		8260C	Total/NA
1,1-Dichloroethane	95		5.0		ug/L	8		8260C	Total/NA
o-Chlorotoluene	38		6.9		ug/L	8		8260C	Total/NA
Chloroethane	17	*	5.0		ug/L	8		8260C	Total/NA
Methylene Chloride	9.6		5.0		ug/L	8		8260C	Total/NA

Client Sample ID: MW-13R — Lab Sample ID: 480-159949-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2500	F1	34		ug/L	40		8260C	Total/NA
Chloroethane	26		13		ug/L	40		8260C	Total/NA

Client Sample ID: MW-15R — Lab Sample ID: 480-159949-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	18		15		ug/L	1		8260C	Total/NA

Client Sample ID: MW-3S — Lab Sample ID: 480-159949-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	73000		1700		ug/L	2000		8260C	Total/NA

Client Sample ID: MW-7R — Lab Sample ID: 480-159949-5

No Detections.

Client Sample ID: MW-8R — Lab Sample ID: 480-159949-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	44		5.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-9R — Lab Sample ID: 480-159949-7

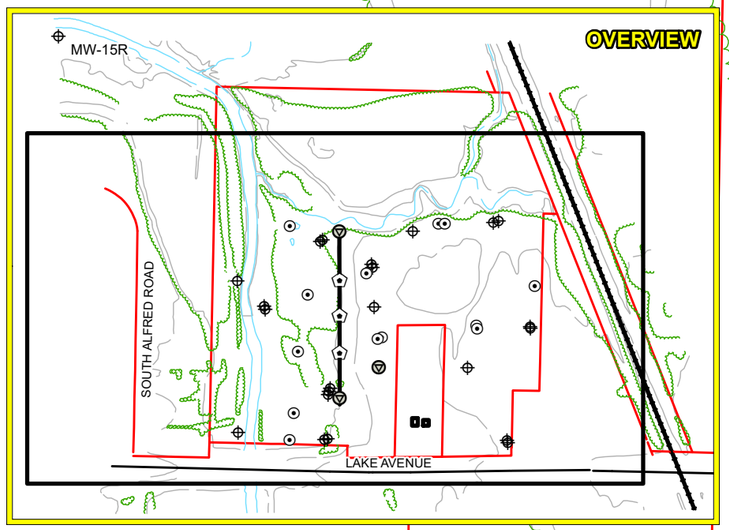
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	200		5.0		ug/L	4		8260C	Total/NA
1,1-Dichloroethane	89		5.0		ug/L	4		8260C	Total/NA
o-Chlorotoluene	39		5.0		ug/L	4		8260C	Total/NA
Chloroethane	29		5.0		ug/L	4		8260C	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-159949-8

No Detections.

This Detection Summary does not include radiochemical test results.

FIGURES



N

ON SITE TRIBUTARY OF SMOKES CREEK

SOUTH BRANCH OF SMOKES CREEK

GROUNDWATER COLLECTION TRENCH

SOUTH ALFRED ROAD

LAKE AVENUE

WATER TREATMENT BUILDING

SOIL VAPOR EXTRACTION BUILDING

P97-5
OW-1FR
MW-10S
MW-10R
MW-13R
P97-4
MW-8S
MW-8R
EW3
EW2
EW1
P97-3
P97-2
P97-1
MW-14R
MW-9RD
MW-9R
MW-9S
OW-2FR
MW-12S
MW-12R
MW-4S
MW-4R
P-4S
MW-3S
OW-3R
P-5R
P-5R
MW-5S
MW-6R
MW-6S
P-1S
P-2R
P-2S
P-3R
P-3S
MW-1R
MW-1S
MW-2S
MW-7S
MW-7R

Legend

- Extraction Well
- Monitoring Wel
- Observation Well
- Piezometer
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

100 0 100 Feet

CHEM-TROL
SITE PLAN

AECOM

FIGURE 1

J:\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\SITE PLAN.mxd 8/21/2019

N

SOUTH ALFRED ROAD

SOUTH BRANCH OF SMOKES CREEK

ON SITE TRIBUTARY OF SMOKES CREEK

GROUNDWATER COLLECTION TRENCH

P97-5, 608.35
OW-1FR, 610.99
MW-10R, 611.22
P-5R, 619.12
MW-6R, 621.86
MW-4R, 610.82
MW-13R, 610.13
EW3, 602.67
P97-4, 610.20
MW-8R, 610.94
EW2, 610.99
P-2R, 640.01
MW-1R, 638.81
P-3R, 619.78
P97-3, 611.06
EW1, 604.99
OW-3R, 615.23
MW-9R, 611.36
OW-2FR, 611.48
WATER TREATMENT BUILDING
SOIL VAPOR EXTRACTION BUILDING
P97-2, 612.09
MW-14R, 613.87
P97-1, 612.97
MW-12R, 613.11
MW-7R, 637.66

LAKE AVENUE

Legend

- Extraction Well
- Monitoring Well
- Observation Well
- Piezometer
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

MW-6R, 621.86
Location ID — Groundwater Elevation

100 0 100 Feet

CHEM-TROL
BEDROCK GROUNDWATER CONTOURS
MARCH 21, 2019

AECOM

FIGURE 2

J:\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\FIRST QUARTER 2019 GW CONTOURS.mxd 7/10/2019

N

ON SITE TRIBUTARY OF SMOKES CREEK

SOUTH BRANCH OF SMOKES CREEK

GROUNDWATER COLLECTION TRENCH

SOUTH ALFRED ROAD

LAKE AVENUE

WATER TREATMENT BUILDING

SOIL VAPOR EXTRACTION BUILDING

P97-5, 602.25

OW-1FR, 610.38

MW-10R, 610.67

P-5R, 618.85

MW-6R, 621.59

MW-4R, 610.18

MW-13R, 609.52

EW3, 606.40

P97-4, 610.12

MW-8R, 610.32

EW2, 607.20

P-2R, 636.66

MW-1R, 638.56

P-3R, 619.58

P97-3, 610.51

EW1, 605.35

OW-3R, 615.13

MW-9R, 610.82

OW-2FR, 610.84

P97-2, 611.91

MW-14R, 613.30

P97-1, 612.87

MW-12R, 616.97

MW-7R, 637.44

Legend

- Extraction Well
- Monitoring Well
- Observation Well
- Piezometer
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

MW-6R, 621.59
Location ID — Groundwater Elevation

100 0 100 Feet

CHEM-TROL
BEDROCK GROUNDWATER CONTOURS
JUNE 24, 2019

AECOM

FIGURE 3

J:\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\SECOND QUARTER 2019 GW CONTOURS.mxd 7/10/2019

N

SOUTH ALFRED ROAD

LAKE AVENUE

SOUTH BRANCH OF SMOKES CREEK

ON SITE TRIBUTARY OF SMOKES CREEK

GROUNDWATER COLLECTION TRENCH

WATER TREATMENT BUILDING

SOIL VAPOR EXTRACTION BUILDING

P97-5, 607.58
OW-1FR, 607.82
MW-10R, 607.89
P-5R, 617.59
MW-6R, 627.00
MW-4R, 607.56
MW-13R, 607.33
EW3, 598.70
P97-4, 607.58
MW-8R, 607.84
EW2, 606.95
P-2R, NM
MW-1R, 636.66
P-3R, 619.82
P97-3, 607.68
EW1, 603.52
OW-3R, 614.22
MW-9R, 607.73
OW-2FR, 607.77
P97-2, 609.66
MW-14R, 612.97
P97-1, 611.05
MW-12R, 609.68
MW-7R, 635.26

600 602 604 606 608 610 612 614 616 618 620 622 624 626 628 630 632 634 636 640

Legend

- Extraction Well
- Monitoring Well
- Observation Well
- Piezometer
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

MW-6R, 627.00
Location ID — Groundwater Elevation

NOTE:
NM - Not Monitored

100 0 100 Feet

CHEM-TROL
BEDROCK GROUNDWATER CONTOURS
SEPTEMBER 19, 2019

AECOM

FIGURE 4

J:\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\THIRD QUARTER 2019 GW CONTOURS.mxd 12/9/2019

N

SOUTH ALFRED ROAD

SOUTH BRANCH OF SMOKES CREEK

ON SITE TRIBUTARY OF SMOKES CREEK

GROUNDWATER COLLECTION TRENCH

P97-5, 610.51
OW-1FR, 611.00
MW-10R, 611.34
P-5R, 618.90
MW-6R, 621.50
MW-4R, 610.83
MW-13R, 610.05
EW3, 605.93
P97-4, 610.71
MW-8R, 610.89
EW2, 607.15
MW-1R, 638.68
P-2R, 641.24
P-3R, 620.53
P97-3, 611.12
EW1, 608.85
OW-3R, 616.52
MW-9R, 611.53
OW-2FR, 611.66
WATER TREATMENT BUILDING
SOIL VAPOR EXTRACTION BUILDING
P97-2, 612.35
MW-14R, 613.43
P97-1, 613.49
MW-12R, 612.83
MW-7R, 637.42

LAKE AVENUE

Legend

- Extraction Well
- Monitoring Well
- Observation Well
- Piezometer
- Groundwater Flow Direction
- Groundwater Elevation Contour
- Edge of Water
- Property Line
- Existing Ground Elevation Contour

MW-6R, 621.50
Location ID — Groundwater Elevation

100 0 100 Feet

CHEM-TROL
BEDROCK GROUNDWATER CONTOURS
DECEMBER 20, 2019

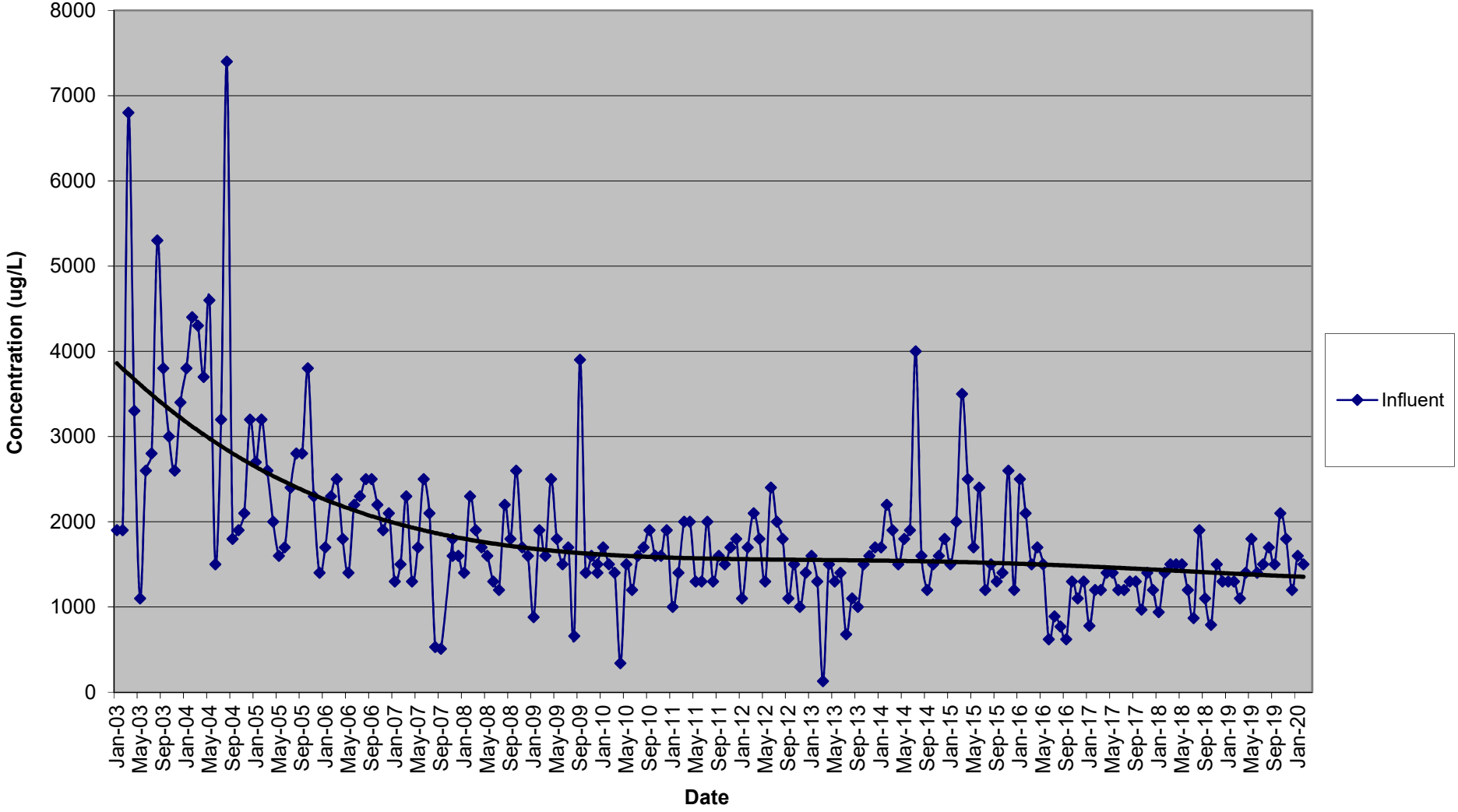
AECOM

FIGURE 5

J:\Projects\60526520_ChmTrl2017\900-CAD-GIS\920-GIS or Graphics\Arcmap\FOURTH QUARTER 2019 GW CONTOURS.mxd 2/21/2020

FIGURE 6

Chem-Trol Groundwater Treatment System
Influent o-Chlorotoluene Concentration
January 2003 - February 2020



ATTACHMENT A

Completed IC/EC Form

Enclosure 2

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

Site Details **Box 1**

Site No. **915015**

Site Name Chem-Trol

Site Address: Lake Avenue Zip Code: 14107
City/Town: Hamburg
County: Erie
Site Acreage: 17.520

Reporting Period: February 15, 2019 to February 15, 2020

	YES	NO
1. Is the information above correct?	☐	☒
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 915015 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
151.02-1-14.1	SC Holdlings Inc./Waste Management	Ground Water Use Restriction
		Monitoring Plan
		O&M Plan
		Landuse Restriction
		Building Use Restriction

The controls identified in the Declaration of Covenants and Restrictions, recorded with Erie County on March 25, 2004, include but are not limited to the following: The owner of the Property shall maintain the cap covering the Property by maintaining its grass cover, or after obtaining written approval from the Relevant Agency, by capping the Property with another material. The property is prohibited from being used for purposes other than for industrial or commercial use, excluding use for day care, child care and medical care; the use of groundwater underlying the property is prohibited without treatment to render it safe for drinking water or industrial purposes, except that the groundwater may be reasonably used as necessary to conduct tests to monitor contamination levels of the groundwater. These restrictive covenants are binding and shall run with the land.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
151.02-1-14.1	Groundwater Treatment System
	Cover System
	Groundwater Containment
	Monitoring Wells
	Fencing/Access Control
	Leachate Collection

Remediation was completed in two phases consisting of Source Control Elements and Groundwater Control Elements. These elements are summarized as follows:

Source Control Elements:

1. Hot Spot Soils Removal.
2. Tributary Sediment Excavation/Disposal.
3. Site Soils Cover.
4. Soil Vapor Extraction. Passive state with one year evaluation starting January 2010. Passive state permanently approved on May 29, 2011.

Groundwater Control Elements:

1. Groundwater extraction from three extraction wells.
2. On-site groundwater treatment with discharge compliance monitoring.
2. Groundwater quality monitoring.

Groundwater intercept, extraction, treatment and discharge compliance monitoring. Periodic measuring of groundwater levels and plotting to develop groundwater contours and directional gradients. Annual groundwater quality monitoring to determine performance of remedy. Ongoing site management activities to continue with remedy and protection of public health and the environment.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 915015

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Chad Moose (print name) at 100 Brandywine Blvd, Suite 300, Newtown, PA 18940, (print business address)

am certifying as Owner (Owner or Remedial Party)

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

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

3/16/2020
Date

IC/EC CERTIFICATIONS

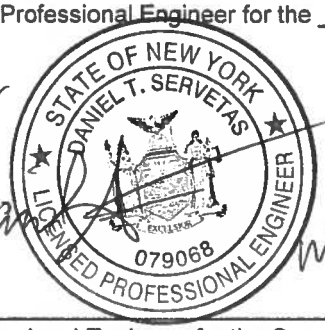
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Daniel T. Servetas (print name) at 40 British American Blvd, Latham, NY 12110 (print business address),

am certifying as a Professional Engineer for the Owner (Owner or Remedial Party)



March 12, 2020

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date

ATTACHMENT B

2019 Annual Groundwater Sample Laboratory Report

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 480-159949-1
Client Project/Site: ChemTrol Site-Annual GW
Sampling Event: ChemTrol Annual Groundwater (9)

For:
Waste Management
Tullytown Landfill
444 Oxford Valley Road
Morrisville, Pennsylvania 19067

Attn: Chad Moose

Katelyn Ferguson

Authorized for release by:
10/11/2019 4:03:31 PM
Katelyn Ferguson, Project Management Assistant I
katelyn.ferguson@testamericainc.com

Designee for

Denise Giglia, Project Manager I
(716)691-2600
denise.giglia@testamericainc.com

Table of Contents

Client: Waste Management
Job ID: 480-159949-1
Project/Site: ChemTrol Site-Annual GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

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

Job ID: 480-159949-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-159949-1

Comments
No additional comments.

Receipt
The samples were received on 9/30/2019 2:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA
Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: DUP (480-159949-1), MW-13R (480-159949-2), MW-3S (480-159949-4), MW-9R (480-159949-7), (480-159949-A-2 MS) and (480-159949-A-2 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The results reported for the following sample do not concur with results previously reported for this site: DUP (480-159949-1) and MW-15R (480-159949-3). Reanalysis was performed, and the result(s) confirmed.

Method(s) 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 480-496556 recovered outside control limits for the following analyte(s): Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The following samples are impacted: DUP (480-159949-1).

Method(s) 8260C: The Laboratory Control Sample (LCS) was outside laboratory/project quality control limits for the following analyte: Dichlorofluoromethane. All other spike recoveries and quality control indicators, including sample specific surrogate recoveries, were acceptable. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: DUP (480-159949-1).

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-Annual GW

Job ID: 480-159949-1

Client Sample ID: DUP — Lab Sample ID: 480-159949-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	210		6.6		ug/L	8		8260C	Total/NA
1,1-Dichloroethane	95		5.0		ug/L	8		8260C	Total/NA
o-Chlorotoluene	38		6.9		ug/L	8		8260C	Total/NA
Chloroethane	17	*	5.0		ug/L	8		8260C	Total/NA
Methylene Chloride	9.6		5.0		ug/L	8		8260C	Total/NA

Client Sample ID: MW-13R — Lab Sample ID: 480-159949-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2500	F1	34		ug/L	40		8260C	Total/NA
Chloroethane	26		13		ug/L	40		8260C	Total/NA

Client Sample ID: MW-15R — Lab Sample ID: 480-159949-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	18		15		ug/L	1		8260C	Total/NA

Client Sample ID: MW-3S — Lab Sample ID: 480-159949-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	73000		1700		ug/L	2000		8260C	Total/NA

Client Sample ID: MW-7R — Lab Sample ID: 480-159949-5

No Detections.

Client Sample ID: MW-8R — Lab Sample ID: 480-159949-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	44		5.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-9R — Lab Sample ID: 480-159949-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	200		5.0		ug/L	4		8260C	Total/NA
1,1-Dichloroethane	89		5.0		ug/L	4		8260C	Total/NA
o-Chlorotoluene	39		5.0		ug/L	4		8260C	Total/NA
Chloroethane	29		5.0		ug/L	4		8260C	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-159949-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: DUP

Date Collected: 09/30/19 11:20
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**210**		6.6		ug/L			10/08/19 15:29	8
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/08/19 15:29	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/08/19 15:29	8
1,1,2-Trichloroethane	ND		5.0		ug/L			10/08/19 15:29	8
1,1-Dichloroethane	**95**		5.0		ug/L			10/08/19 15:29	8
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/08/19 15:29	8
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/19 15:29	8
1,2-Dibromoethane	ND		5.8		ug/L			10/08/19 15:29	8
1,2-Dichlorobenzene	ND		6.3		ug/L			10/08/19 15:29	8
1,2-Dichloroethane	ND		5.0		ug/L			10/08/19 15:29	8
1,2-Dichloropropane	ND		5.8		ug/L			10/08/19 15:29	8
1,3-Dichlorobenzene	ND		6.2		ug/L			10/08/19 15:29	8
1,4-Dichlorobenzene	ND		6.7		ug/L			10/08/19 15:29	8
2-Butanone (MEK)	ND		25		ug/L			10/08/19 15:29	8
o-Chlorotoluene	**38**		6.9		ug/L			10/08/19 15:29	8
2-Hexanone	ND		25		ug/L			10/08/19 15:29	8
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/08/19 15:29	8
Acetone	ND		25		ug/L			10/08/19 15:29	8
Benzene	ND		5.0		ug/L			10/08/19 15:29	8
Bromoform	ND		5.0		ug/L			10/08/19 15:29	8
Bromomethane	ND		5.5		ug/L			10/08/19 15:29	8
Carbon disulfide	ND		5.0		ug/L			10/08/19 15:29	8
Carbon tetrachloride	ND		5.0		ug/L			10/08/19 15:29	8
Chlorobenzene	ND		6.0		ug/L			10/08/19 15:29	8
Chlorodibromomethane	ND		5.0		ug/L			10/08/19 15:29	8
Chloroethane	**17**	*	5.0		ug/L			10/08/19 15:29	8
Chloroform	ND		5.0		ug/L			10/08/19 15:29	8
Chloromethane	ND		5.0		ug/L			10/08/19 15:29	8
cis-1,2-Dichloroethene	ND		6.5		ug/L			10/08/19 15:29	8
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 15:29	8
Cyclohexane	ND		5.0		ug/L			10/08/19 15:29	8
Bromodichloromethane	ND		5.0		ug/L			10/08/19 15:29	8
Dichlorofluoromethane	ND	*	5.0		ug/L			10/08/19 15:29	8
Ethylbenzene	ND		5.9		ug/L			10/08/19 15:29	8
Isopropylbenzene	ND		6.3		ug/L			10/08/19 15:29	8
Methyl acetate	ND		10		ug/L			10/08/19 15:29	8
Methyl tert-butyl ether	ND		5.0		ug/L			10/08/19 15:29	8
Methylcyclohexane	ND		5.0		ug/L			10/08/19 15:29	8
Methylene Chloride	**9.6**		5.0		ug/L			10/08/19 15:29	8
Styrene	ND		5.8		ug/L			10/08/19 15:29	8
Tetrachloroethene	ND		5.0		ug/L			10/08/19 15:29	8
Toluene	ND		5.0		ug/L			10/08/19 15:29	8
trans-1,2-Dichloroethene	ND		7.2		ug/L			10/08/19 15:29	8
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 15:29	8
Trichloroethene	ND		5.0		ug/L			10/08/19 15:29	8
Trichlorofluoromethane	ND		7.0		ug/L			10/08/19 15:29	8
Vinyl chloride	ND		7.2		ug/L			10/08/19 15:29	8
Xylenes, Total	ND		15		ug/L			10/08/19 15:29	8

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: DUP
Date Collected: 09/30/19 11:20
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		10/08/19 15:29	8
Toluene-d8 (Surr)	103		80 - 120		10/08/19 15:29	8
4-Bromofluorobenzene (Surr)	104		73 - 120		10/08/19 15:29	8
Dibromofluoromethane (Surr)	104		75 - 123		10/08/19 15:29	8

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-13R
Date Collected: 09/30/19 11:10
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		33		ug/L			10/07/19 12:41	40
1,1,2,2-Tetrachloroethane	ND		8.4		ug/L			10/07/19 12:41	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		12		ug/L			10/07/19 12:41	40
1,1,2-Trichloroethane	ND		9.2		ug/L			10/07/19 12:41	40
1,1-Dichloroethane	ND		15		ug/L			10/07/19 12:41	40
1,2,4-Trichlorobenzene	ND		16		ug/L			10/07/19 12:41	40
1,2-Dibromo-3-Chloropropane	ND		16		ug/L			10/07/19 12:41	40
1,2-Dibromoethane	ND		29		ug/L			10/07/19 12:41	40
1,2-Dichlorobenzene	ND		32		ug/L			10/07/19 12:41	40
1,2-Dichloroethane	ND		8.4		ug/L			10/07/19 12:41	40
1,2-Dichloropropane	ND		29		ug/L			10/07/19 12:41	40
1,3-Dichlorobenzene	ND		31		ug/L			10/07/19 12:41	40
1,4-Dichlorobenzene	ND		34		ug/L			10/07/19 12:41	40
2-Butanone (MEK)	ND		53		ug/L			10/07/19 12:41	40
o-Chlorotoluene	**2500**	**F1**	34		ug/L			10/07/19 12:41	40
2-Hexanone	ND		50		ug/L			10/07/19 12:41	40
4-Methyl-2-pentanone (MIBK)	ND		84		ug/L			10/07/19 12:41	40
Acetone	ND	F2	120		ug/L			10/07/19 12:41	40
Benzene	ND		16		ug/L			10/07/19 12:41	40
Bromoform	ND		10		ug/L			10/07/19 12:41	40
Bromomethane	ND		28		ug/L			10/07/19 12:41	40
Carbon disulfide	ND		7.6		ug/L			10/07/19 12:41	40
Carbon tetrachloride	ND		11		ug/L			10/07/19 12:41	40
Chlorobenzene	ND		30		ug/L			10/07/19 12:41	40
Chlorodibromomethane	ND		13		ug/L			10/07/19 12:41	40
Chloroethane	**26**		13		ug/L			10/07/19 12:41	40
Chloroform	ND		14		ug/L			10/07/19 12:41	40
Chloromethane	ND		14		ug/L			10/07/19 12:41	40
cis-1,2-Dichloroethene	ND		32		ug/L			10/07/19 12:41	40
cis-1,3-Dichloropropene	ND		14		ug/L			10/07/19 12:41	40
Cyclohexane	ND		7.2		ug/L			10/07/19 12:41	40
Bromodichloromethane	ND		16		ug/L			10/07/19 12:41	40
Dichlorofluoromethane	ND		14		ug/L			10/07/19 12:41	40
Ethylbenzene	ND		30		ug/L			10/07/19 12:41	40
Isopropylbenzene	ND		32		ug/L			10/07/19 12:41	40
Methyl acetate	ND		52		ug/L			10/07/19 12:41	40
Methyl tert-butyl ether	ND		6.4		ug/L			10/07/19 12:41	40
Methylcyclohexane	ND		6.4		ug/L			10/07/19 12:41	40
Methylene Chloride	ND		18		ug/L			10/07/19 12:41	40
Styrene	ND		29		ug/L			10/07/19 12:41	40
Tetrachloroethene	ND		14		ug/L			10/07/19 12:41	40
Toluene	ND		20		ug/L			10/07/19 12:41	40
trans-1,2-Dichloroethene	ND		36		ug/L			10/07/19 12:41	40
trans-1,3-Dichloropropene	ND		15		ug/L			10/07/19 12:41	40
Trichloroethene	ND		18		ug/L			10/07/19 12:41	40
Trichlorofluoromethane	ND		35		ug/L			10/07/19 12:41	40
Vinyl chloride	ND		36		ug/L			10/07/19 12:41	40
Xylenes, Total	ND		26		ug/L			10/07/19 12:41	40

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-13R
Date Collected: 09/30/19 11:10
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		10/07/19 12:41	40
Toluene-d8 (Surr)	100		80 - 120		10/07/19 12:41	40
4-Bromofluorobenzene (Surr)	103		73 - 120		10/07/19 12:41	40
Dibromofluoromethane (Surr)	100		75 - 123		10/07/19 12:41	40

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-15R
Date Collected: 09/30/19 12:00
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/08/19 12:24	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/08/19 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/08/19 12:24	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/08/19 12:24	1
1,1-Dichloroethane	ND		5.0		ug/L			10/08/19 12:24	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/08/19 12:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/19 12:24	1
1,2-Dibromoethane	ND		5.0		ug/L			10/08/19 12:24	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/08/19 12:24	1
1,2-Dichloroethane	ND		5.0		ug/L			10/08/19 12:24	1
1,2-Dichloropropane	ND		5.0		ug/L			10/08/19 12:24	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/08/19 12:24	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/08/19 12:24	1
2-Butanone (MEK)	ND		25		ug/L			10/08/19 12:24	1
o-Chlorotoluene	ND		5.0		ug/L			10/08/19 12:24	1
2-Hexanone	ND		25		ug/L			10/08/19 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/08/19 12:24	1
Acetone	ND		25		ug/L			10/08/19 12:24	1
Benzene	ND		5.0		ug/L			10/08/19 12:24	1
Bromoform	ND		5.0		ug/L			10/08/19 12:24	1
Bromomethane	ND		5.0		ug/L			10/08/19 12:24	1
Carbon disulfide	ND		5.0		ug/L			10/08/19 12:24	1
Carbon tetrachloride	ND		5.0		ug/L			10/08/19 12:24	1
Chlorobenzene	ND		5.0		ug/L			10/08/19 12:24	1
Chlorodibromomethane	ND		5.0		ug/L			10/08/19 12:24	1
Chloroethane	ND		5.0		ug/L			10/08/19 12:24	1
Chloroform	ND		5.0		ug/L			10/08/19 12:24	1
Chloromethane	ND		5.0		ug/L			10/08/19 12:24	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/08/19 12:24	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 12:24	1
Cyclohexane	ND		5.0		ug/L			10/08/19 12:24	1
Bromodichloromethane	ND		5.0		ug/L			10/08/19 12:24	1
Dichlorofluoromethane	ND		5.0		ug/L			10/08/19 12:24	1
Ethylbenzene	ND		5.0		ug/L			10/08/19 12:24	1
Isopropylbenzene	ND		5.0		ug/L			10/08/19 12:24	1
Methyl acetate	ND		5.0		ug/L			10/08/19 12:24	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/08/19 12:24	1
Methylcyclohexane	ND		5.0		ug/L			10/08/19 12:24	1
Methylene Chloride	ND		5.0		ug/L			10/08/19 12:24	1
Styrene	ND		5.0		ug/L			10/08/19 12:24	1
Tetrachloroethene	ND		5.0		ug/L			10/08/19 12:24	1
Toluene	ND		5.0		ug/L			10/08/19 12:24	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/08/19 12:24	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 12:24	1
Trichloroethene	ND		5.0		ug/L			10/08/19 12:24	1
Trichlorofluoromethane	ND		5.0		ug/L			10/08/19 12:24	1
Vinyl chloride	ND		5.0		ug/L			10/08/19 12:24	1
Xylenes, Total	**18**		15		ug/L			10/08/19 12:24	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-15R
Date Collected: 09/30/19 12:00
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		10/08/19 12:24	1
Toluene-d8 (Surr)	100		80 - 120		10/08/19 12:24	1
4-Bromofluorobenzene (Surr)	101		73 - 120		10/08/19 12:24	1
Dibromofluoromethane (Surr)	103		75 - 123		10/08/19 12:24	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-3S
Date Collected: 09/30/19 11:40
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1600		ug/L			10/07/19 13:28	2000
1,1,2,2-Tetrachloroethane	ND		420		ug/L			10/07/19 13:28	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		620		ug/L			10/07/19 13:28	2000
1,1,2-Trichloroethane	ND		460		ug/L			10/07/19 13:28	2000
1,1-Dichloroethane	ND		760		ug/L			10/07/19 13:28	2000
1,2,4-Trichlorobenzene	ND		820		ug/L			10/07/19 13:28	2000
1,2-Dibromo-3-Chloropropane	ND		780		ug/L			10/07/19 13:28	2000
1,2-Dibromoethane	ND		1500		ug/L			10/07/19 13:28	2000
1,2-Dichlorobenzene	ND		1600		ug/L			10/07/19 13:28	2000
1,2-Dichloroethane	ND		420		ug/L			10/07/19 13:28	2000
1,2-Dichloropropane	ND		1400		ug/L			10/07/19 13:28	2000
1,3-Dichlorobenzene	ND		1600		ug/L			10/07/19 13:28	2000
1,4-Dichlorobenzene	ND		1700		ug/L			10/07/19 13:28	2000
2-Butanone (MEK)	ND		2600		ug/L			10/07/19 13:28	2000
o-Chlorotoluene	**73000**		1700		ug/L			10/07/19 13:28	2000
2-Hexanone	ND		2500		ug/L			10/07/19 13:28	2000
4-Methyl-2-pentanone (MIBK)	ND		4200		ug/L			10/07/19 13:28	2000
Acetone	ND		6000		ug/L			10/07/19 13:28	2000
Benzene	ND		820		ug/L			10/07/19 13:28	2000
Bromoform	ND		520		ug/L			10/07/19 13:28	2000
Bromomethane	ND		1400		ug/L			10/07/19 13:28	2000
Carbon disulfide	ND		380		ug/L			10/07/19 13:28	2000
Carbon tetrachloride	ND		540		ug/L			10/07/19 13:28	2000
Chlorobenzene	ND		1500		ug/L			10/07/19 13:28	2000
Chlorodibromomethane	ND		640		ug/L			10/07/19 13:28	2000
Chloroethane	ND		640		ug/L			10/07/19 13:28	2000
Chloroform	ND		680		ug/L			10/07/19 13:28	2000
Chloromethane	ND		700		ug/L			10/07/19 13:28	2000
cis-1,2-Dichloroethene	ND		1600		ug/L			10/07/19 13:28	2000
cis-1,3-Dichloropropene	ND		720		ug/L			10/07/19 13:28	2000
Cyclohexane	ND		360		ug/L			10/07/19 13:28	2000
Bromodichloromethane	ND		780		ug/L			10/07/19 13:28	2000
Dichlorofluoromethane	ND		680		ug/L			10/07/19 13:28	2000
Ethylbenzene	ND		1500		ug/L			10/07/19 13:28	2000
Isopropylbenzene	ND		1600		ug/L			10/07/19 13:28	2000
Methyl acetate	ND		2600		ug/L			10/07/19 13:28	2000
Methyl tert-butyl ether	ND		320		ug/L			10/07/19 13:28	2000
Methylcyclohexane	ND		320		ug/L			10/07/19 13:28	2000
Methylene Chloride	ND		880		ug/L			10/07/19 13:28	2000
Styrene	ND		1500		ug/L			10/07/19 13:28	2000
Tetrachloroethene	ND		720		ug/L			10/07/19 13:28	2000
Toluene	ND		1000		ug/L			10/07/19 13:28	2000
trans-1,2-Dichloroethene	ND		1800		ug/L			10/07/19 13:28	2000
trans-1,3-Dichloropropene	ND		740		ug/L			10/07/19 13:28	2000
Trichloroethene	ND		920		ug/L			10/07/19 13:28	2000
Trichlorofluoromethane	ND		1800		ug/L			10/07/19 13:28	2000
Vinyl chloride	ND		1800		ug/L			10/07/19 13:28	2000
Xylenes, Total	ND		1300		ug/L			10/07/19 13:28	2000

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-3S
Date Collected: 09/30/19 11:40
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		10/07/19 13:28	2000
Toluene-d8 (Surr)	101		80 - 120		10/07/19 13:28	2000
4-Bromofluorobenzene (Surr)	101		73 - 120		10/07/19 13:28	2000
Dibromofluoromethane (Surr)	100		75 - 123		10/07/19 13:28	2000

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-7R
Date Collected: 09/30/19 10:30
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/07/19 13:52	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/07/19 13:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/07/19 13:52	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/07/19 13:52	1
1,1-Dichloroethane	ND		5.0		ug/L			10/07/19 13:52	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/07/19 13:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/19 13:52	1
1,2-Dibromoethane	ND		5.0		ug/L			10/07/19 13:52	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/07/19 13:52	1
1,2-Dichloroethane	ND		5.0		ug/L			10/07/19 13:52	1
1,2-Dichloropropane	ND		5.0		ug/L			10/07/19 13:52	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/07/19 13:52	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/07/19 13:52	1
2-Butanone (MEK)	ND		25		ug/L			10/07/19 13:52	1
o-Chlorotoluene	ND		5.0		ug/L			10/07/19 13:52	1
2-Hexanone	ND		25		ug/L			10/07/19 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/07/19 13:52	1
Acetone	ND		25		ug/L			10/07/19 13:52	1
Benzene	ND		5.0		ug/L			10/07/19 13:52	1
Bromoform	ND		5.0		ug/L			10/07/19 13:52	1
Bromomethane	ND		5.0		ug/L			10/07/19 13:52	1
Carbon disulfide	ND		5.0		ug/L			10/07/19 13:52	1
Carbon tetrachloride	ND		5.0		ug/L			10/07/19 13:52	1
Chlorobenzene	ND		5.0		ug/L			10/07/19 13:52	1
Chlorodibromomethane	ND		5.0		ug/L			10/07/19 13:52	1
Chloroethane	ND		5.0		ug/L			10/07/19 13:52	1
Chloroform	ND		5.0		ug/L			10/07/19 13:52	1
Chloromethane	ND		5.0		ug/L			10/07/19 13:52	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 13:52	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 13:52	1
Cyclohexane	ND		5.0		ug/L			10/07/19 13:52	1
Bromodichloromethane	ND		5.0		ug/L			10/07/19 13:52	1
Dichlorofluoromethane	ND		5.0		ug/L			10/07/19 13:52	1
Ethylbenzene	ND		5.0		ug/L			10/07/19 13:52	1
Isopropylbenzene	ND		5.0		ug/L			10/07/19 13:52	1
Methyl acetate	ND		5.0		ug/L			10/07/19 13:52	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/07/19 13:52	1
Methylcyclohexane	ND		5.0		ug/L			10/07/19 13:52	1
Methylene Chloride	ND		5.0		ug/L			10/07/19 13:52	1
Styrene	ND		5.0		ug/L			10/07/19 13:52	1
Tetrachloroethene	ND		5.0		ug/L			10/07/19 13:52	1
Toluene	ND		5.0		ug/L			10/07/19 13:52	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 13:52	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 13:52	1
Trichloroethene	ND		5.0		ug/L			10/07/19 13:52	1
Trichlorofluoromethane	ND		5.0		ug/L			10/07/19 13:52	1
Vinyl chloride	ND		5.0		ug/L			10/07/19 13:52	1
Xylenes, Total	ND		15		ug/L			10/07/19 13:52	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-7R
Date Collected: 09/30/19 10:30
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-5
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		10/07/19 13:52	1
Toluene-d8 (Surr)	99		80 - 120		10/07/19 13:52	1
4-Bromofluorobenzene (Surr)	105		73 - 120		10/07/19 13:52	1
Dibromofluoromethane (Surr)	102		75 - 123		10/07/19 13:52	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-8R
Date Collected: 09/30/19 12:55
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/07/19 14:16	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/07/19 14:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/07/19 14:16	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/07/19 14:16	1
1,1-Dichloroethane	ND		5.0		ug/L			10/07/19 14:16	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/07/19 14:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/19 14:16	1
1,2-Dibromoethane	ND		5.0		ug/L			10/07/19 14:16	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/07/19 14:16	1
1,2-Dichloroethane	ND		5.0		ug/L			10/07/19 14:16	1
1,2-Dichloropropane	ND		5.0		ug/L			10/07/19 14:16	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/07/19 14:16	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/07/19 14:16	1
2-Butanone (MEK)	ND		25		ug/L			10/07/19 14:16	1
o-Chlorotoluene	**44**		5.0		ug/L			10/07/19 14:16	1
2-Hexanone	ND		25		ug/L			10/07/19 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/07/19 14:16	1
Acetone	ND		25		ug/L			10/07/19 14:16	1
Benzene	ND		5.0		ug/L			10/07/19 14:16	1
Bromoform	ND		5.0		ug/L			10/07/19 14:16	1
Bromomethane	ND		5.0		ug/L			10/07/19 14:16	1
Carbon disulfide	ND		5.0		ug/L			10/07/19 14:16	1
Carbon tetrachloride	ND		5.0		ug/L			10/07/19 14:16	1
Chlorobenzene	ND		5.0		ug/L			10/07/19 14:16	1
Chlorodibromomethane	ND		5.0		ug/L			10/07/19 14:16	1
Chloroethane	ND		5.0		ug/L			10/07/19 14:16	1
Chloroform	ND		5.0		ug/L			10/07/19 14:16	1
Chloromethane	ND		5.0		ug/L			10/07/19 14:16	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 14:16	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 14:16	1
Cyclohexane	ND		5.0		ug/L			10/07/19 14:16	1
Bromodichloromethane	ND		5.0		ug/L			10/07/19 14:16	1
Dichlorofluoromethane	ND		5.0		ug/L			10/07/19 14:16	1
Ethylbenzene	ND		5.0		ug/L			10/07/19 14:16	1
Isopropylbenzene	ND		5.0		ug/L			10/07/19 14:16	1
Methyl acetate	ND		5.0		ug/L			10/07/19 14:16	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/07/19 14:16	1
Methylcyclohexane	ND		5.0		ug/L			10/07/19 14:16	1
Methylene Chloride	ND		5.0		ug/L			10/07/19 14:16	1
Styrene	ND		5.0		ug/L			10/07/19 14:16	1
Tetrachloroethene	ND		5.0		ug/L			10/07/19 14:16	1
Toluene	ND		5.0		ug/L			10/07/19 14:16	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 14:16	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 14:16	1
Trichloroethene	ND		5.0		ug/L			10/07/19 14:16	1
Trichlorofluoromethane	ND		5.0		ug/L			10/07/19 14:16	1
Vinyl chloride	ND		5.0		ug/L			10/07/19 14:16	1
Xylenes, Total	ND		15		ug/L			10/07/19 14:16	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-8R
Date Collected: 09/30/19 12:55
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		10/07/19 14:16	1
Toluene-d8 (Surr)	102		80 - 120		10/07/19 14:16	1
4-Bromofluorobenzene (Surr)	102		73 - 120		10/07/19 14:16	1
Dibromofluoromethane (Surr)	109		75 - 123		10/07/19 14:16	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-9R
Date Collected: 09/30/19 11:20
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**200**		5.0		ug/L			10/07/19 14:39	4
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/07/19 14:39	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/07/19 14:39	4
1,1,2-Trichloroethane	ND		5.0		ug/L			10/07/19 14:39	4
1,1-Dichloroethane	**89**		5.0		ug/L			10/07/19 14:39	4
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/07/19 14:39	4
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/19 14:39	4
1,2-Dibromoethane	ND		5.0		ug/L			10/07/19 14:39	4
1,2-Dichlorobenzene	ND		5.0		ug/L			10/07/19 14:39	4
1,2-Dichloroethane	ND		5.0		ug/L			10/07/19 14:39	4
1,2-Dichloropropane	ND		5.0		ug/L			10/07/19 14:39	4
1,3-Dichlorobenzene	ND		5.0		ug/L			10/07/19 14:39	4
1,4-Dichlorobenzene	ND		5.0		ug/L			10/07/19 14:39	4
2-Butanone (MEK)	ND		25		ug/L			10/07/19 14:39	4
o-Chlorotoluene	**39**		5.0		ug/L			10/07/19 14:39	4
2-Hexanone	ND		25		ug/L			10/07/19 14:39	4
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/07/19 14:39	4
Acetone	ND		25		ug/L			10/07/19 14:39	4
Benzene	ND		5.0		ug/L			10/07/19 14:39	4
Bromoform	ND		5.0		ug/L			10/07/19 14:39	4
Bromomethane	ND		5.0		ug/L			10/07/19 14:39	4
Carbon disulfide	ND		5.0		ug/L			10/07/19 14:39	4
Carbon tetrachloride	ND		5.0		ug/L			10/07/19 14:39	4
Chlorobenzene	ND		5.0		ug/L			10/07/19 14:39	4
Chlorodibromomethane	ND		5.0		ug/L			10/07/19 14:39	4
Chloroethane	**29**		5.0		ug/L			10/07/19 14:39	4
Chloroform	ND		5.0		ug/L			10/07/19 14:39	4
Chloromethane	ND		5.0		ug/L			10/07/19 14:39	4
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 14:39	4
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 14:39	4
Cyclohexane	ND		5.0		ug/L			10/07/19 14:39	4
Bromodichloromethane	ND		5.0		ug/L			10/07/19 14:39	4
Dichlorofluoromethane	ND		5.0		ug/L			10/07/19 14:39	4
Ethylbenzene	ND		5.0		ug/L			10/07/19 14:39	4
Isopropylbenzene	ND		5.0		ug/L			10/07/19 14:39	4
Methyl acetate	ND		5.2		ug/L			10/07/19 14:39	4
Methyl tert-butyl ether	ND		5.0		ug/L			10/07/19 14:39	4
Methylcyclohexane	ND		5.0		ug/L			10/07/19 14:39	4
Methylene Chloride	ND		5.0		ug/L			10/07/19 14:39	4
Styrene	ND		5.0		ug/L			10/07/19 14:39	4
Tetrachloroethene	ND		5.0		ug/L			10/07/19 14:39	4
Toluene	ND		5.0		ug/L			10/07/19 14:39	4
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 14:39	4
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 14:39	4
Trichloroethene	ND		5.0		ug/L			10/07/19 14:39	4
Trichlorofluoromethane	ND		5.0		ug/L			10/07/19 14:39	4
Vinyl chloride	ND		5.0		ug/L			10/07/19 14:39	4
Xylenes, Total	ND		15		ug/L			10/07/19 14:39	4

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: MW-9R
Date Collected: 09/30/19 11:20
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		10/07/19 14:39	4
Toluene-d8 (Surr)	99		80 - 120		10/07/19 14:39	4
4-Bromofluorobenzene (Surr)	102		73 - 120		10/07/19 14:39	4
Dibromofluoromethane (Surr)	102		75 - 123		10/07/19 14:39	4

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: Trip Blank
Date Collected: 09/30/19 08:00
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/07/19 15:03	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/07/19 15:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/07/19 15:03	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/07/19 15:03	1
1,1-Dichloroethane	ND		5.0		ug/L			10/07/19 15:03	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/07/19 15:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/19 15:03	1
1,2-Dibromoethane	ND		5.0		ug/L			10/07/19 15:03	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/07/19 15:03	1
1,2-Dichloroethane	ND		5.0		ug/L			10/07/19 15:03	1
1,2-Dichloropropane	ND		5.0		ug/L			10/07/19 15:03	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/07/19 15:03	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/07/19 15:03	1
2-Butanone (MEK)	ND		25		ug/L			10/07/19 15:03	1
o-Chlorotoluene	ND		5.0		ug/L			10/07/19 15:03	1
2-Hexanone	ND		25		ug/L			10/07/19 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/07/19 15:03	1
Acetone	ND		25		ug/L			10/07/19 15:03	1
Benzene	ND		5.0		ug/L			10/07/19 15:03	1
Bromoform	ND		5.0		ug/L			10/07/19 15:03	1
Bromomethane	ND		5.0		ug/L			10/07/19 15:03	1
Carbon disulfide	ND		5.0		ug/L			10/07/19 15:03	1
Carbon tetrachloride	ND		5.0		ug/L			10/07/19 15:03	1
Chlorobenzene	ND		5.0		ug/L			10/07/19 15:03	1
Chlorodibromomethane	ND		5.0		ug/L			10/07/19 15:03	1
Chloroethane	ND		5.0		ug/L			10/07/19 15:03	1
Chloroform	ND		5.0		ug/L			10/07/19 15:03	1
Chloromethane	ND		5.0		ug/L			10/07/19 15:03	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 15:03	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 15:03	1
Cyclohexane	ND		5.0		ug/L			10/07/19 15:03	1
Bromodichloromethane	ND		5.0		ug/L			10/07/19 15:03	1
Dichlorofluoromethane	ND		5.0		ug/L			10/07/19 15:03	1
Ethylbenzene	ND		5.0		ug/L			10/07/19 15:03	1
Isopropylbenzene	ND		5.0		ug/L			10/07/19 15:03	1
Methyl acetate	ND		5.0		ug/L			10/07/19 15:03	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/07/19 15:03	1
Methylcyclohexane	ND		5.0		ug/L			10/07/19 15:03	1
Methylene Chloride	ND		5.0		ug/L			10/07/19 15:03	1
Styrene	ND		5.0		ug/L			10/07/19 15:03	1
Tetrachloroethene	ND		5.0		ug/L			10/07/19 15:03	1
Toluene	ND		5.0		ug/L			10/07/19 15:03	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 15:03	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 15:03	1
Trichloroethene	ND		5.0		ug/L			10/07/19 15:03	1
Trichlorofluoromethane	ND		5.0		ug/L			10/07/19 15:03	1
Vinyl chloride	ND		5.0		ug/L			10/07/19 15:03	1
Xylenes, Total	ND		15		ug/L			10/07/19 15:03	1

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: Trip Blank
Date Collected: 09/30/19 08:00
Date Received: 09/30/19 14:45

Lab Sample ID: 480-159949-8
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		10/07/19 15:03	1
Toluene-d8 (Surr)	105		80 - 120		10/07/19 15:03	1
4-Bromofluorobenzene (Surr)	107		73 - 120		10/07/19 15:03	1
Dibromofluoromethane (Surr)	112		75 - 123		10/07/19 15:03	1

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

Lab Sample ID: MB 480-496294/7
Matrix: Water
Analysis Batch: 496294

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/07/19 11:57	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/07/19 11:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/07/19 11:57	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/07/19 11:57	1
1,1-Dichloroethane	ND		5.0		ug/L			10/07/19 11:57	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/07/19 11:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/19 11:57	1
1,2-Dibromoethane	ND		5.0		ug/L			10/07/19 11:57	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/07/19 11:57	1
1,2-Dichloroethane	ND		5.0		ug/L			10/07/19 11:57	1
1,2-Dichloropropane	ND		5.0		ug/L			10/07/19 11:57	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/07/19 11:57	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/07/19 11:57	1
2-Butanone (MEK)	ND		25		ug/L			10/07/19 11:57	1
o-Chlorotoluene	ND		5.0		ug/L			10/07/19 11:57	1
2-Hexanone	ND		25		ug/L			10/07/19 11:57	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/07/19 11:57	1
Acetone	ND		25		ug/L			10/07/19 11:57	1
Benzene	ND		5.0		ug/L			10/07/19 11:57	1
Bromoform	ND		5.0		ug/L			10/07/19 11:57	1
Bromomethane	ND		5.0		ug/L			10/07/19 11:57	1
Carbon disulfide	ND		5.0		ug/L			10/07/19 11:57	1
Carbon tetrachloride	ND		5.0		ug/L			10/07/19 11:57	1
Chlorobenzene	ND		5.0		ug/L			10/07/19 11:57	1
Chlorodibromomethane	ND		5.0		ug/L			10/07/19 11:57	1
Chloroethane	ND		5.0		ug/L			10/07/19 11:57	1
Chloroform	ND		5.0		ug/L			10/07/19 11:57	1
Chloromethane	ND		5.0		ug/L			10/07/19 11:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 11:57	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 11:57	1
Cyclohexane	ND		5.0		ug/L			10/07/19 11:57	1
Bromodichloromethane	ND		5.0		ug/L			10/07/19 11:57	1
Dichlorofluoromethane	ND		5.0		ug/L			10/07/19 11:57	1
Ethylbenzene	ND		5.0		ug/L			10/07/19 11:57	1
Isopropylbenzene	ND		5.0		ug/L			10/07/19 11:57	1
Methyl acetate	ND		5.0		ug/L			10/07/19 11:57	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/07/19 11:57	1
Methylcyclohexane	ND		5.0		ug/L			10/07/19 11:57	1
Methylene Chloride	ND		5.0		ug/L			10/07/19 11:57	1
Styrene	ND		5.0		ug/L			10/07/19 11:57	1
Tetrachloroethene	ND		5.0		ug/L			10/07/19 11:57	1
Toluene	ND		5.0		ug/L			10/07/19 11:57	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/07/19 11:57	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/07/19 11:57	1
Trichloroethene	ND		5.0		ug/L			10/07/19 11:57	1
Trichlorofluoromethane	ND		5.0		ug/L			10/07/19 11:57	1
Vinyl chloride	ND		5.0		ug/L			10/07/19 11:57	1
Xylenes, Total	ND		15		ug/L			10/07/19 11:57	1

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

Lab Sample ID: MB 480-496294/7
Matrix: Water
Analysis Batch: 496294

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/07/19 11:57*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/07/19 11:57*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*10/07/19 11:57*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*10/07/19 11:57*	*1*

Lab Sample ID: LCS 480-496294/5
Matrix: Water
Analysis Batch: 496294

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.9		ug/L		108	61 - 148
1,1,2-Trichloroethane	25.0	23.4		ug/L		94	76 - 122
1,1-Dichloroethane	25.0	25.1		ug/L		100	77 - 120
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	56 - 134
1,2-Dibromoethane	25.0	23.4		ug/L		94	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	23.6		ug/L		94	75 - 120
1,2-Dichloropropane	25.0	23.7		ug/L		95	76 - 120
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 120
2-Butanone (MEK)	125	108		ug/L		86	57 - 140
o-Chlorotoluene	25.0	25.5		ug/L		102	76 - 121
2-Hexanone	125	107		ug/L		86	65 - 127
4-Methyl-2-pentanone (MIBK)	125	117		ug/L		94	71 - 125
Acetone	125	91.7		ug/L		73	56 - 142
Benzene	25.0	24.1		ug/L		96	71 - 124
Bromoform	25.0	23.4		ug/L		94	61 - 132
Bromomethane	25.0	25.4		ug/L		101	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	26.0		ug/L		104	72 - 134
Chlorobenzene	25.0	24.4		ug/L		98	80 - 120
Chlorodibromomethane	25.0	23.8		ug/L		95	75 - 125
Chloroethane	25.0	24.1		ug/L		97	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	24.0		ug/L		96	68 - 124
cis-1,2-Dichloroethene	25.0	25.1		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	22.2		ug/L		89	74 - 124
Cyclohexane	25.0	25.2		ug/L		101	59 - 135
Bromodichloromethane	25.0	22.8		ug/L		91	80 - 122
Dichlorofluoromethane	25.0	25.4		ug/L		102	76 - 127
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
Isopropylbenzene	25.0	25.9		ug/L		104	77 - 122
Methyl acetate	50.0	46.4		ug/L		93	74 - 133
Methyl tert-butyl ether	25.0	25.2		ug/L		101	77 - 120
Methylcyclohexane	25.0	25.6		ug/L		102	68 - 134

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

Lab Sample ID: LCS 480-496294/5
Matrix: Water
Analysis Batch: 496294

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylene Chloride			25.0	23.8		ug/L		95	75 - 124		
Styrene			25.0	23.7		ug/L		95	80 - 120		
Tetrachloroethene			25.0	26.2		ug/L		105	74 - 122		
Toluene			25.0	24.8		ug/L		99	80 - 122		
trans-1,2-Dichloroethene			25.0	25.0		ug/L		100	73 - 127		
trans-1,3-Dichloropropene			25.0	23.1		ug/L		92	80 - 120		
Trichloroethene			25.0	24.1		ug/L		97	74 - 123		
Trichlorofluoromethane			25.0	26.7		ug/L		107	62 - 150		
Vinyl chloride			25.0	26.0		ug/L		104	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*

Lab Sample ID: 480-159949-2 MS
Matrix: Water
Analysis Batch: 496294

Client Sample ID: MW-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane	ND		1000	1110		ug/L		111	73 - 126		
1,1,2,2-Tetrachloroethane	ND		1000	987		ug/L		99	76 - 120		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	1200		ug/L		120	61 - 148		
1,1,2-Trichloroethane	ND		1000	958		ug/L		96	76 - 122		
1,1-Dichloroethane	ND		1000	1120		ug/L		112	77 - 120		
1,2,4-Trichlorobenzene	ND		1000	1040		ug/L		104	79 - 122		
1,2-Dibromo-3-Chloropropane	ND		1000	946		ug/L		95	56 - 134		
1,2-Dibromoethane	ND		1000	951		ug/L		95	77 - 120		
1,2-Dichlorobenzene	ND		1000	1050		ug/L		105	80 - 124		
1,2-Dichloroethane	ND		1000	1000		ug/L		100	75 - 120		
1,2-Dichloropropane	ND		1000	984		ug/L		98	76 - 120		
1,3-Dichlorobenzene	ND		1000	1020		ug/L		102	77 - 120		
1,4-Dichlorobenzene	ND		1000	1000		ug/L		100	78 - 124		
2-Butanone (MEK)	ND		5000	4100		ug/L		82	57 - 140		
o-Chlorotoluene	2500	F1	1000	3000	F1	ug/L		48	76 - 121		
2-Hexanone	ND		5000	4320		ug/L		86	65 - 127		
4-Methyl-2-pentanone (MIBK)	ND		5000	5040		ug/L		101	71 - 125		
Acetone	ND	F2	5000	3410		ug/L		68	56 - 142		
Benzene	ND		1000	1040		ug/L		104	71 - 124		
Bromoform	ND		1000	909		ug/L		91	61 - 132		
Bromomethane	ND		1000	1180		ug/L		118	55 - 144		
Carbon disulfide	ND		1000	1100		ug/L		110	59 - 134		
Carbon tetrachloride	ND		1000	1150		ug/L		115	72 - 134		
Chlorobenzene	ND		1000	1020		ug/L		102	80 - 120		
Chlorodibromomethane	ND		1000	967		ug/L		97	75 - 125		
Chloroethane	26		1000	1150		ug/L		112	69 - 136		
Chloroform	ND		1000	1010		ug/L		101	73 - 127		

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

Lab Sample ID: 480-159949-2 MS
Matrix: Water
Analysis Batch: 496294

Client Sample ID: MW-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		1000	1090		ug/L		109	68 - 124
cis-1,2-Dichloroethene	ND		1000	1110		ug/L		111	74 - 124
cis-1,3-Dichloropropene	ND		1000	873		ug/L		87	74 - 124
Cyclohexane	ND		1000	1140		ug/L		114	59 - 135
Bromodichloromethane	ND		1000	953		ug/L		95	80 - 122
Dichlorofluoromethane	ND		1000	1170		ug/L		117	76 - 127
Ethylbenzene	ND		1000	1080		ug/L		108	77 - 123
Isopropylbenzene	ND		1000	1110		ug/L		111	77 - 122
Methyl acetate	ND		2000	1980		ug/L		99	74 - 133
Methyl tert-butyl ether	ND		1000	1120		ug/L		112	77 - 120
Methylcyclohexane	ND		1000	1150		ug/L		115	68 - 134
Methylene Chloride	ND		1000	1050		ug/L		105	75 - 124
Styrene	ND		1000	1010		ug/L		101	80 - 120
Tetrachloroethene	ND		1000	1120		ug/L		112	74 - 122
Toluene	ND		1000	1070		ug/L		107	80 - 122
trans-1,2-Dichloroethene	ND		1000	1120		ug/L		112	73 - 127
trans-1,3-Dichloropropene	ND		1000	884		ug/L		88	80 - 120
Trichloroethene	ND		1000	1050		ug/L		105	74 - 123
Trichlorofluoromethane	ND		1000	1230		ug/L		123	62 - 150
Vinyl chloride	ND		1000	1190		ug/L		119	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Lab Sample ID: 480-159949-2 MSD
Matrix: Water
Analysis Batch: 496294

Client Sample ID: MW-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		1000	1010		ug/L		101	73 - 126	9	15
1,1,2,2-Tetrachloroethane	ND		1000	1010		ug/L		101	76 - 120	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1000	1070		ug/L		107	61 - 148	12	20
1,1,2-Trichloroethane	ND		1000	976		ug/L		98	76 - 122	2	15
1,1-Dichloroethane	ND		1000	1030		ug/L		103	77 - 120	8	20
1,2,4-Trichlorobenzene	ND		1000	1060		ug/L		106	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		1000	978		ug/L		98	56 - 134	3	15
1,2-Dibromoethane	ND		1000	1020		ug/L		102	77 - 120	7	15
1,2-Dichlorobenzene	ND		1000	1040		ug/L		104	80 - 124	1	20
1,2-Dichloroethane	ND		1000	1000		ug/L		100	75 - 120	0	20
1,2-Dichloropropane	ND		1000	996		ug/L		100	76 - 120	1	20
1,3-Dichlorobenzene	ND		1000	1010		ug/L		101	77 - 120	1	20
1,4-Dichlorobenzene	ND		1000	997		ug/L		100	78 - 124	0	20
2-Butanone (MEK)	ND		5000	4800		ug/L		96	57 - 140	16	20
o-Chlorotoluene	2500	F1	1000	2890	F1	ug/L		37	76 - 121	4	20
2-Hexanone	ND		5000	4460		ug/L		89	65 - 127	3	15

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

Lab Sample ID: 480-159949-2 MSD
Matrix: Water
Analysis Batch: 496294

Client Sample ID: MW-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	ND		5000	4990		ug/L		100	71 - 125	1	35
Acetone	ND	F2	5000	4540	F2	ug/L		91	56 - 142	29	15
Benzene	ND		1000	1000		ug/L		100	71 - 124	4	13
Bromoform	ND		1000	976		ug/L		98	61 - 132	7	15
Bromomethane	ND		1000	1060		ug/L		106	55 - 144	11	15
Carbon disulfide	ND		1000	996		ug/L		100	59 - 134	10	15
Carbon tetrachloride	ND		1000	1050		ug/L		105	72 - 134	9	15
Chlorobenzene	ND		1000	1010		ug/L		101	80 - 120	2	25
Chlorodibromomethane	ND		1000	994		ug/L		99	75 - 125	3	15
Chloroethane	26		1000	1060		ug/L		104	69 - 136	8	15
Chloroform	ND		1000	935		ug/L		94	73 - 127	8	20
Chloromethane	ND		1000	1010		ug/L		101	68 - 124	7	15
cis-1,2-Dichloroethene	ND		1000	1030		ug/L		103	74 - 124	8	15
cis-1,3-Dichloropropene	ND		1000	970		ug/L		97	74 - 124	10	15
Cyclohexane	ND		1000	1010		ug/L		101	59 - 135	12	20
Bromodichloromethane	ND		1000	981		ug/L		98	80 - 122	3	15
Dichlorofluoromethane	ND		1000	1060		ug/L		106	76 - 127	10	20
Ethylbenzene	ND		1000	1010		ug/L		101	77 - 123	7	15
Isopropylbenzene	ND		1000	1060		ug/L		106	77 - 122	4	20
Methyl acetate	ND		2000	2100		ug/L		105	74 - 133	6	20
Methyl tert-butyl ether	ND		1000	1070		ug/L		107	77 - 120	4	37
Methylcyclohexane	ND		1000	1030		ug/L		103	68 - 134	11	20
Methylene Chloride	ND		1000	996		ug/L		100	75 - 124	6	15
Styrene	ND		1000	975		ug/L		97	80 - 120	4	20
Tetrachloroethene	ND		1000	1050		ug/L		105	74 - 122	7	20
Toluene	ND		1000	998		ug/L		100	80 - 122	7	15
trans-1,2-Dichloroethene	ND		1000	1030		ug/L		103	73 - 127	8	20
trans-1,3-Dichloropropene	ND		1000	968		ug/L		97	80 - 120	9	15
Trichloroethene	ND		1000	1000		ug/L		100	74 - 123	5	16
Trichlorofluoromethane	ND		1000	1080		ug/L		108	62 - 150	13	20
Vinyl chloride	ND		1000	1070		ug/L		107	65 - 133	11	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*

Lab Sample ID: MB 480-496526/7
Matrix: Water
Analysis Batch: 496526

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/08/19 11:44	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/08/19 11:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/08/19 11:44	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/08/19 11:44	1
1,1-Dichloroethane	ND		5.0		ug/L			10/08/19 11:44	1

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

Lab Sample ID: MB 480-496526/7
Matrix: Water
Analysis Batch: 496526

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/08/19 11:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/19 11:44	1
1,2-Dibromoethane	ND		5.0		ug/L			10/08/19 11:44	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/08/19 11:44	1
1,2-Dichloroethane	ND		5.0		ug/L			10/08/19 11:44	1
1,2-Dichloropropane	ND		5.0		ug/L			10/08/19 11:44	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/08/19 11:44	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/08/19 11:44	1
2-Butanone (MEK)	ND		25		ug/L			10/08/19 11:44	1
o-Chlorotoluene	ND		5.0		ug/L			10/08/19 11:44	1
2-Hexanone	ND		25		ug/L			10/08/19 11:44	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/08/19 11:44	1
Acetone	ND		25		ug/L			10/08/19 11:44	1
Benzene	ND		5.0		ug/L			10/08/19 11:44	1
Bromoform	ND		5.0		ug/L			10/08/19 11:44	1
Bromomethane	ND		5.0		ug/L			10/08/19 11:44	1
Carbon disulfide	ND		5.0		ug/L			10/08/19 11:44	1
Carbon tetrachloride	ND		5.0		ug/L			10/08/19 11:44	1
Chlorobenzene	ND		5.0		ug/L			10/08/19 11:44	1
Chlorodibromomethane	ND		5.0		ug/L			10/08/19 11:44	1
Chloroethane	ND		5.0		ug/L			10/08/19 11:44	1
Chloroform	ND		5.0		ug/L			10/08/19 11:44	1
Chloromethane	ND		5.0		ug/L			10/08/19 11:44	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/08/19 11:44	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 11:44	1
Cyclohexane	ND		5.0		ug/L			10/08/19 11:44	1
Bromodichloromethane	ND		5.0		ug/L			10/08/19 11:44	1
Dichlorofluoromethane	ND		5.0		ug/L			10/08/19 11:44	1
Ethylbenzene	ND		5.0		ug/L			10/08/19 11:44	1
Isopropylbenzene	ND		5.0		ug/L			10/08/19 11:44	1
Methyl acetate	ND		5.0		ug/L			10/08/19 11:44	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/08/19 11:44	1
Methylcyclohexane	ND		5.0		ug/L			10/08/19 11:44	1
Methylene Chloride	ND		5.0		ug/L			10/08/19 11:44	1
Styrene	ND		5.0		ug/L			10/08/19 11:44	1
Tetrachloroethene	ND		5.0		ug/L			10/08/19 11:44	1
Toluene	ND		5.0		ug/L			10/08/19 11:44	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/08/19 11:44	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 11:44	1
Trichloroethene	ND		5.0		ug/L			10/08/19 11:44	1
Trichlorofluoromethane	ND		5.0		ug/L			10/08/19 11:44	1
Vinyl chloride	ND		5.0		ug/L			10/08/19 11:44	1
Xylenes, Total	ND		15		ug/L			10/08/19 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*10/08/19 11:44*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/08/19 11:44*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*10/08/19 11:44*	*1*

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

Lab Sample ID: MB 480-496526/7
Matrix: Water
Analysis Batch: 496526

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*10/08/19 11:44*	*1*

Lab Sample ID: LCS 480-496526/5
Matrix: Water
Analysis Batch: 496526

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	23.5		ug/L		94	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		102	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.8		ug/L		99	61 - 148
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122
1,1-Dichloroethane	25.0	24.9		ug/L		99	77 - 120
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.3		ug/L		97	56 - 134
1,2-Dibromoethane	25.0	26.0		ug/L		104	77 - 120
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	24.2		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	24.8		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.1		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120
2-Butanone (MEK)	125	125		ug/L		100	57 - 140
o-Chlorotoluene	25.0	25.4		ug/L		102	76 - 121
2-Hexanone	125	115		ug/L		92	65 - 127
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	71 - 125
Acetone	125	120		ug/L		96	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromoform	25.0	25.5		ug/L		102	61 - 132
Bromomethane	25.0	24.6		ug/L		98	55 - 144
Carbon disulfide	25.0	24.7		ug/L		99	59 - 134
Carbon tetrachloride	25.0	24.7		ug/L		99	72 - 134
Chlorobenzene	25.0	25.6		ug/L		102	80 - 120
Chlorodibromomethane	25.0	25.5		ug/L		102	75 - 125
Chloroethane	25.0	23.2		ug/L		93	69 - 136
Chloroform	25.0	22.7		ug/L		91	73 - 127
Chloromethane	25.0	21.4		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	23.3		ug/L		93	59 - 135
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Dichlorofluoromethane	25.0	23.6		ug/L		94	76 - 127
Ethylbenzene	25.0	25.1		ug/L		100	77 - 123
Isopropylbenzene	25.0	25.4		ug/L		102	77 - 122
Methyl acetate	50.0	52.2		ug/L		104	74 - 133
Methyl tert-butyl ether	25.0	26.1		ug/L		104	77 - 120
Methylcyclohexane	25.0	23.4		ug/L		93	68 - 134
Methylene Chloride	25.0	24.6		ug/L		98	75 - 124
Styrene	25.0	24.7		ug/L		99	80 - 120
Tetrachloroethene	25.0	25.7		ug/L		103	74 - 122

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

Lab Sample ID: LCS 480-496526/5
Matrix: Water
Analysis Batch: 496526

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	80 - 120
Trichloroethene	25.0	24.8		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	22.4		ug/L		90	62 - 150
Vinyl chloride	25.0	22.2		ug/L		89	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Lab Sample ID: MB 480-496556/7
Matrix: Water
Analysis Batch: 496556

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/L			10/08/19 12:09	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			10/08/19 12:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			10/08/19 12:09	1
1,1,2-Trichloroethane	ND		5.0		ug/L			10/08/19 12:09	1
1,1-Dichloroethane	ND		5.0		ug/L			10/08/19 12:09	1
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/08/19 12:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/19 12:09	1
1,2-Dibromoethane	ND		5.0		ug/L			10/08/19 12:09	1
1,2-Dichlorobenzene	ND		5.0		ug/L			10/08/19 12:09	1
1,2-Dichloroethane	ND		5.0		ug/L			10/08/19 12:09	1
1,2-Dichloropropane	ND		5.0		ug/L			10/08/19 12:09	1
1,3-Dichlorobenzene	ND		5.0		ug/L			10/08/19 12:09	1
1,4-Dichlorobenzene	ND		5.0		ug/L			10/08/19 12:09	1
2-Butanone (MEK)	ND		25		ug/L			10/08/19 12:09	1
o-Chlorotoluene	ND		5.0		ug/L			10/08/19 12:09	1
2-Hexanone	ND		25		ug/L			10/08/19 12:09	1
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			10/08/19 12:09	1
Acetone	ND		25		ug/L			10/08/19 12:09	1
Benzene	ND		5.0		ug/L			10/08/19 12:09	1
Bromoform	ND		5.0		ug/L			10/08/19 12:09	1
Bromomethane	ND		5.0		ug/L			10/08/19 12:09	1
Carbon disulfide	ND		5.0		ug/L			10/08/19 12:09	1
Carbon tetrachloride	ND		5.0		ug/L			10/08/19 12:09	1
Chlorobenzene	ND		5.0		ug/L			10/08/19 12:09	1
Chlorodibromomethane	ND		5.0		ug/L			10/08/19 12:09	1
Chloroethane	ND		5.0		ug/L			10/08/19 12:09	1
Chloroform	ND		5.0		ug/L			10/08/19 12:09	1
Chloromethane	ND		5.0		ug/L			10/08/19 12:09	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/08/19 12:09	1
cis-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 12:09	1

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

Lab Sample ID: MB 480-496556/7
Matrix: Water
Analysis Batch: 496556

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		5.0		ug/L			10/08/19 12:09	1
Bromodichloromethane	ND		5.0		ug/L			10/08/19 12:09	1
Dichlorofluoromethane	ND		5.0		ug/L			10/08/19 12:09	1
Ethylbenzene	ND		5.0		ug/L			10/08/19 12:09	1
Isopropylbenzene	ND		5.0		ug/L			10/08/19 12:09	1
Methyl acetate	ND		5.0		ug/L			10/08/19 12:09	1
Methyl tert-butyl ether	ND		5.0		ug/L			10/08/19 12:09	1
Methylcyclohexane	ND		5.0		ug/L			10/08/19 12:09	1
Methylene Chloride	ND		5.0		ug/L			10/08/19 12:09	1
Styrene	ND		5.0		ug/L			10/08/19 12:09	1
Tetrachloroethene	ND		5.0		ug/L			10/08/19 12:09	1
Toluene	ND		5.0		ug/L			10/08/19 12:09	1
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/08/19 12:09	1
trans-1,3-Dichloropropene	ND		5.0		ug/L			10/08/19 12:09	1
Trichloroethene	ND		5.0		ug/L			10/08/19 12:09	1
Trichlorofluoromethane	ND		5.0		ug/L			10/08/19 12:09	1
Vinyl chloride	ND		5.0		ug/L			10/08/19 12:09	1
Xylenes, Total	ND		15		ug/L			10/08/19 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*10/08/19 12:09*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/08/19 12:09*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*10/08/19 12:09*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*10/08/19 12:09*	*1*

Lab Sample ID: LCS 480-496556/5
Matrix: Water
Analysis Batch: 496556

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.1		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.9		ug/L		80	61 - 148
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	27.5		ug/L		110	77 - 120
1,2,4-Trichlorobenzene	25.0	21.7		ug/L		87	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	17.2		ug/L		69	56 - 134
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
1,2-Dichlorobenzene	25.0	23.4		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	23.0		ug/L		92	75 - 120
1,2-Dichloropropane	25.0	27.2		ug/L		109	76 - 120
1,3-Dichlorobenzene	25.0	25.9		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 120
2-Butanone (MEK)	125	148		ug/L		118	57 - 140
o-Chlorotoluene	25.0	26.0		ug/L		104	76 - 121
2-Hexanone	125	123		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	98.3		ug/L		79	56 - 142

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

Lab Sample ID: LCS 480-496556/5
Matrix: Water
Analysis Batch: 496556

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	27.9		ug/L		111	71 - 124
Bromoform	25.0	26.2		ug/L		105	61 - 132
Bromomethane	25.0	14.2		ug/L		57	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	26.6		ug/L		106	72 - 134
Chlorobenzene	25.0	26.7		ug/L		107	80 - 120
Chlorodibromomethane	25.0	26.8		ug/L		107	75 - 125
Chloroethane	25.0	13.1	*	ug/L		53	69 - 136
Chloroform	25.0	25.0		ug/L		100	73 - 127
Chloromethane	25.0	22.5		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	27.3		ug/L		109	74 - 124
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	74 - 124
Cyclohexane	25.0	28.5		ug/L		114	59 - 135
Bromodichloromethane	25.0	25.0		ug/L		100	80 - 122
Dichlorofluoromethane	25.0	14.4	*	ug/L		58	76 - 127
Ethylbenzene	25.0	26.9		ug/L		107	77 - 123
Isopropylbenzene	25.0	25.5		ug/L		102	77 - 122
Methyl acetate	50.0	56.3		ug/L		113	74 - 133
Methyl tert-butyl ether	25.0	25.1		ug/L		100	77 - 120
Methylcyclohexane	25.0	27.1		ug/L		108	68 - 134
Methylene Chloride	25.0	27.1		ug/L		108	75 - 124
Styrene	25.0	26.8		ug/L		107	80 - 120
Tetrachloroethene	25.0	29.4		ug/L		118	74 - 122
Toluene	25.0	27.4		ug/L		109	80 - 122
trans-1,2-Dichloroethene	25.0	28.2		ug/L		113	73 - 127
trans-1,3-Dichloropropene	25.0	25.6		ug/L		103	80 - 120
Trichloroethene	25.0	27.5		ug/L		110	74 - 123
Trichlorofluoromethane	25.0	18.3		ug/L		73	62 - 150
Vinyl chloride	25.0	21.2		ug/L		85	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

QC Association Summary

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

GC/MS VOA

Analysis Batch: 496294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159949-2	MW-13R	Total/NA	Water	8260C	
480-159949-4	MW-3S	Total/NA	Water	8260C	
480-159949-5	MW-7R	Total/NA	Water	8260C	
480-159949-6	MW-8R	Total/NA	Water	8260C	
480-159949-7	MW-9R	Total/NA	Water	8260C	
480-159949-8	Trip Blank	Total/NA	Water	8260C	
MB 480-496294/7	Method Blank	Total/NA	Water	8260C	
LCS 480-496294/5	Lab Control Sample	Total/NA	Water	8260C	
480-159949-2 MS	MW-13R	Total/NA	Water	8260C	
480-159949-2 MSD	MW-13R	Total/NA	Water	8260C	

Analysis Batch: 496526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159949-3	MW-15R	Total/NA	Water	8260C	
MB 480-496526/7	Method Blank	Total/NA	Water	8260C	
LCS 480-496526/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 496556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159949-1	DUP	Total/NA	Water	8260C	
MB 480-496556/7	Method Blank	Total/NA	Water	8260C	
LCS 480-496556/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Client Sample ID: DUP
Lab Sample ID: 480-159949-1
Date Collected: 09/30/19 11:20
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	496556	10/08/19 15:29	KMN	TAL BUF

Client Sample ID: MW-13R
Lab Sample ID: 480-159949-2
Date Collected: 09/30/19 11:10
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	496294	10/07/19 12:41	OMI	TAL BUF

Client Sample ID: MW-15R
Lab Sample ID: 480-159949-3
Date Collected: 09/30/19 12:00
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	496526	10/08/19 12:24	S1V	TAL BUF

Client Sample ID: MW-3S
Lab Sample ID: 480-159949-4
Date Collected: 09/30/19 11:40
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2000	496294	10/07/19 13:28	OMI	TAL BUF

Client Sample ID: MW-7R
Lab Sample ID: 480-159949-5
Date Collected: 09/30/19 10:30
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	496294	10/07/19 13:52	OMI	TAL BUF

Client Sample ID: MW-8R
Lab Sample ID: 480-159949-6
Date Collected: 09/30/19 12:55
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	496294	10/07/19 14:16	OMI	TAL BUF

Client Sample ID: MW-9R
Lab Sample ID: 480-159949-7
Date Collected: 09/30/19 11:20
Matrix: Water
Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	496294	10/07/19 14:39	OMI	TAL BUF

Lab Chronicle

Client: Waste Management
Job ID: 480-159949-1
Project/Site: ChemTrol Site-Annual GW

Client Sample ID: Trip Blank
Lab Sample ID: 480-159949-8

Date Collected: 09/30/19 08:00
Matrix: Water

Date Received: 09/30/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	496294	10/07/19 15:03	OMI	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

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

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dichlorofluoromethane

Method Summary

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Waste Management
Project/Site: ChemTrol Site-Annual GW

Job ID: 480-159949-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-159949-1	DUP	Water	09/30/19 11:20	09/30/19 14:45	
480-159949-2	MW-13R	Water	09/30/19 11:10	09/30/19 14:45	
480-159949-3	MW-15R	Water	09/30/19 12:00	09/30/19 14:45	
480-159949-4	MW-3S	Water	09/30/19 11:40	09/30/19 14:45	
480-159949-5	MW-7R	Water	09/30/19 10:30	09/30/19 14:45	
480-159949-6	MW-8R	Water	09/30/19 12:55	09/30/19 14:45	
480-159949-7	MW-9R	Water	09/30/19 11:20	09/30/19 14:45	
480-159949-8	Trip Blank	Water	09/30/19 08:00	09/30/19 14:45	

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: TB/SO/ZV	Lab PM: Giglia, Denise L	Carrier Tracking No(s):	COC No: 480-134079-30197.1
Client Contact: Mr. Roger Senf	Phone:	E-Mail: denise.giglia@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Analysis Requested		Job #:
Address: 10 Hazelwood Drive	Due Date Requested:			Preservation Codes:
City: Amherst	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: NY, 14228-2298				Other:
Phone: 215-269-2114(Tel) 215-699-8315(Fax)	PO #: 5070003206			
Email: rsenf@stl-inc.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Annual Groundwate	Project #: 48002447			
Site: New York	SSOW#:			

480-159949 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
Trip Blank	9/30/19	0800	G	Water			3		
DUP	9/30/19	1120	G	Water			3		TAKEN @ 9R
MW-13R	9/30/19	1110	G	Water			3		
MW-15R	9/30/19	1200	G	Water			3		
MW-3S	9/30/19	1140	G	Water			3		
MW-7R	9/30/19	1030	G	Water			3		
MW-8R	9/30/19	1255	G	Water			3		
MW-9R	9/30/19	1120	G	Water			3		DUP TAKEN

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
S.OZ	09-30-19/1445	TAL			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10-1-19 1000	Company TAL

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.4 #1

Ver: 01/16/2019

FIELD OBSERVATIONS

Facility: Chemtrol **Sample Point ID:** MW-15R

Field Personnel: TR/SO/ZV **Sample Matrix:** GW

MONITORTING WELL INSPECTION:

Date/Time 9-30-19 1138 **Cond of seal:** (Y) Good ( ) Cracked ( ) None ( ) Buried ____ %

Prot. Casing/riser height: ____ **Cond of prot. Casing/riser:** ( ) Unlocked (Y) Good ( ) Loose ( ) Flush Mount ( ) Damaged ____

If prot.casing; depth to riser below: ____

Gas Meter (Calibration/ Reading): **% Gas:** ____ / ____ **% LEL:** ____ / ____

Vol. Organic Meter (Calibration/Reading): **Volatiles (ppm)** ____ / ____

PURGE INFORMATION:

Date / Time Initiated: 9-30-19/1138 **Date / Time Completed:** 9-30-19/1142

Surf. Meas. Pt: ( ) Prot. Casing (X) Riser **Riser Diameter, Inches:** 2.0

Initial Water Level, Feet: 18.04 **Elevation. G/W MSL:** ____

Well Total Depth, Feet: 20.25 **Method of Well Purge:** Bailer

One (1) Riser Volume, Gal: 1.34 **Dedicated:** (Y) / N

Total Volume Purged, Gal: DRY@ 1.5 **Purged To Dryness** (Y) / N

Purge Observations: ____ **Start** sl. turbid **Finish** sl. turbid

PURGE DATA: (If applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other

NYFS GW Form 12/20/11

Page 1 of 2

FIELD OBSERVATIONS

SAMPLING INFORMATION:

POINT ID MW-15R

Date/Time 9-30-19 1200 **Water Level @ Sampling, Feet:** 21.82

Method of Sampling: Bailer **Dedicated:** (Y) / N

Multi-phased/ layered: ( ) Yes (X) No **If YES:** ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conductivity (µmhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1200	17.0	6.60	23,800	25.2	-28	

INSTRUMENT CALIBRATION/CHECK DATA:

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								

GENERAL INFORMATION:

Weather conditions @ time of sampling: 64°F cloudy SSW 3mph

Sample Characteristics: Sl. turbid with strong odor

COMMENTS AND OBSERVATIONS:

Sampled @ 1200

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 9/30/19 **By:** [signature] **Company:** TAL

Page 2 of 2

FIELD OBSERVATIONS

Facility: Chemtrol

Sample Point ID: MW-13R

Field Personnel: TB/SD/ZV

Sample Matrix: GW

MONITORING WELL INSPECTION:

Date/Time 9-30-19 / 1025

Cond of seal: (X) Good ( ) Cracked ( ) None ( ) Buried %

Prot. Casing/riser height:

Cond of prot. Casing/riser: ( ) Unlocked (X) Good ( ) Loose ( ) Flush Mount ( ) Damaged

If prot.casing; depth to riser below:

Gas Meter (Calibration/ Reading): % Gas: / % LEL: /

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm): /

PURGE INFORMATION:

Date / Time Initiated: 9-30-19/ 1027

Date / Time Completed: 9-30-19/ 1100

Surf. Meas. Pt: ( ) Prot. Casing (X) Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 7.92

Elevation. G/W MSL:

Well Total Depth, Feet: 22.25

Method of Well Purge: Baker

One (1) Riser Volume, Gal: 9.35

Dedicated: (Y) / N

Total Volume Purged, Gal: 28.0

Purged To Dryness Y / (N)

Purge Obeservations:

Start clear Finish clear

PURGE DATA: (If applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other

FIELD OBSERVATIONS

SAMPLING INFORMATION:

POINT ID MW-13R

Date/Time 9-30-19 1110 **Water Level @ Sampling, Feet:** 7.93

Method of Sampling: Baker **Dedicated:** (Y) N

Multi-phased/ layered: ( ) Yes (X) No **If YES:** ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conductivity (µmhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1110	17.5	6.88	1410	8.1	-44	

INSTRUMENT CALIBRATION/CHECK DATA:

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								

GENERAL INFORMATION:

Weather conditions @ time of sampling: 64°F cloudy SSW 3mph

Sample Characteristics: clear with slight oily/gas odor → no sheen

COMMENTS AND OBSERVATIONS:

Sampled @ 1110

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 9/30/19 **By:** [signature] **Company:** TAL

FIELD OBSERVATIONS

Facility: Chemtrol **Sample Point ID:** 9R

Field Personnel: TB/SO/ZV **Sample Matrix:** G.W

MONITORTING WELL INSPECTION:

Date/Time 09-30-19 / 1032 **Cond of seal:** (✓) Good ( ) Cracked ( ) None ( ) Buried %

Prot. Casing/riser height: **Cond of prot. Casing/riser:** ( ) Unlocked (✓) Good ( ) Loose ( ) Flush Mount ( ) Damaged

If prot.casing; depth to riser below:

Gas Meter (Calibration/ Reading): **% Gas:** / **% LEL:** /

Vol. Organic Meter (Calibration/Reading): **Volatiles (ppm'** /

PURGE INFORMATION:

Date / Time Initiated: 09-30-19 / 1035 **Date / Time Completed:** 09-30-19 / 1105

Surf. Meas. Pt: ( ) Prot. Casing (✓) Riser **Riser Diameter, Inches:** 4.0

Initial Water Level, Feet: 11.69 **Elevation. G/W MSL:**

Well Total Depth, Feet: 29.45 **Method of Well Purge:** Bailer

One (1) Riser Volume, Gal: 11.5 **Dedicated:** (Y) N

Total Volume Purged, Gal: 34.5 **Purged To Dryness** Y / (N)

Purge Observations: Clear. **Start** Clear **Finish** Clear

PURGE DATA: (If applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other

FIELD OBSERVATIONS

SAMPLING INFORMATION:

POINT ID 9R

Date/Time 09-30-19 / 1120 **Water Level @ Sampling, Feet:** 11.70

Method of Sampling: Bailer **Dedicated:** (Y) / N

Multi-phased/ layered: ( ) Yes (L) No **If YES:** ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conductivity (µmhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1120	17.2	6.92	2076	6.2	-54	

INSTRUMENT CALIBRATION/CHECK DATA:

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								

GENERAL INFORMATION:

Weather conditions @ time of sampling: Cloudy. 55°

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS: Slight Smell.

Sampled @ 1120

* DUP Taken.

* lock missing - replaced.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 09,30,19 **By:** _____ **Company:** TAL

FIELD OBSERVATIONS

Facility: Chemtrol

Sample Point ID: 8R

Field Personnel: TB/SO/ZV

Sample Matrix: G.W

MONITORTING WELL INSPECTION:

Date/Time 09-30-19 , 1220

Cond of seal: (✓) Good ( ) Cracked ( ) None ( ) Buried %

Prot. Casing/riser height:

Cond of prot. Casing/riser: ( ) Unlocked (✓) Good ( ) Loose ( ) Flush Mount ( ) Damaged

If prot.casing; depth to riser below:

Gas Meter (Calibration/ Reading): % Gas: / % LEL: /

Vol. Organic Meter (Calibration/Reading): Volatiles (ppm) /

PURGE INFORMATION:

Date / Time Initiated: 09-30-19/1222

Date / Time Completed: 09-30-19/

Surf. Meas. Pt: ( ) Prot. Casing (✓) Riser

Riser Diameter, Inches: 4.0

Initial Water Level, Feet: 9.51

Elevation. G/W MSL:

Well Total Depth, Feet: 22.10

Method of Well Purge: Bailer.

One (1) Riser Volume, Gal: ~8.0

Dedicated: (Y) / N

Total Volume Purged, Gal: ~24.0

Purged To Dryness Y (N)

Purge Observations: Clear.

Start Clear Finish Clear.

PURGE DATA: (If applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other

NYFS GW Form 12/20/11

Page 1 of 2

FIELD OBSERVATIONS

SAMPLING INFORMATION:

POINT ID 8R

Date/Time 09-30-19 , 1255 **Water Level @ Sampling, Feet:** 9.69

Method of Sampling: Bailer **Dedicated:** (Y) / N

Multi-phased/ layered: ( ) Yes ~~(No)~~ **If YES:** ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conductivity (µmhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1255	18.2	7.33	1181	5.04	-66	

INSTRUMENT CALIBRATION/CHECK DATA:

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								

GENERAL INFORMATION:

Weather conditions @ time of sampling: Cloudy

Sample Characteristics: Clear.

COMMENTS AND OBSERVATIONS:

Sampled @ 1255

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 09/30/19 **By:** _____ **Company:** TAL

FIELD OBSERVATIONS

Facility: Chemtrol **Sample Point ID:** 3S

Field Personnel: TB/SO/ZV **Sample Matrix:** G.W

MONITORTING WELL INSPECTION:

Date/Time 09/30/19 1020 **Cond of seal:** (✓) Good ( ) Cracked ( ) None ( ) Buried ____ %

Prot. Casing/riser height: ____ **Cond of prot. Casing/riser:** ( ) Unlocked (✓) Good ( ) Loose ( ) Flush Mount ( ) Damaged ____

If prot.casing; depth to riser below: ____

Gas Meter (Calibration/ Reading): **% Gas:** ____ / ____ **% LEL:** ____ / ____

Vol. Organic Meter (Calibration/Reading): **Volatiles (ppm)** ____ / ____

PURGE INFORMATION:

Date / Time Initiated: 09-30-19/1021 **Date / Time Completed:** 09-30-19/1023

Surf. Meas. Pt: ( ) Prot. Casing (✓) Riser **Riser Diameter, Inches:** 2.0

Initial Water Level, Feet: 18.12 **Elevation. G/W MSL:** ____

Well Total Depth, Feet: 20.40 **Method of Well Purge:** Bailer

One (1) Riser Volume, Gal: 0.4 **Dedicated:** (Y) N

Total Volume Purged, Gal: 0.5 **Purged To Dryness** (Y) / N

Purge Observations: slight turb **Start** clear **Finish** slight turb

PURGE DATA: (If applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other

FIELD OBSERVATIONS

SAMPLING INFORMATION:

POINT ID 35

Date/Time 09-30-19 / 1140 **Water Level @ Sampling, Feet:** 18.33

Method of Sampling: Bailer **Dedicated:** (Y) / N

Multi-phased/ layered: ( ) Yes (X) No **If YES:** ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conductivity (µmhos/cm)	Turb. (NTU)	Other (ORP)	Other ( )
1140	17.6	6.92	1559	16.7	-23	

INSTRUMENT CALIBRATION/CHECK DATA:

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								

GENERAL INFORMATION:

Weather conditions @ time of sampling: Cloudy

Sample Characteristics: Clear.

COMMENTS AND OBSERVATIONS:

Sampled @ 1140

* Replaced lock-

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 09 Oct 19 **By:** [signature] **Company:** TAL

FIELD OBSERVATIONS

Facility: Chemtrol **Sample Point ID:** 7R

Field Personnel: 2024W V. **Sample Matrix:** GW

MONITORTING WELL INSPECTION:

Date/Time 07/30/19 / 10:30 **Cond of seal:** ( ) (Good) ( ) Cracked ( ) None ( ) Buried %

Prot. Casing/riser height: **Cond of prot. Casing/riser:** ( ) Unlocked ( ) (Good) ( ) Loose ( ) Flush Mount ( ) Damaged

If prot.casing; depth to riser below:

Gas Meter (Calibration/ Reading): **% Gas:** / **% LEL:** /

Vol. Organic Meter (Calibration/Reading): **Volatiles (ppm'** /

PURGE INFORMATION:

Date / Time Initiated: 07/30/19 ~~9:30~~ 9:30 **Date / Time Completed:** 07/30/19 10:30

Surf. Meas. Pt: ( ) Prot. Casing (H) Riser **Riser Diameter, Inches:** 4

Initial Water Level, Feet: 7.20 **Elevation. G/W MSL:**

Well Total Depth, Feet: 37.95 **Method of Well Purge:** BAILER

One (1) Riser Volume, Gal: 19.8 **Dedicated:** Y / N

Total Volume Purged, Gal: 59.3 **Purged To Dryness** Y (N)

Purge Observations: **Start** CLEAR **Finish** CLEAR

PURGE DATA: (If applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other

FIELD OBSERVATIONS

SAMPLING INFORMATION:

POINT ID 7R

Date/Time 09/30/19 | 10:30 **Water Level @ Sampling, Feet:** 7.20

Method of Sampling: Bailer **Dedicated:** (Y) / N

Multi-phased/ layered: ( ) Yes (X) No **If YES:** ( ) light ( ) heavy

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conductivity (µmhos/cm)	Turb. (NTU)	Other (orp)	Other ( )
10:30	14.4	7.02	2318	3.58	-150	

INSTRUMENT CALIBRATION/CHECK DATA:

Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								

GENERAL INFORMATION:

Weather conditions @ time of sampling: clear

Sample Characteristics:

COMMENTS AND OBSERVATIONS:

37.95 - 7.20 = 30.75 x 0.628 = 19.8 x 3 = 59.3

Sampled @ 1030.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocals.

Date: 09/30/19 **By:** ZORAN V. **Company:** TRC

ATTACHMENT C

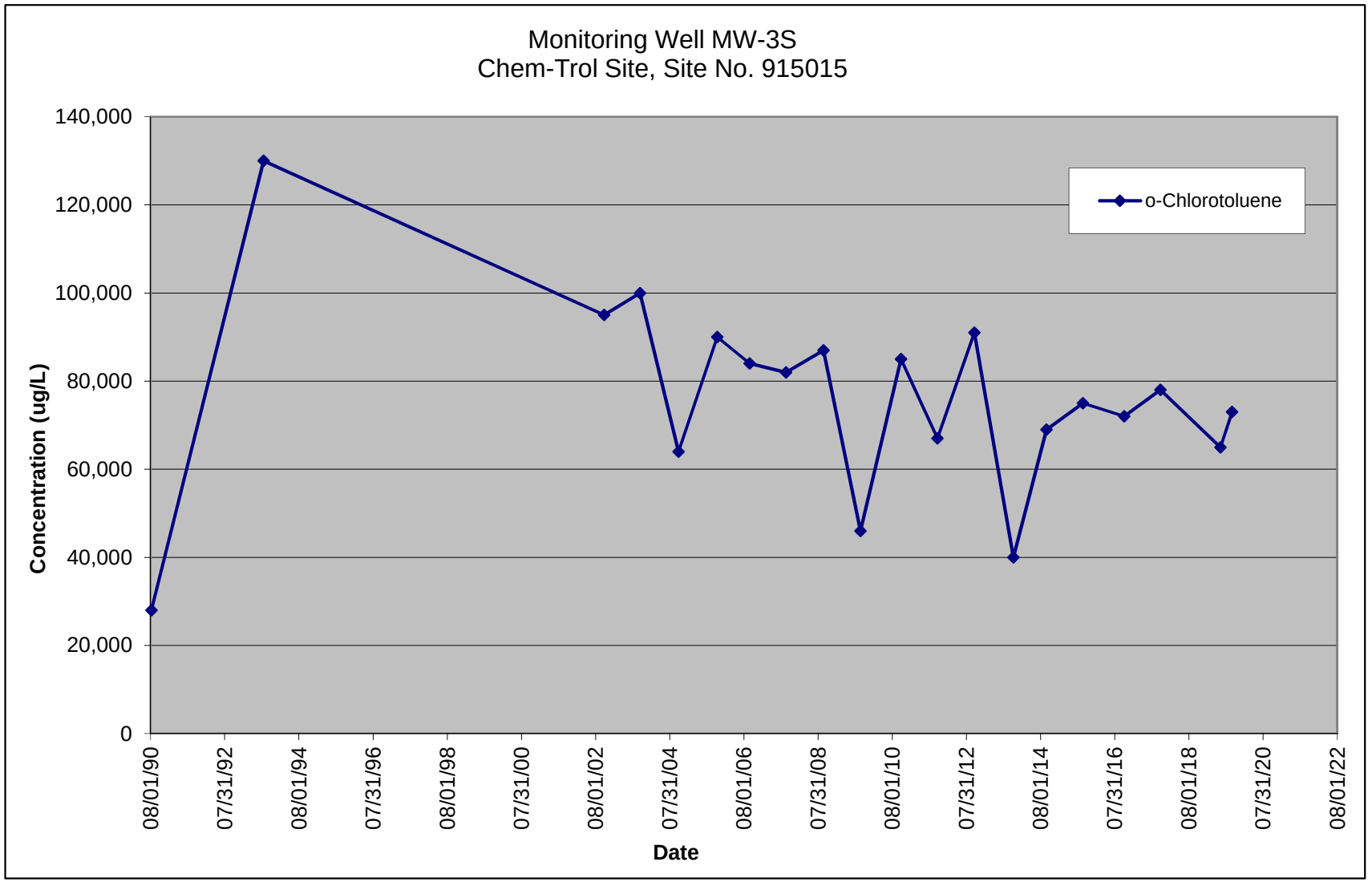
Historical Data Trend Plots

CHEM-TROL SITE

Groundwater Analytical Data for Well MW-3S (ug/L)

Date	o-Chlorotoluene
08/09/90	28,000
08/19/93	130,000
10/23/02	95,000
10/13/03	100,000
10/26/04	64,000
11/11/05	90,000
09/27/06	84,000
09/20/07	82,000
09/24/08	87,000
09/22/09	46,000
10/27/10	85,000
10/20/11	67,000
10/17/12	91,000
11/05/13	40,000
09/29/14	69,000
09/23/15	75,000
11/02/16	72,000
10/25/17	78,000
06/07/19	65,000
09/30/19	73,000

Note: Data not collected 10/30/18 due to the well being dry; as a result, 2018 annual sample collected 06/07/19.

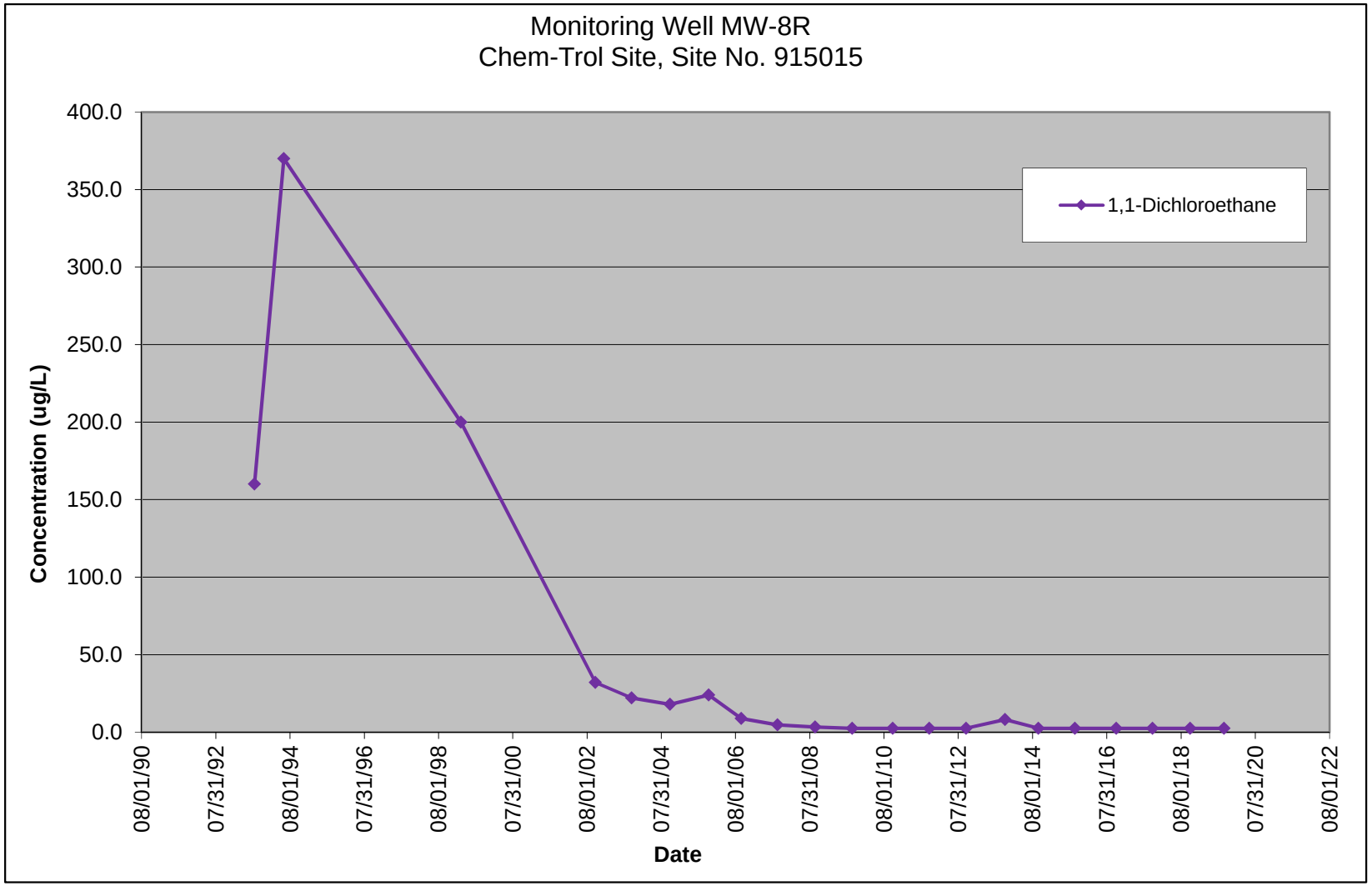

Monitoring Well MW-3S
Chem-Trol Site, Site No. 915015
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Concentration (ug/L)
o-Chlorotoluene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date

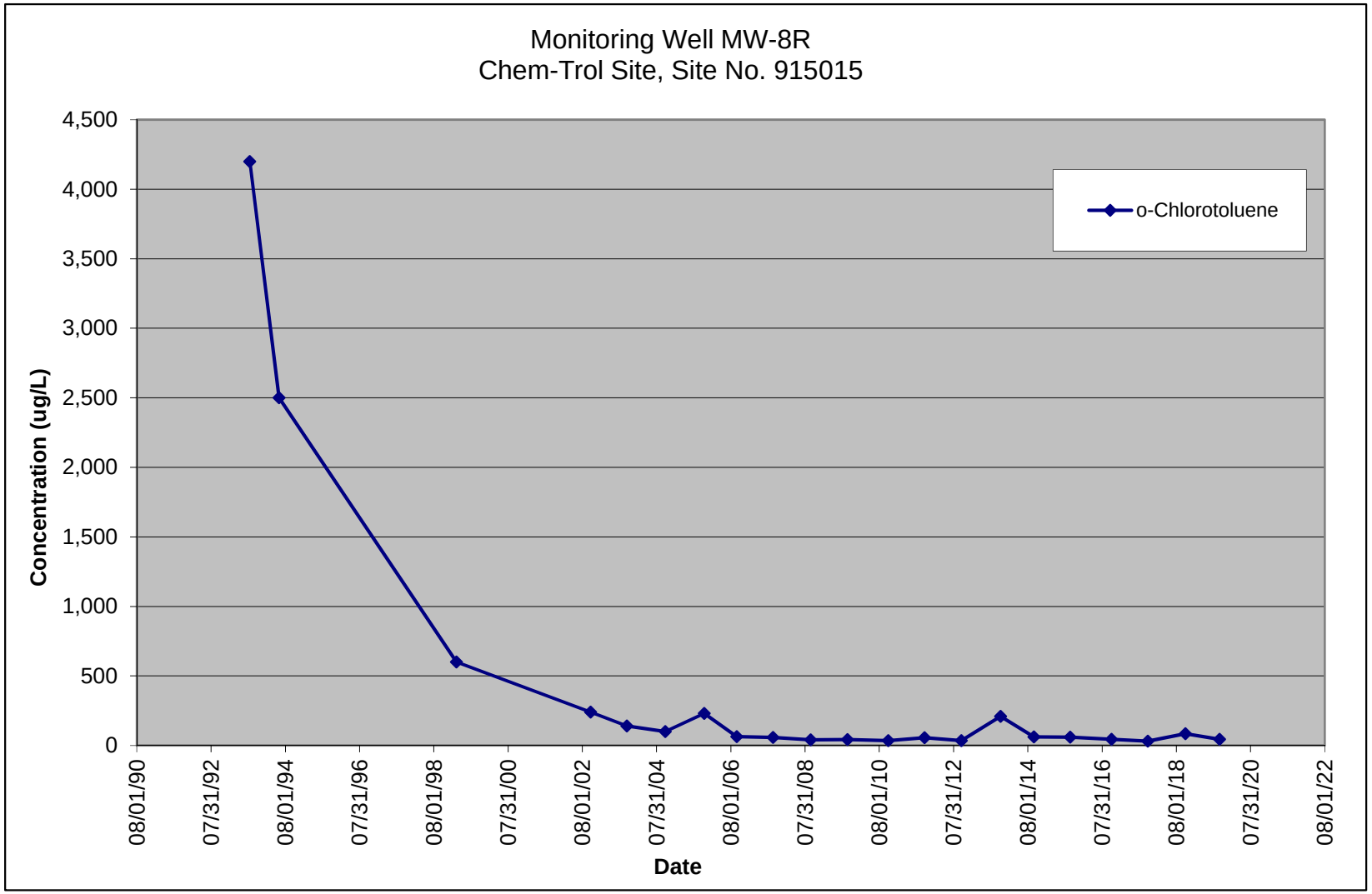
CHEM-TROL SITE

Groundwater Analytical Data for Well MW-8R (ug/L)

Date	1,1-Dichloroethane	o-Chlorotoluene
08/16/93	160.0	4,200
06/01/94	370.0	2,500
03/10/99	200.0	600.0
10/22/02	32.0	240.0
10/13/03	22.0	140.0
10/26/04	18.0	100.0
11/11/05	24.0	230.0
09/27/06	8.9	63.0
09/20/07	4.7	58.0
09/24/08	3.4	40.0
09/22/09	2.5	43.0
10/27/10	2.5	35.0
10/20/11	2.5	55.0
10/17/12	2.5	34.0
11/05/13	8.2	210.0
09/29/14	2.5	61.0
09/23/15	2.5	59.0
11/02/16	2.5	44.0
10/25/17	2.5	31.0
10/30/18	2.5	85.0
09/30/19	2.5	44.0

Value is equal to 1/2 the detection limit.


Monitoring Well MW-8R
Chem-Trol Site, Site No. 915015
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Concentration (ug/L)
1,1-Dichloroethane
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date


Monitoring Well MW-8R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
o-Chlorotoluene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date

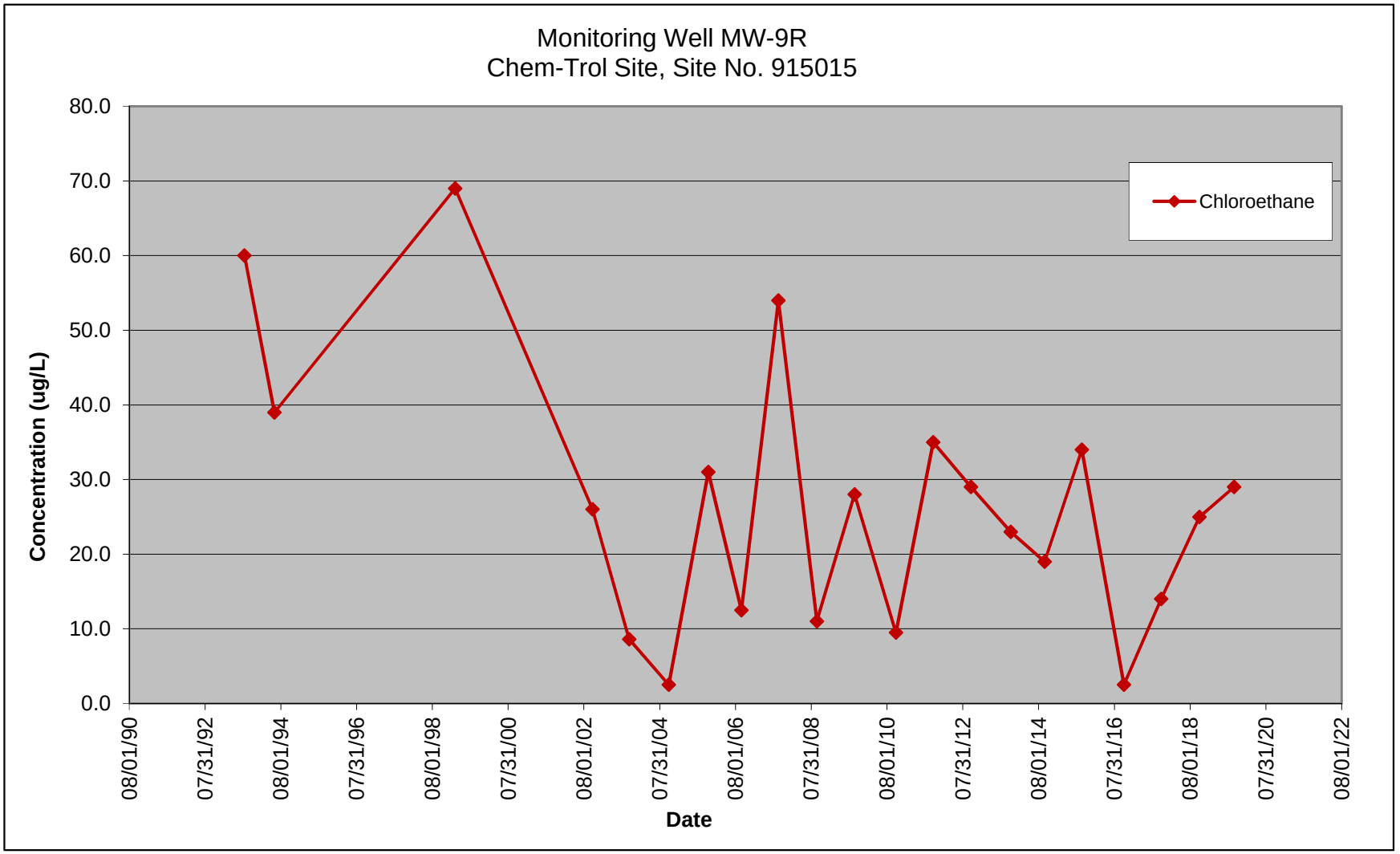
CHEM-TROL SITE

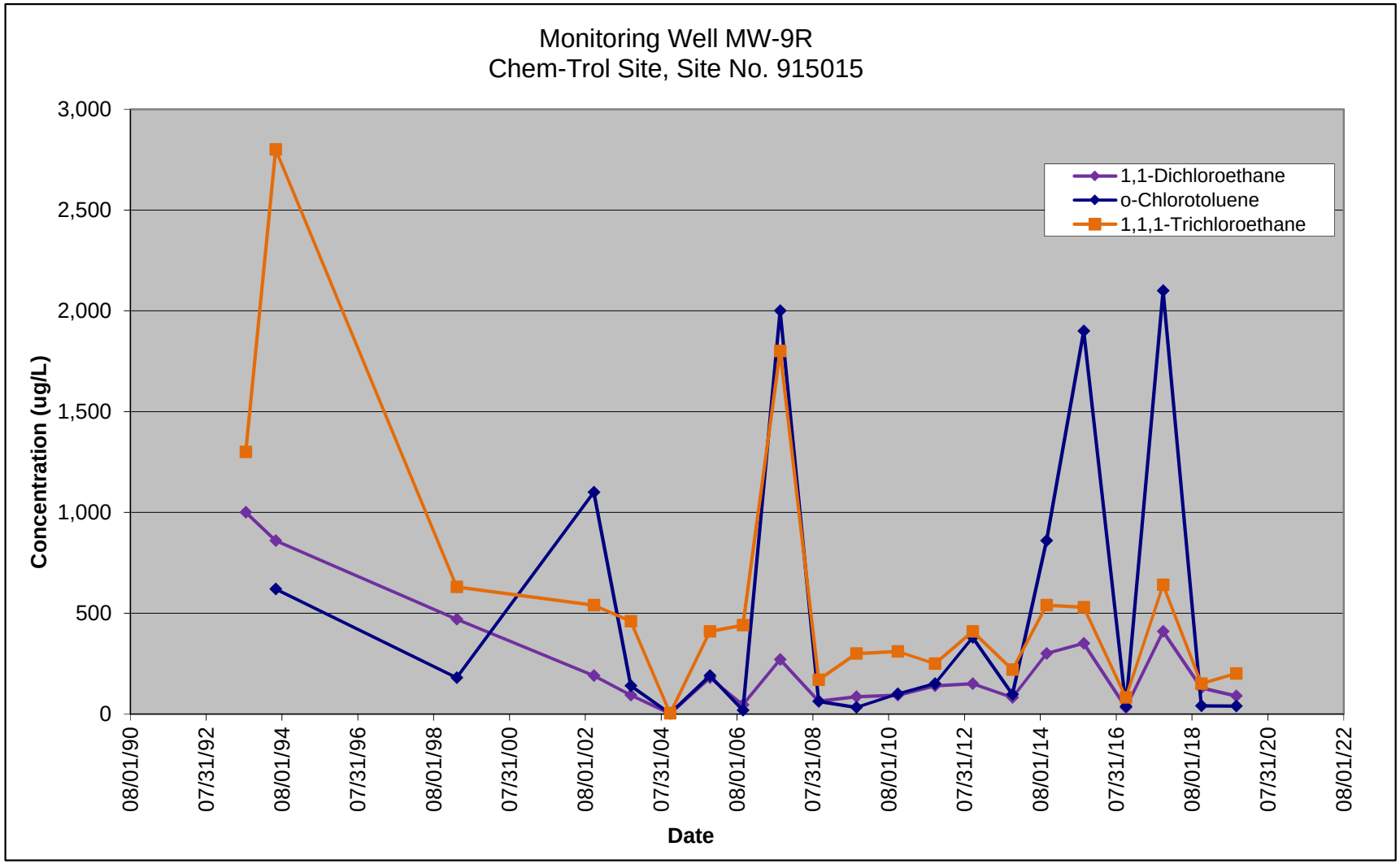
Groundwater Analytical Data for Well MW-9R (ug/L)

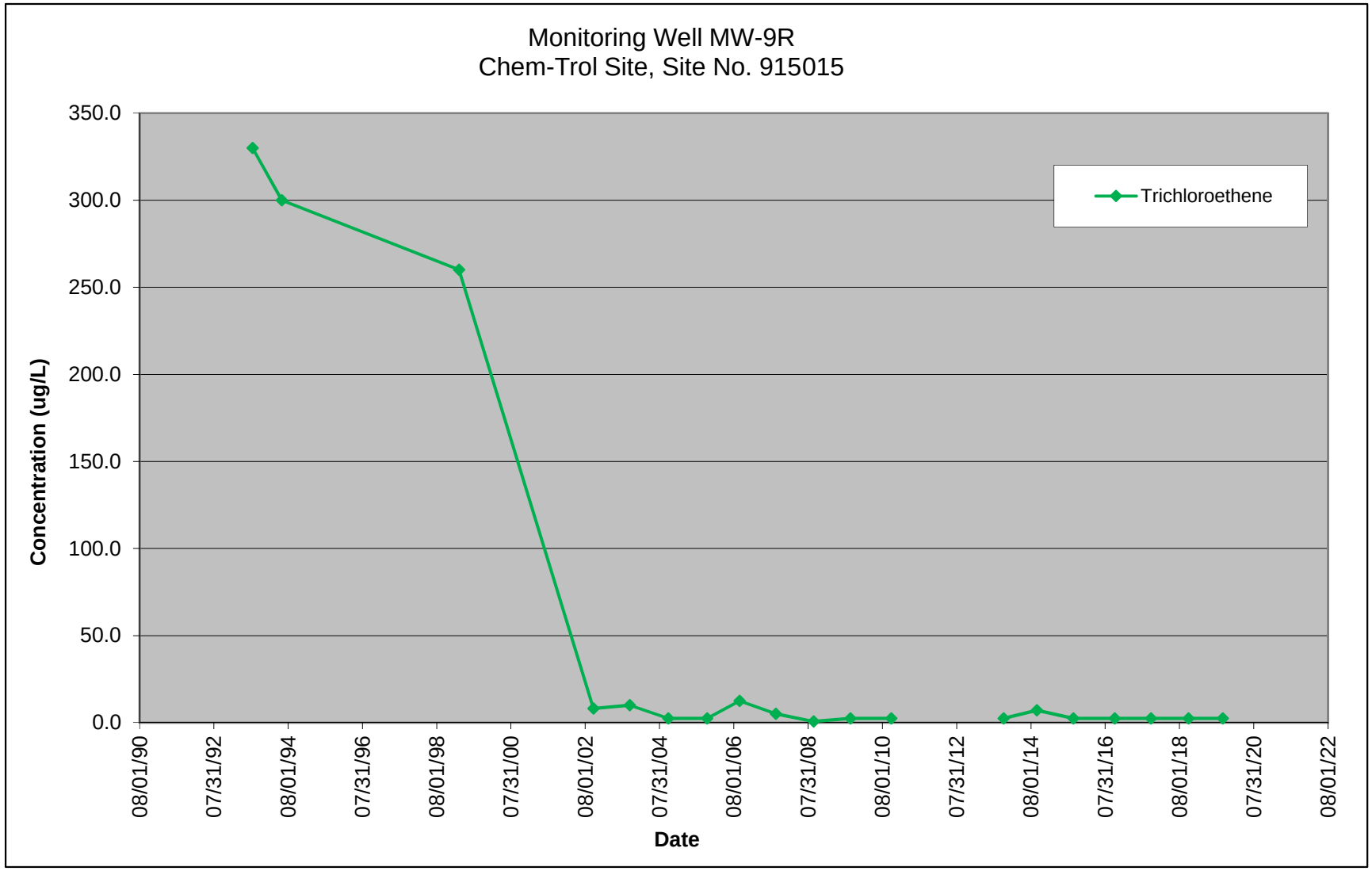
Date	Chloroethane	1,1-Dichloroethane	o-Chlorotoluene	1,1,1-Trichloroethane	Trichloroethene
08/16/93	60.0	1,000		1,300	330.0
06/01/94	39.0	860.0	620.0	2,800	300.0
03/10/99	69.0	470.0	180.0	630.0	260.0
10/22/02	26.0	190.0	1,100	540.0	8.2
10/13/03	8.6	93.0	140.0	460.0	10.0
10/26/04	2.5	2.5	2.5	2.5	2.5
11/11/05	31.0	180.0	190.0	410.0	2.4
09/27/06	12.5	46.0	18.0	440.0	12.5
09/20/07	54.0	270.0	2,000	1,800	5.1
09/24/08	11.0	64.0	62.0	170.0	0.68
09/22/09	28.0	85.0	33.0	300.0	2.5
10/27/10	9.5	93.0	100.0	310.0	2.5
10/20/11	35.0	140.0	150.0	250.0	
10/17/12	29.0	150.0	380.0	410.0	
11/05/13	23.0	82.0	97.0	220.0	2.5
09/29/14	19.0	300.0	860.0	540.0	7.1
09/23/15	34.0	350.0	1900.0	530.0	2.5
11/02/16	2.5	31.0	38.0	82.0	2.5
10/25/17	14.0	410.0	2100.0	640.0	2.5
10/30/18	25.0	130.0	40.0	150.0	2.5
09/30/19	29.0	89.0	39.0	200.0	2.5

Data not included due to 1/2 the detection limit being higher than the previous 3 years of positive results.

Value is equal to 1/2 the detection limit.


Monitoring Well MW-9R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date
Chloroethane


Monitoring Well MW-9R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
3,000
2,500
2,000
1,500
1,000
500
0
1,1-Dichloroethane
o-Chlorotoluene
1,1,1-Trichloroethane
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date


Monitoring Well MW-9R
Chem-Trol Site, Site No. 915015
Concentration (ug/L)
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Trichloroethene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date

CHEM-TROL SITE

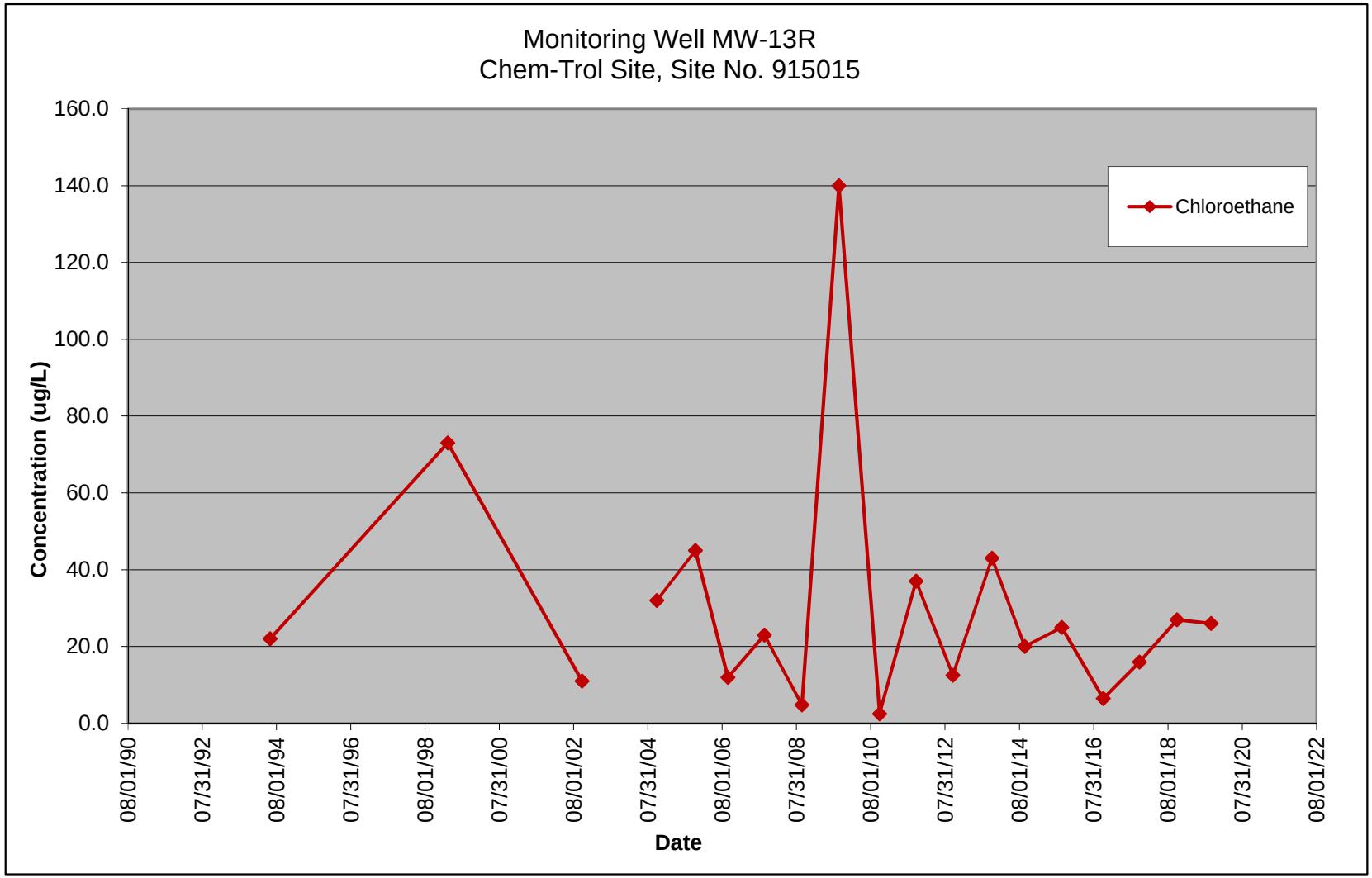
Groundwater Analytical Data for Well MW-13R (ug/L)

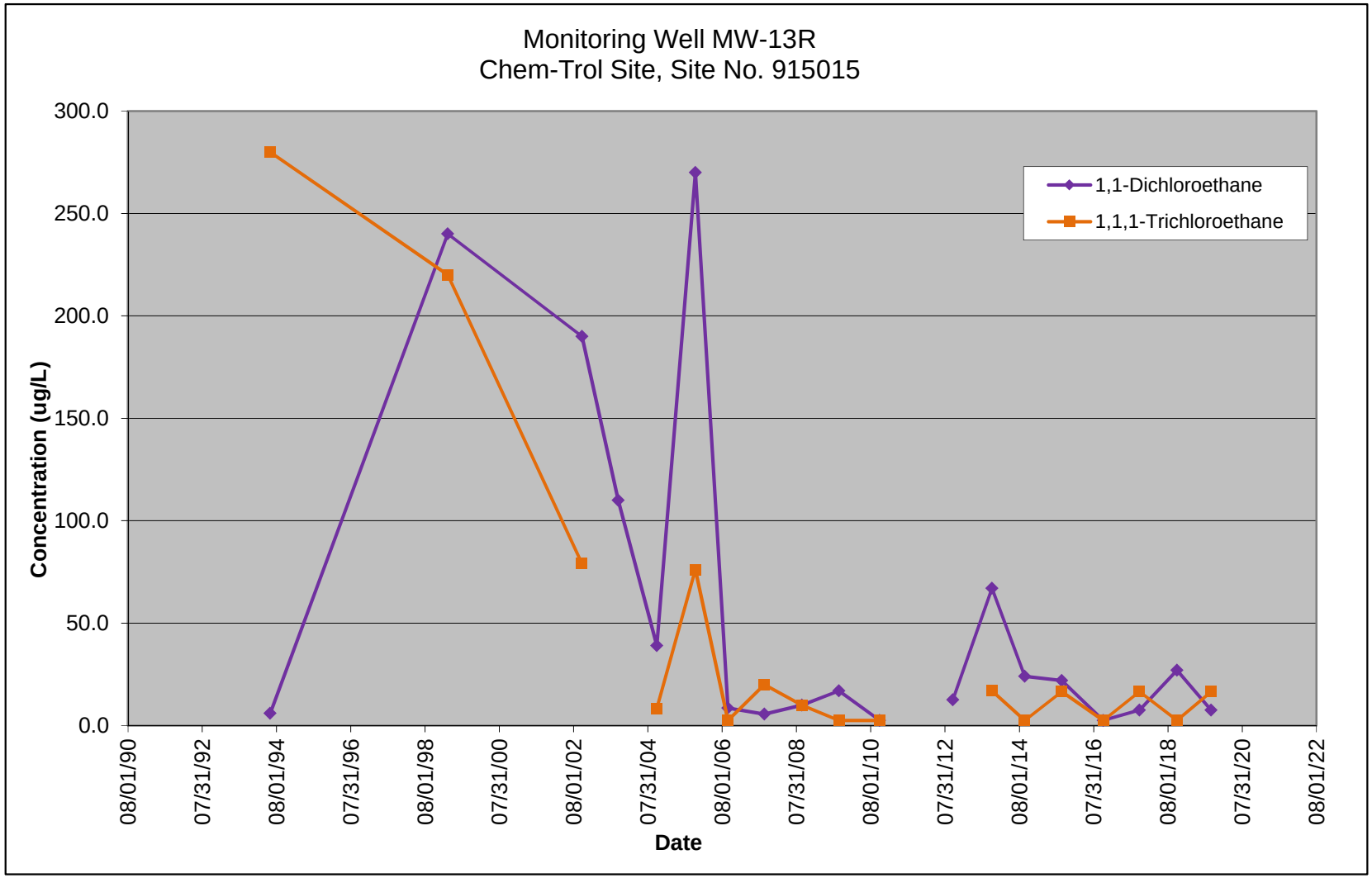
Date	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane	o-Chlorotoluene
05/31/94	22.0	6.0	280.0	1,700
03/11/99	73.0	240.0	220.0	
10/22/02	11.0	190.0	79.0	4,200
10/13/03		110.0		4,500
10/26/04	32.0	39.0	8.2	1,900
11/11/05	45.0	270.0	76.0	4,900
09/27/06	12.0	8.6	2.5	680.0
09/20/07	23.0	5.6	20.0	440.0
09/24/08	4.8	10.0	10.0	250.0
09/22/09	140.0	17.0	2.5	600.0
10/27/10	2.5	2.5	2.5	210.0
10/20/11	37.0			820.0
10/17/12	12.5	12.5		410.0
11/05/13	43.0	67.0	17.0	2,500
09/24/14	20.0	24.0	2.5	2,000
09/23/15	25.0	22.0	16.5	3200
11/02/16	6.5	2.5	2.5	1200
10/25/17	16.0	7.5	16.5	2000
10/30/18	27.0	27.0	2.5	2300
09/30/19	26.0	7.5	16.5	2500

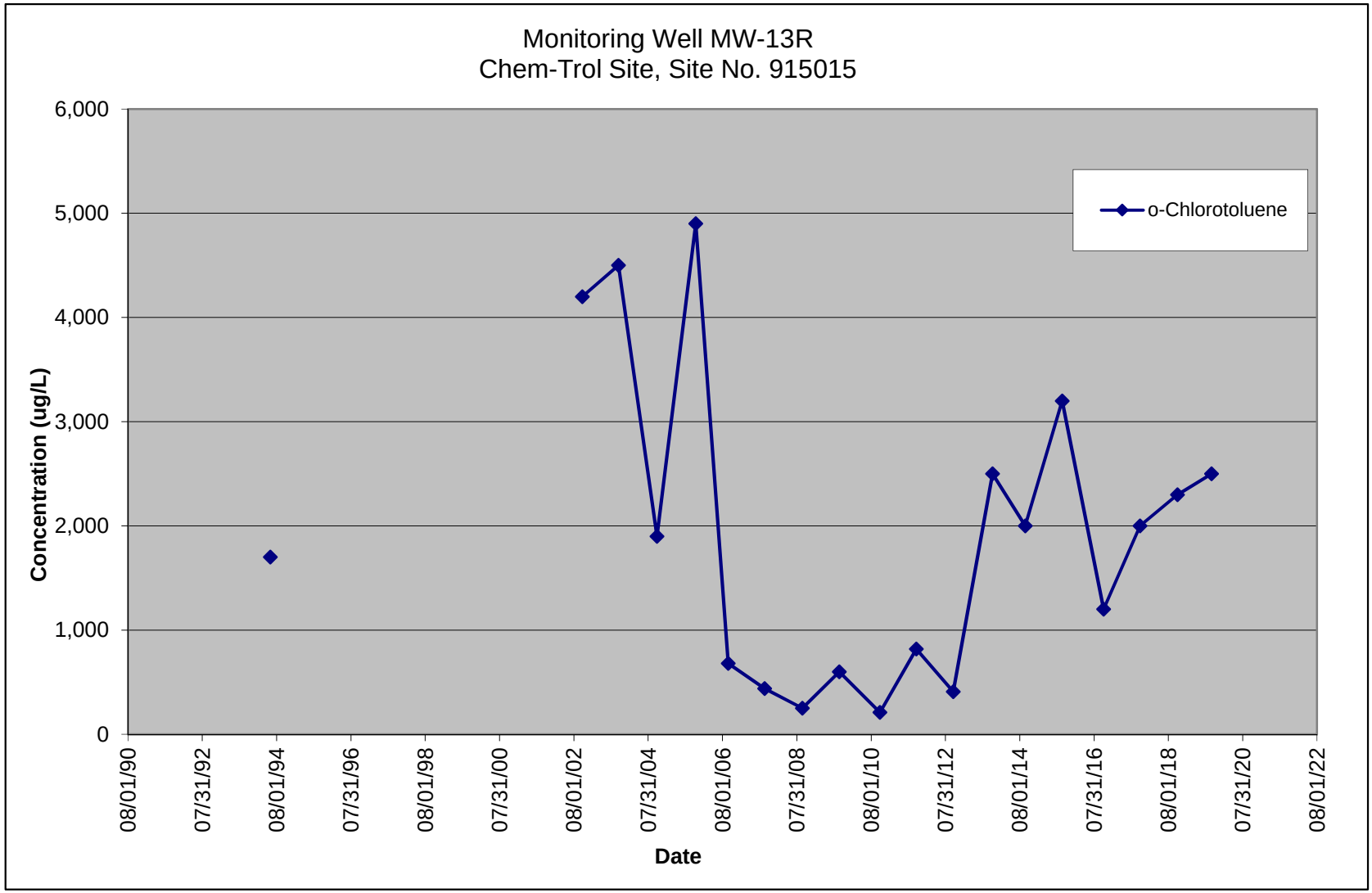
Data not included due to high detection limits for ND values: (1) 2003 - 200 ug/L except for Total Xylenes, which was 600 ug/L.

Data not included due to 1/2 the detection limit being higher than the previous 3 years of positive results.

Value is equal to 1/2 the detection limit.


Monitoring Well MW-13R
Chem-Trol Site, Site No. 915015
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Concentration (ug/L)
Chloroethane
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date


Monitoring Well MW-13R
Chem-Trol Site, Site No. 915015
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Concentration (ug/L)
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date
1,1-Dichloroethane
1,1,1-Trichloroethane


Monitoring Well MW-13R
Chem-Trol Site, Site No. 915015
6,000
5,000
4,000
3,000
2,000
1,000
0
Concentration (ug/L)
o-Chlorotoluene
08/01/90
07/31/92
08/01/94
07/31/96
08/01/98
07/31/00
08/01/02
07/31/04
08/01/06
07/31/08
08/01/10
07/31/12
08/01/14
07/31/16
08/01/18
07/31/20
08/01/22
Date