PERIODIC REVIEW REPORT

FOR PERIOD

JANUARY 2015 THROUGH DECEMBER 2015

ROCHESTER FIRE TRAINING ACADEMY

1190 SCOTTSVILLE ROAD

ROCHESTER, NEW YORK, 14624

NYSDEC SITE #828015

Prepared For: **City of Rochester**
Division of Environmental Quality
Rochester, New York

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Date: **May 2016**

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APPENDICES

I. Introduction

A. Summary

The Rochester Fire Training Academy (RFA) site (Site) is an 18-acre site located on the west bank of the Genesee River at 1190 Scottsville Road in the City of Rochester, Monroe County, New York. A Site location map is included as Figure 1. The Site is divided into five areas, which include the North Disposal Area (NDA) (2.5 acres), Training Grounds Area (TGA) (5.4 acres), Police Obstacle Course/Firing Range, South Disposal Area (SDA) (1.0 acres), and the Genesee Valley Park Area (GVPA) (1.0 acres). A Site map is included as Figure 2.

Based upon the results of remedial investigation activities, the types of contamination at the Site that were identified to require remediation included:

- Polychlorinated biphenyls (PCB's);
- Heavy metals, including lead and cadmium; and
- Volatile Organic Compounds (VOC's).

Remedial actions performed at the Site in accordance with the March 1993 Record of Decision include:

- Excavation and treatment of selected soils in the SDA and TGA, followed by on-site soil conditioning and placement in the NDA (completed);
- Excavation and off-site disposal of a smaller volume of soils (completed);
- Excavation and placement of GVPA soils in the NDA (completed);
- Restoration of the remediation areas (SDA, TGA and GVPA) (completed);
- Capping of the NDA (completed);
- Groundwater collection and treatment in the SDA (ongoing); and
- General Site management activities (ongoing).

B. Effectiveness of the Remedial Program

Progress made during the reporting period toward meeting the remedial objectives for the Site include continued operation and monitoring of the SDA groundwater collection and treatment system, and maintenance of the associated Site institutional and engineering controls in accordance with the general requirements of the Site Operation and Maintenance Manual. Monitoring data from the work completed to date shows that the remedial program is currently meeting, and has the ability to achieve, the remedial objectives for the Site.

C. Compliance

No areas were identified as being currently out of compliance with the Site management and monitoring program requirements (based upon the current understanding of these requirements – the Operation and Maintenance Manual is being revised to reflect current Site and plan conditions and requirements, as noted in Section I.D.4. below). As such, no steps are currently deemed necessary to correct areas of non-compliance.

D. Recommendations

PRR recommendations and proposed scheduling are detailed in Section VI.C. A summary of these recommendations is provided below.

1. Since residual contamination remains on the Site, applicable site management requirements, as specified in the Operations and Maintenance Manual, should be continued.

2. Repairs shall be made to the TGA cover system to seal cracks that are developing in the asphalt and asphalt-concrete interfaces, as necessary to limit and/or prevent stormwater infiltration into this area.

3. Complete the revision of the Operations and Maintenance Manual (O&MM) to reflect the current monitoring program, well locations, groundwater treatment system components, operating schedule, etc.

II. Site Overview

The RFA is an active police and fire training academy which has been operated by the City of Rochester since 1954. During the time period from 1954 through 1980, flammable liquids from local industries and other sources were accepted by the RFA as sources of fuel for training purposes. In 1980, the New York State Department of Environmental Conservation (NYSDEC) began investigating the RFA's disposal practices, and subsequently directed the removal of more than 200 drums and numerous chemical reagent bottles from the NDA, SDA, and TGA. While no hazardous waste disposal occurred in the GVPA, some surficial contamination of park grounds did occur adjacent to the site along the Genesee River.

The City of Rochester signed an Order on Consent with the NYSDEC on May 5, 1989 to investigate the extent of contamination and remediate the site. To address the nature of the contamination and determine the most appropriate alternatives to remediate the site, the City retained Malcolm Pirnie, Inc. to conduct a Remedial Investigation/Feasibility Study (RIFS). The RIFS results indicated that area soils were contaminated with polychlorinated biphenyls (PCBs), lead, cadmium, and volatile organic compounds (VOCs). The primary focus was on the TGA, GVPA, and SDA portions of the property. Groundwater contamination at the RFA site, caused by the storage and disposal of solvents, was determined to be essentially confined to the SDA. SDA soils were shown to be contaminated with VOCs as well as PCBs and metals. Soils in the TGA and the GVPA were shown to be contaminated primarily with PCBs and metals.

Based on the results of the RIFS, a NYSDEC Record of Decision was published in March 1993 that specified remedial actions and objectives for the groundwater and soils to meet applicable standards, criteria, and guidelines (SCGs), and to protect human health and the environment. The selected remedy specified that heavily contaminated soils were to be treated and/or removed from the Site, with residual Site contamination to be addressed through natural attenuation supplemented by institutional and engineering controls, including capping/covering select areas for isolation and to minimize infiltration, and groundwater treatment for contaminant removal and hydraulic containment.

Specifically, the remedial design for the site required that soils in the SDA containing total VOCs, PCBs, or cadmium equal to or above 10 mg/kg and/or containing lead concentrations equal to or greater than 250 mg/kg be excavated. The excavated soils were conditioned using a thermal desorber to reduce VOC levels to less than the Action Limit of 10 mg/kg. Following desorption, soils requiring solidification and stabilization were stockpiled in the TGA for additional treatment consisting of mixing the soil with cement and water to form a slurry. The slurry was then placed in the NDA and later capped with a soil/synthetic cover barrier layer. Excavated soils containing PCB concentrations greater than or equal to 50 mg/kg were disposed of off-site.

The groundwater treatment remedial component consists of a groundwater intercept trench and treatment plant installed at the SDA to provide for contaminant removal and a degree of hydraulic containment. Contaminated groundwater is collected via a 191-ft long collection trench, and pumped via a submersible pump station to the Groundwater Treatment System (GWTS) building located on the southwestern portion of the SDA. The GWTS processes groundwater through dual particulate filters and an air stripper to remove VOC's prior to discharge to the Monroe County sanitary sewer system. Operation of the GWTS was initiated in March 1998, and the GWTS discharge is permitted and regulated under a sanitary sewer industrial use permit granted by the Monroe County Department of Pure Waters (MCPW permit #705).

III. Monitoring Plan Compliance and Remedy Evaluation

A. Monitoring Plan Components

Monitoring and laboratory analyses were completed in accordance with the O&MM monitoring plan, Sewer Discharge Permit requirements, and/or consistent with routine monitoring completed prior to this reporting period. A summary of the routine monitoring and analyses is provided in the table below. Other site monitoring and inspections are as detailed in Section V.A.

Item	Frequency	Lab Analyses
Groundwater Monitoring Well Sampling	Semi-Annual	VOCs + MTBE (EPA 601/602)
GWTS Influent Sampling	Quarterly	VOCs (EPA 601/602), Pesticides (EPA 608), Total RCRA Metals, pH, alkalinity, hardness
GWTS Effluent Sampling	Monthly	VOCs (EPA 601/602), Acetone, MEK, MIBK (EPA 8015), and pH
	Quarterly	VOCs (EPA 601/602), Acetone, MEK, MIBK (EPA 8015), Semi-volatiles + 4-methyl phenol (EPA 625), Pesticides (EPA 608), Total RCRA Metals, and pH

B. Analytical Monitoring Data

Groundwater sampling from monitoring wells was performed semi-annually throughout the review period using disposable polyethylene bailers. Monitoring well sampling was conducted in accordance with the schedule and procedures specified in the O&MM (including Appendices E.1 through E.4). GWTS sampling was performed in general accordance with Site (O&MM) and Sewer Use Permit requirements. Samples intended for laboratory analyses were collected and stored in the appropriate polyethylene or glass bottles, preserved in the field, and transferred within allowable hold times to an ELAP-certified laboratory for analysis.

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Summary tables of the most recent monitoring results, including the current reporting period (January through December 2015), are provided in Appendix A, and graphical trend lines and historical well data for select contaminants of concern (1998 through 2015) are included in Appendix B to this report. The upgradient wells MW6, MW9, and MW10 are monitored to establish background groundwater quality. The remaining wells are monitored to establish the downgradient water quality. Refer to Figure 3 for the monitoring well locations.

A full copy of the analytical laboratory reports for analyses completed during the current PRR reporting period are included in Appendix C. A brief evaluation of the data and trends for the three monitored remedial areas is provided below (see Section III.D. for analysis of GWTS analytical data).

NDA: Upgradient well (MW-10I) continues to consistently show MTBE in the 0 to 10 µg/l range. Downgradient well MW-11I has recently exhibited increasingly elevated concentrations of vinyl chloride, which has been reported in the range of 245 to 476 µg/l over the past three years (above the historical range of 82 to 273 µg/l observed at this location from 2005 through 2012). These vinyl chloride concentrations should be monitored to determine whether or not the observed increase becomes a long-term trend. No other VOC's have been reported above detectable levels more than once since initiation of monitoring.

TGA: Upgradient well (MW-6I) continues to show vinyl chloride in a fairly consistent range of 0 to 10 µg/l over the past 10-plus years, with a single high level of 14 µg/l reported for 11/30/12. Vinyl chloride at downgradient well MW-8I was consistently reported to be less than 400 µg/l (and usually below 200 µg/l) prior to 2007, after which a singular high result of 850 µg/l was reported. Vinyl chloride concentrations since that time remain slightly elevated compared to prior years, but are steadily trending back downward to the 200 µg/l range. Benzene at downgradient well MW-15S was detected multiple times at concentrations of up to 291 µg/l in earlier monitoring events (prior to 2006), but benzene concentrations at this location have stabilized, with reported levels consistently below 2 µg/l since that time.

SDA: Upgradient (MW-9D) and downgradient (MW-7S, MW-7I and MW-7D) wells each experienced increases in one or more of the monitored chlorinated VOC's (TCE, DCE and vinyl chloride) over the period of 2010 to 2013, which directly corresponded to the period of the GWTS shutdown. The elevated VOC concentrations have since returned to historical, typical ranges following restart of the GWTS in April 2013.

Overall, based upon the analytical results for the current monitoring period, monitoring well concentrations of VOC's in the NDA and TGA were generally observed to remain within their historical stable and consistent ranges, which demonstrates the effectiveness of the cover systems in minimizing contaminant migration. The lone possible exception to this is elevated concentrations of vinyl chloride observed at well MW-11I, located downgradient from the NDA, at which continued monitoring is recommended. Wells in the SDA were noticeably impacted by the GWTS shutdown period (2010 to 2013); however, the observed and relatively quick restoration of VOC levels in the SDA wells to pre-shutdown concentration ranges demonstrates the effectiveness of the groundwater intercept trench in providing hydraulic containment, minimizing any migration of the SDA contaminants.

C. GWTS Flow Data

The GWTS is currently specified to be operated continuously (weekends included) to remove contaminants and maintain a depressed groundwater table in the vicinity of the groundwater collection trench. A summary of the annual GWTS flow data (total gallons processed and discharged) over the most recent five year period is as follows:

	Period of Operation				
	2011	2012	2013	2014	2015
Total Flow (gal)	0	0	1,552,338	1,313,659	1,163,289
Operating Days	0	0	255	320	349
Avg. Daily Flow (gal)	0	0	6,088	4,105	3,333

It should be noted that the GWTS had experienced multiple equipment and operational failures in the years prior to 2010, and was also experiencing reduced average daily throughput (flow) over this period. These system problems culminated in an extended GWTS shut down from August 2010 through April 2013 that required a system-wide descaling of equipment and piping. The system was brought back online in April 2013, and additional facility repairs, upgrades and modifications were completed in 2014 in accordance with the NYSDEC-approved *Work Plan for Completion of Periodic Review Report Recommendations*, dated February 5, 2014.

D. Contaminant Removal

Based upon measured flowrates and analytical monitoring of the groundwater treatment system influent concentrations, the mass of contaminants (VOC's) removed from the Site by the GWTS for the most recent five year period is as follows:

	Period of Operation				
	2011	2012	2013	2014	2015
Total Flow (gal)	0	0	1,552,338	1,313,659	1,163,289
Avg. VOC's (µg/l)	0	0	15,232	12,512	10,562
Net VOC Removal (lb)	0	0	197	137	102

As discussed in the previous section, the GWTS experienced an extended shut down period from August 2010 through April 2013. The system was brought back online in April 2013, and additional system repairs, upgrades and modifications were completed in 2014 to improve GWTS operational and removal efficiencies.

In terms of treatment system effectiveness, effluent data demonstrates that the wastewater treatment system process has proven effective, and has generally maintained compliance with the applicable effluent discharge limits since it's time of start-up. The lone exception to this is a single discharge permit exceedance occurring in July of 2009 which was attributed to a faulty flow sensor controlling the operation of the air stripper blower.

E. Air Emissions

Volatile organic compounds (VOCs) liberated from the groundwater are emitted to the outdoor atmosphere in the air discharged from the GWTS air stripper, which has been identified as an air emission point source. The air stripper is exempt from formal permitting requirements; however, monitoring is performed to confirm compliance with NYSDEC-approved air loadings listed in the O&MM. VOC emissions are estimated by mass balance using monitored flow rates, and influent and effluent VOC concentrations. Results are summarized in the chart in Appendix B, which shows that emissions continue to be well within approved levels.

F. Evaluation of Remedy Performance, Effectiveness and Protectiveness

Based upon the results of performance monitoring conducted over the course of time covered by this PRR, the effectiveness of the GWTS and associated Site remedial activities is summarized as follows:

- The GWTS extraction well/trench system is effective at capturing and removing VOC's from the SDA (436 pounds removed since April 2013).

- The GWTS process is effective and meeting program objectives in treating the extracted groundwater sufficiently to comply with effluent sewer use limits.

- Groundwater depression created by operation of the GWTS appears to be effective and meeting program objectives in providing basic hydraulic containment within the SDA, as evidenced by static water level data and groundwater monitoring results for the wells in this area.

- The Site cap and cover systems appear to be generally effective and meeting program objectives in minimizing the potential for contaminant migration, as evidenced by groundwater monitoring results for the downgradient wells in these areas.

- The long-term efficiency of the remedy (natural attenuation supplemented by VOC removal by the GWTS) in achieving ultimate Site cleanup goals remains unclear, as long-term trends in groundwater contaminant concentrations remain difficult to discern; however, this is not uncommon for natural attenuation, which is a comparatively long-term process. The site conditions (including prevalence of vinyl chloride over other chlorinated organic forms) remain amenable to and/or indicative of natural attenuation, and the general stability of the monitoring data demonstrates that the Site activities appear to remain protective of the environment while natural attenuation occurs.

G. Monitoring Deficiencies

Site media monitoring (groundwater and GWTS) was observed to comply with the O&MM monitoring plan, Sewer Discharge Permit requirements, and/or was consistent with routine monitoring completed prior to this reporting period. As was noted in the 2013 Periodic Review Report (PRR), this monitoring does not fully comply with the procedures and parameters outlined in the O&MM, as the monitoring parameter list was altered after the O&MM was prepared (and prior to this monitoring period), among other site/program changes. For example, NYSDEC approved removal of PCB's and metals from the sampling parameter list for groundwater (change approved in NYSDEC correspondence dated 5/30/00), and changes to monitoring wells/locations have been made since the O&MM was prepared. Also, carbon treatment is no longer used as part of the GWTS, though GWTS effluent continues to be monitored at the end of the treatment process (i.e., after the air stripper). And Monroe County Department of Pure Waters has changed the effluent sampling requirements several times since the permit was originally granted.

Most importantly, regardless of site/parameter changes that have occurred since the O&MM was prepared, the parameters and locations considered critical to evaluation of remedial performance and effectiveness continue to be monitored. The O&MM is currently in the midst of being revised and updated.

H. Conclusions and Recommendations for Changes

There are no recommendations for changes or improvements to the current monitoring program.

IV. IC/EC Compliance Report

A. IC/EC Requirements/Compliance

1. A description of source documentation, applicable control, control objective, and how performance of the control is evaluated is provided below:

Operations and Maintenance Manual (O&MM): The objective of the O&MM is to manage Site contamination that remains above regulatory criteria in a manner that is protective of human health and the environment. The O&MM covers management, operations and monitoring of various Institutional and Engineering Controls. The performance of these controls is evaluated through monitoring and periodic certification.

Controls on the Site covered under the O&MM include:

- GWTS Operations (SDA), which are intended to provide for limited removal of VOC's and to provide a degree of hydraulic containment to limit/prevent contaminant migration. The effectiveness of the GWTS is evaluated based on review of static water levels and analytical monitoring data for nearby groundwater monitoring wells and GWTS influent and effluent monitoring data;

- Cover Systems (NDA and TGA), which are intended to limit and/or prevent stormwater infiltration into contaminated soils, preventing migration of contaminants while the soils undergo the natural attenuation process. The effectiveness of the cover system is evaluated based on review of analytical monitoring data from nearby groundwater monitoring wells;

- Site Stormwater Collection System, which is intended to direct stormwater away from the Site and limit and/or prevent stormwater infiltration into area soils, preventing migration of contaminants while the soils undergo the natural attenuation process. The effectiveness of the stormwater collection system is evaluated based on review of analytical monitoring data from nearby groundwater monitoring wells;

- Facility Access System, which is intended to facilitate access to the Site by authorized personnel while limiting unauthorized access to the remedial areas to minimize the potential for vandalism, outside interference with ongoing remedial processes, and potential third-party exposure to contaminants. The effectiveness of the access system is evaluated based on review of the condition of these access facilities, and the apparent occurrence (or non-occurrence) of unauthorized access incidents.

Record of Decision: The Record of Decision includes requirement for a deed restriction and requirement for notification and approval from NYSDEC prior to any physical alteration or construction constituting a substantial change to the use of the Site. This is intended to assist in management of soil and historic fill material during future activities that would penetrate, encounter or disturb remaining contamination; to prevent human exposure to contaminants; and to protect the environment from migration of contaminants. The effectiveness of the deed restriction is evaluated by adherence to the DEC notification and approval requirements prior to any change in Site use, and in meeting the objectives of the deed restriction as defined above.

2. Status

Each control is fully in place, is being adhered to, and appears to remain generally effective as of the date of this report.

Several cracks were observed in the TGA asphalt and concrete cover system which will need to be addressed to minimize infiltration into this area. Many of these cracks are minor, and there is no evidence to indicate that significant infiltration or adverse impacts upon contaminant migration are occurring; however, the potential infiltration points were noted during the 2014 and 2015 site inspections. To date, the City of Rochester and Monroe County personnel have reviewed the site and site repair needs, and reviewed site lease and operating agreements to determine responsibility for repairs. In accordance with these agreements, Monroe County is responsible for "maintaining the facility consistent with the Site Record of Decision and the New York State approved Operations and Maintenance Manual for the Site". The City of Rochester will continue coordination with Monroe County to complete the repairs to the cap in this area, which are currently anticipated to be completed by the end of 2017.

3. Corrective Measures

None Required

4. Conclusions and Recommendations for Changes

The controls are being effectively implemented as of the date of this report. While no significant changes are deemed necessary, minor recommendations for maintenance and/or improvements to the existing IC/EC's are as described above and in Section VI of this report.

B. Certification

Certification Statement and forms are included as Appendix E to this report.

V. Operation & Maintenance Manual (O&MM) Compliance Report

A. Components of O&MM

Documentation of Site monitoring and inspections completed in accordance with the O&MM requirements are as indicated in the table below. Copies of these logs and inspection forms are included in Appendix D. Media sampling and analytical monitoring activities are as detailed in Section III.A.

Item	Frequency
GWTS Operations Log (Flow, maintenance data)	Daily (when site attended)
Cover System Inspection	Quarterly
Stormwater Collection System Inspection	Periodic (completed quarterly)
Facility Access System	Periodic (completed quarterly)

B. O&MM Activities

O&MM activities completed during the current reporting period include general maintenance for the GWTS, general maintenance of the cover system (vegetation and soil cover maintenance), and general maintenance of the Site fencing. Additional details on Site activities and dates of completion are included in the Site logs and inspection forms included in Appendix D.

C. Evaluation of Remedial Systems

The O&MM activities completed over the reporting period were appropriate to maintain operational and treatment efficiencies, and to enable the remedial systems to function as intended and as designed in order to meet the remedial objectives.

As noted in the previous (2014) PRR, further enhancement to the remedial performance of the GWTS may be possible if the GWTS is periodically operated in a “pulsed” mode, wherein occasional pump resting periods are used to allow partial groundwater recharge to aid in flushing of soils located above the elevation of the depressed groundwater table. Potential benefits of pulsed GWTS operation include improved remedial effectiveness (flushing of soils increases overall contaminant removal and minimizes potential for “rebound” effect following completion of site remediation), and reduced operating costs (pulsed systems typically require fewer total hours of pump operation to achieve remedial objectives).

Based upon observations made following the extended GWTS shutdown period (2010 to 2013), it does not appear that short-term shut-down of the groundwater pumps would have a significant impact upon contaminant migration. Nonetheless, it is recommended that pulsed operation be automated to monitor the groundwater recharge process, providing for adequate soil flushing while simultaneously ensuring that hydraulic containment is maintained throughout the pump resting periods. It is proposed that only 1 or 2 pump resting periods per year be utilized as part of the pulsed GWTS operation, thus resulting in a relatively minor change to the GWTS operations. It is anticipated that several GWTS maintenance activities that require the system to be off-line can be completed concurrent with the planned pump resting periods.

D. O&MM Deficiencies

As previously noted, the primary deficiency observed in the O&MM is that this manual has not been modified and revised over the years to accurately reflect current Site and remedial conditions.

E. Conclusions and Recommendations for Improvements

The O&MM is currently being revised to reflect and document changes to the GWTS and the associated monitoring program that have occurred since the original OM&M was prepared in 1999, including incorporation of a pulsed GWTS operating mode.

No additional improvements to the O&MM are recommended at this time.

VI. Conclusions and Recommendations

A. Compliance

With exceptions as noted, the requirements of the following plans were met during the reporting period:

- IC/EC requirements.
- Monitoring Plan requirements.
- O&MM requirements.

B. Performance and Effectiveness of Remedy

An evaluation of the components of the O&MM during this reporting period indicates that, as of the end date of this monitoring period:

- the IC/EC controls appear to remain generally protective of human health and the environment;
- the monitoring plan sufficiently monitored the performance of the remedy;
- applicable components of the O&MM (revision pending) adequately maintain the GWTS; and
- the remedial program is compliant with, and remains capable of, achieving the remedial objectives for the Site.

C. Recommendations

Since residual contaminants remain at the Site, it is recommended that applicable aspects of the O&MM continue to be implemented at this Site

While the Site continues to be operated in general compliance with the remedial plan requirements, and while it has been determined that the remedy is currently meeting the remedial objectives for the Site, the following recommendations are provided in accordance with O&MM requirements, and/or to improve Site and remedial operations, monitoring, and efficiencies:

1. Revision of the O&MM should be completed to reflect and document recent changes to the GWTS and the current monitoring program, as well as to include recommended procedures for intermittent pulsed operation of the GWTS as described in Section V.C. above. The anticipated completion for the O&MM update has been revised to on or before the end of 2016. The revised O&MM will be submitted to NYSDEC for review and approval upon completion.

2. Provide repairs to the TGA cover (cracks and seems in asphalt and concrete cover) in accordance with O&MM requirements to minimize infiltration into this area. Many of these cracks are minor, and there is no evidence to indicate that significant infiltration or adverse impacts upon contaminant migration are occurring; however, the potential infiltration points were noted during the 2014 and 2015 site inspections. The anticipated completion date for repairs to address the integrity of the TGA cap has been revised to on or before the end of 2017, to allow sufficient time for coordination among the multiple governmental entities involved in Site ownership and operations under the lease and operating agreements (as described in Section IV.A.2).

FIGURES

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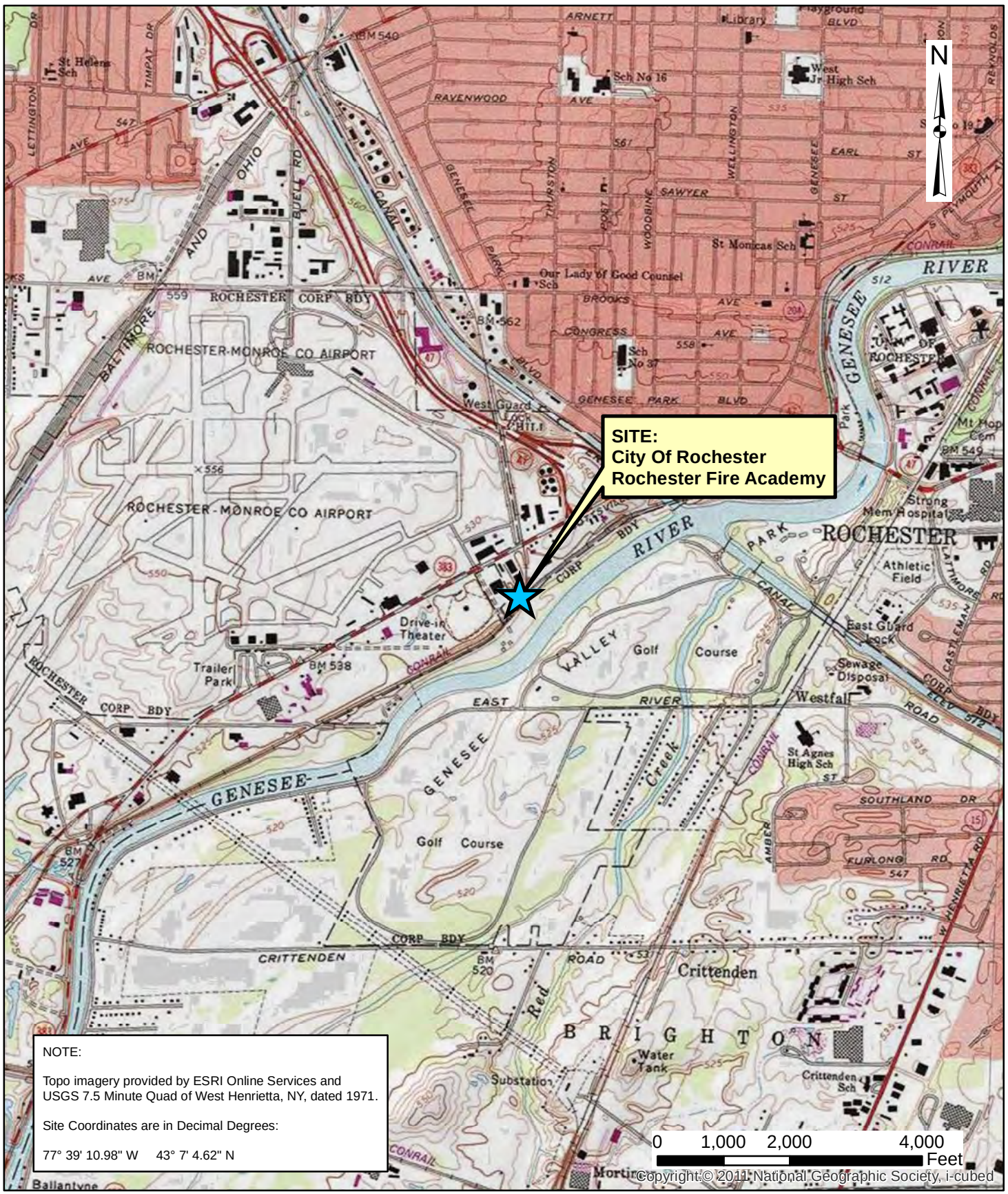

NOTE:

Topo imagery provided by ESRI Online Services and USGS 7.5 Minute Quad of West Henrietta, NY, dated 1971.

Site Coordinates are in Decimal Degrees:

77° 39' 10.98" W 43° 7' 4.62" N

Date: 10-16-2013 Drawn By: RJM Scale: AS NOTED	day **DAY ENVIRONMENTAL, INC.** **Environmental Consultants** **Rochester, New York 14606** **New York, New York 10170**	Project Title: CITY OF ROCHESTER ROCHESTER FIRE ACADEMY ROCHESTER, NEW YORK GROUNDWATER TREATMENT SYSTEM RENOVATION Drawing Title: Project Locus Map	Project No. 4839C-13 FIGURE 1

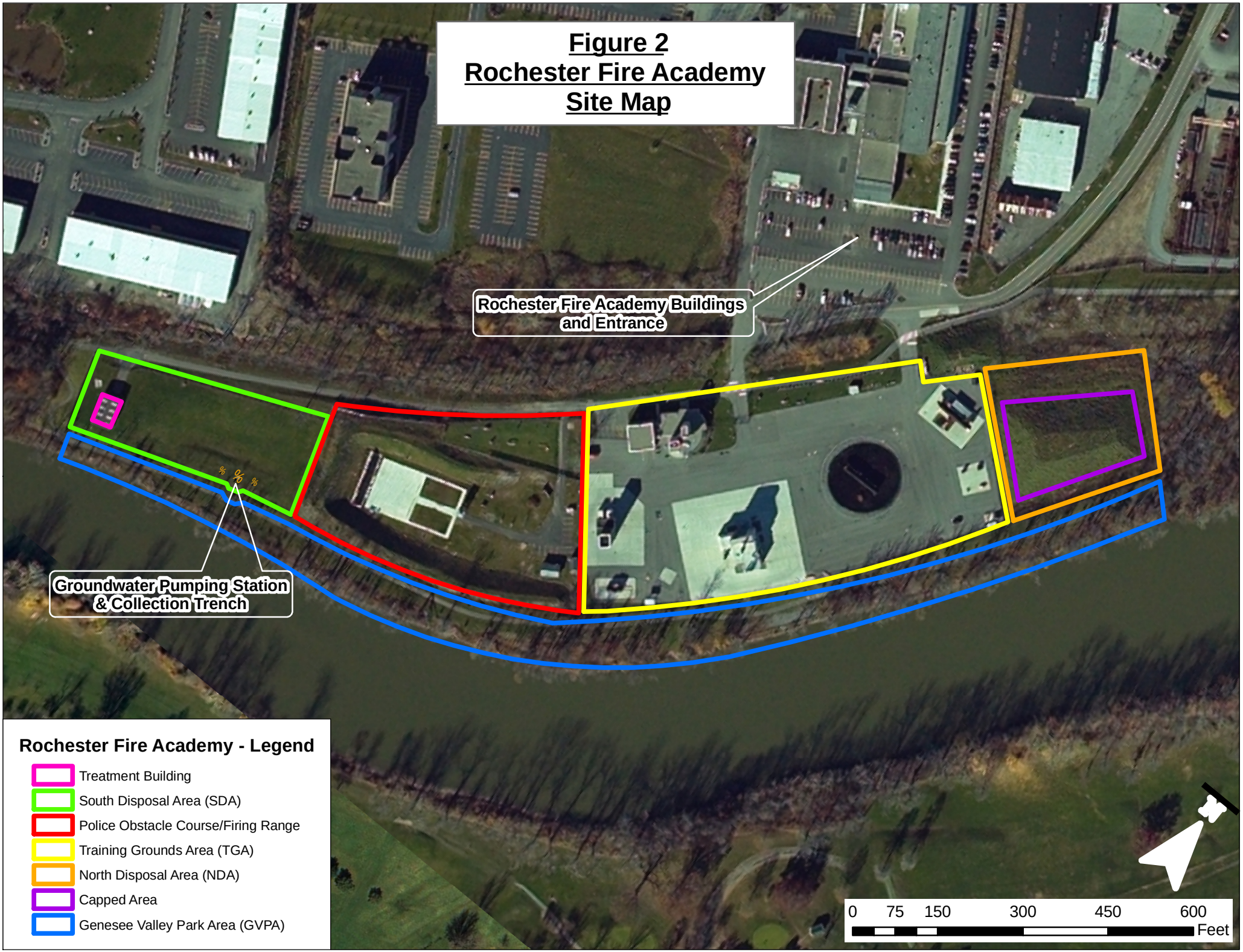
Figure 2
Rochester Fire Academy
Site Map
Rochester Fire Academy Buildings and Entrance
Groundwater Pumping Station & Collection Trench
Rochester Fire Academy - Legend
Treatment Building
South Disposal Area (SDA)
Police Obstacle Course/Firing Range
Training Grounds Area (TGA)
North Disposal Area (NDA)
Capped Area
Genesee Valley Park Area (GVPA)
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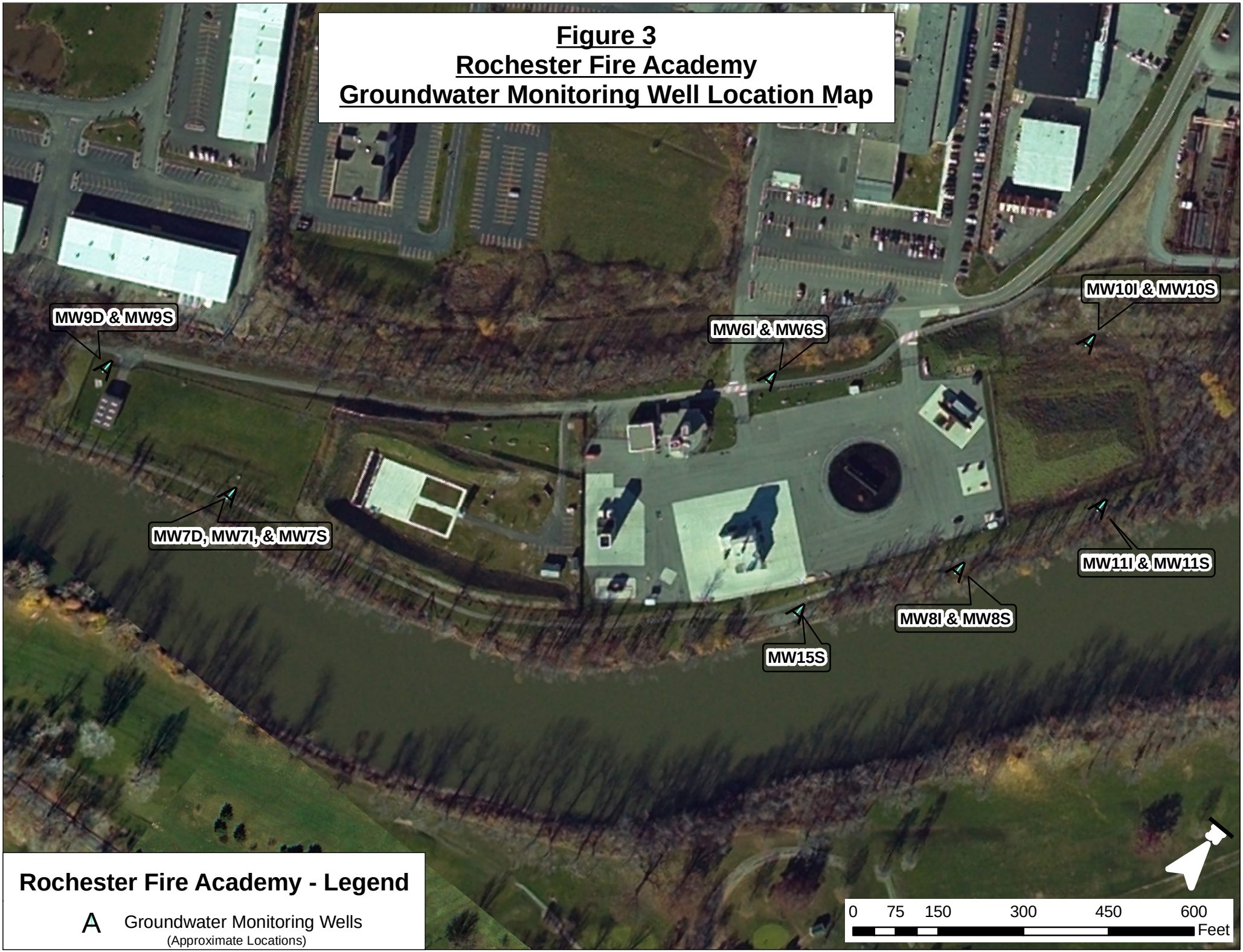
Feet

Figure 3
Rochester Fire Academy
Groundwater Monitoring Well Location Map



APPENDIX A

ANALYTICAL DATA SUMMARY TABLES

(January 2015 through December 2015)

Rochester Fire Academy
GWTS Influent
Quarterly Grab Sampling Monitoring Results

Parameter	2/25/2015	5/29/2015	8/21/2015	11/24/2015
Total Volatiles (601/602) (ug/L)				
Vinyl Chloride	**1340**	**724**	**1130**	**1370**
Chloroethane	**310**	ND (200)	**253**	**308**
1,1 - Dichloroethene	ND(200)	ND(200)	ND(200)	**237**
1,1 - Dichloroethane	**3280**	**1270**	**4520**	**8470**
1,1,1 - Trichloroethane	**7150**	**1280**	**6080**	**2770**
Trichloroethene	ND(200)	ND(200)	ND(200)	ND(200)
Toluene	**650**	ND (200)	**595**	**510**
Total Metals (mg/L)				
Arsenic	ND(.005)	**0.01**	**0.01**	**0.01**
Copper	ND(.0125)	ND(.0125)	ND(.0125)	ND(.0125)
Iron (not on IDP)	NS	NS	NS	NS
Manganese	NS	NS	NS	NS
Selenium	**0.010**	ND(.005)	**0.01**	ND(.005)
Zinc	ND(.03)	**0.06**	ND(.03)	ND(.03)
Total Pesticides (608) (ug/L)				
4,4-DDD	ND (0.1)	ND(0.1)	ND (0.1)	ND(0.1)
4,4-DDE	ND(0.1)	ND(0.1)	**0.11**	ND(0.1)
delta-BHC	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
alpha-Chlordane	NS	NS	NS	NS
4,4'-DDT	ND (0.1)	ND (0.1)	ND (0.1)	ND(0.1)
Endrin Aldehyde	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Aldrin	**0.11**	ND (0.1)	ND (0.1)	ND(0.1)
Heptachlor	ND(0.1)	ND (0.1)	ND(0.1)	ND(0.1)
Total Alkalinity (ug/L)	400	390	430	440
Total Hardness (ug/L)	626	626	625	624

Rochester Fire Academy
GWTS Effluent VOC
Quarterly Grab Sampling Results

Parameter	2/25/2015	5/29/2015	8/21/2015	11/24/2015
Total Volatiles (601/602) (ug/L)				
Vinyl Chloride	ND (5.0)	**6.5**	**12.1**	ND(2.0)
Chloroethane	ND(5.0)	**2.62**	**5.08**	ND(2.0)
1,1 - Dichloroethene	ND(5.0)	ND(2.0)	**3.32**	ND(2.0)
1,1 - Dichloroethane	**12**	**31.8**	**82.9**	**12.6**
1,2 - Dichloroethane	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	**9.79**	**26.8**	**110**	ND(2.0)
Trichloroethene	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(5.0)	ND(2.0)	**3.79**	ND(2.0)

Rochester Fire Academy
GTWS Effluent
Grab Sampling Results (Metals and Phosphorus)

Parameter	2/25/2015	5/29/2015	8/21/2015	11/24/2015
Total Metals (mg/L)				
Arsenic	ND(.005)	**0.012**	**0.00115**	**0.006**
Cadmium	ND(0.0025)	ND(0.0025)	ND(0.0025)	ND(0.0025)
Chromium	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Copper	ND (0.0125)	ND (0.0125)	ND (0.0125)	ND (0.0125)
Iron (not on IDP)	NS	NS	NS	NS
Lead	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Manganese	NS	NS	NS	NS
Nickel	ND(0.02)	ND(0.02)	ND(.02)	ND(0.02)
Selenium	**0.015**	ND(0.005)	**0.008**	ND(0.005)
Zinc	ND(0.03)	**0.039**	ND(0.03)	ND(0.03)
Phosphorous (mg/L)	NS	NS	NS	NS

Rochester Fire Academy
GWTS Effluent
Grab Sampling Results (pH, PCBs, EPA 8015, and TTO)

Parameter	1/15/2015	2/25/2015	3/17/2015	4/22/2015	5/29/2015	6/19/2015	7/17/2015	8/21/2015	9/28/2015	10/22/2015	11/24/2015	12/21/2015
pH(SU)	8.26	8.27	8.26	8.22	8.25	8.15	7.99	7.94	8.35	8.13	8.23	8.32
Heptaclor	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethyl phthalate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acetone (8015)	37.5	66.5	19.4	45	ND(10.0)	66.9	51.9	33.4	28.4	31	32.3	38.8
2-Butanone (8015)	40.2	42.8	14.7	43.8	ND(10.0)	70.2	60.7	52.8	51.3	50.1	55.3	57.2
4-methyl-2-pentanone (8015)	7.61	ND(12.5)	6.84	9.28	ND(5.0)	ND(12.5)	ND(12.5)	ND(5.0)	ND(12.5)	ND(12.5)	ND(5.0)	ND(12.5)
Total Toxic Organics (TTO)[2]	38.03	21.79	23.33	129.58	67.72	113.61	241.83	217.19	8.96	10.7	12.6	24.6

Rochester Fire Academy
GWTS Air Stripper Emission Estimates

Total Volatiles (601/602) Parameter	O&MM Allowable	2/25/2015	5/29/2015	8/21/2015	11/24/2015
Vinyl Chloride	0.004	0.0010	0.0017	0.0020	0.0017
1,1 - Dichloroethane	0.02	0.0025	0.0029	0.0079	0.0106
1,2 - Dichloroethane	0.001	0.0000	0.0000	0.0000	0.0000
1,1 - Dichloroethene	0.002	0.0000	0.0000	0.0000	0.0003
1,1,1 - Trichloroethane	0.158	0.0056	0.0029	0.0107	0.0035
Trichloroethene	0.019	0.0000	0.0000	0.0000	0.0000
Toluene	0.018	0.0005	0.0000	0.0011	0.0006

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**6.59**	**7.17**	**3.01**	**14.00**	**6.03**	**9.16**	**4.5**	**4.24**	**4.5**	**3.2**
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
MTBE	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Benzene	ND(0.7)	ND(0.7)	ND(0.7)	ND(5.0)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(1.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**5.7**	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethane	**9.9**	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	**4.0**	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
MTBE	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Benzene	ND(0.7)	ND(0.7)	ND(0.7)	ND(5.0)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(1.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-7I	MW-7I	MW-7I	MW-7I
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**1930.0**	**2090.0**	**998.0**	**5500.0**	**328.0**	**259.0**	**96.8**	**238**	**182**	**180**
Chloroethane	**473.0**	**717.0**	**199.0**	**2200.0**	**117.0**	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
1,1 - Dichloroethene	**56.20**	**47.60**	ND(40.0)	**150.00**	ND(20.0)	**22.40**	ND(20.0)	**35.8**	**39.5**	**37.3**
1,1 - Dichloroethane	**2210.0**	**2320.0**	**1220.0**	**6100.0**	**607.0**	**668.0**	**348**	**856**	**684**	**662**
1,2 - Dichloroethane	ND(50.0)	**49.1**	ND(40.0)	**13.0**	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
Tetrachloroethene	ND(2.0)	ND(20.0)	ND(40.0)	**2.2**	ND(40.0)	ND(40.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
1,1,1 - Trichloroethane	**559.0**	**302.0**	**73.5**	**140.0**	**56.5**	**325.0**	**236**	**454**	**528**	**555**
Trichloroethene	ND(50.0)	ND(20.0)	ND(40.0)	**12.00**	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
MTBE	ND(50.0)	ND(20.0)	ND(40.0)	ND(5.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
Benzene	ND(17.5)	ND(70.0)	ND(14.0)	**8.2**	ND(7.0)	ND(7.0)	ND(20.0)	ND(20.0)	ND(3.50)	ND(5.0)
Ethylbenzene	ND(50.0)	ND(20.0)	ND(40.0)	**4.8**	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
Toluene	ND(50.0)	**42.1**	ND(40.0)	**93.0**	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	**10.6**	**11.6**
Methylene Chloride	ND(125.0)	ND(50.0)	ND(100.0)	**24.0**	ND(50.0)	ND(50.0)	ND(20.0)	ND(20.0)	ND(25.0)	ND(25.0)
Chloroform	ND(50.0)	ND(20.0)	ND(40.0)	**0.98**	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	ND(10.0)
trans 1,2-Dichloroethene	ND(50.0)	**47.7**	ND(40.0)	**13.0**	ND(20.0)	ND(20.0)	ND(20.0)	ND(20.0)	ND(10.0)	11

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**264.0**	**97.0**	**273.0**	**34.0**	**306.0**	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
Chloroethane	**80.7**	**41.9**	**30.6**	**25.0**	**85.6**	**46.7**	ND(10.0)	ND(10.0)	**19.9**	ND(5.0)
1,1 - Dichloroethene	**13.7**	ND(5.0)	**6.2**	**4.3**	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
1,1 - Dichloroethane	**396.0**	**222.0**	**393.0**	**140.0**	**507.0**	**353.0**	**86.6**	**229**	**129**	**238**
1,2 - Dichloroethane	ND(4.0)	ND(5.0)	**6.8**	**1.9**	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	ND(4.0)	ND(4.0)	ND(5.0)	**0.5**	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
1,1,1 - Trichloroethane	**416.0**	**124.0**	**98.8**	**39.0**	**106.0**	**106.0**	**170**	**146**	**139**	**161**
Trichloroethene	ND(4.0)	ND(5.0)	ND(5.0)	**7.80**	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
MTBE	ND(4.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.40)	ND(1.75)	ND(1.75)	ND(5.0)	ND(7.0)	ND(3.5)	ND(3.5)	ND(3.5)	ND(1.75)	ND(2.50)
Ethylbenzene	**115.0**	**44.1**	**42.1**	**0.5**	**42.8**	**10.6**	ND(10.0)	4.73	ND(5.0)	ND(5.0)
Toluene	**8.58**	ND(5.0)	ND(5.0)	ND(5.0)	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
Methylene Chloride	ND(10.0)	ND(12.5)	ND(12.5)	ND(5.0)	ND(50.0)	ND(25.0)	ND(25.0)	ND(25.0)	ND(12.5)	ND(12.5)
Chloroform	ND(4.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)
trans 1,2-Dichloroethene	ND(4.0)	ND(5.0)	ND(5.0)	**0.96**	ND(20.0)	ND(10.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**182.0**	**423.0**	**211.0**	**320.0**	**220.0**	**206.0**	**180**	**234**	**165**	**228**
Chloroethane	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
1,1 - Dichloroethene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
1,1 - Dichloroethane	ND(5.0)	**6.6**	ND(5.0)	**1.5**	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
1,2 - Dichloroethane	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
Tetrachloroethene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
1,1,1 - Trichloroethane	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
Trichloroethene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
MTBE	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
Benzene	ND(01.75)	**1.8**	ND(01.75)	**0.8**	ND(1.4)	ND(1.4)	ND(1.75)	ND(1.4)	ND(1.75)	ND(2.50)
Ethylbenzene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
Toluene	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
Methylene Chloride	ND(12.5)	ND(12.5)	ND(12.5)	ND(5.0)	ND(10.0)	ND(10.0)	ND(12.5)	ND(10.0)	ND(12.5)	ND(12.5)
Chloroform	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)
trans 1,2-Dichloroethene	ND(5.0)	ND(5.0)	ND(5.0)	**1.0**	ND(4.0)	ND(4.0)	ND(5.0)	ND(4.0)	ND(5.0)	ND(5.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**54.2**	**27.8**	**14.9**	**120.0**	**35.5**	**73.8**	**38**	**21.7**	ND(2.0)	**15.1**
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	**27.0**	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethane	**36.9**	ND(2.0)	**7.2**	ND(5.0)	**6.4**	**17.4**	ND(2.0)	**6.98**	ND(2.0)	**5.4**
1,2 - Dichloroethane	ND(2.0)	**8.1**	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	**7.7**	ND(2.0)	ND(2.0)	**3.8**	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
MTBE	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Benzene	ND(0.7)	ND(0.7)	ND(0.7)	ND(5.0)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(1.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-101	MW-101	MW-101	MW-101
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
MTBE	**3.50**	**4.00**	**6.09**	**4.10**	**4.72**	**3.85**	**3.36**	**3.54**	**4.04**	**3.38**
Benzene	ND(0.7)	ND(0.7)	ND(0.7)	ND(5.0)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(1.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
MTBE	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Benzene	ND(0.7)	ND(0.7)	ND(0.7)	ND(5.0)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(1.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)

Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**137.0**	**110.0**	**132.0**	**170.0**	**245.0**	**269.0**	ND(2.0)	**346**	**476**	**435**
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	**1.9**	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
1,1 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
1,2 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
1,1,1 - Trichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
MTBE	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
Benzene	ND(0.7)	ND(0.7)	ND(0.7)	ND(5.0)	ND(1.4)	ND(1.4)	ND(0.7)	ND(1.75)	ND(3.50)	ND(5.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(10.0)	ND(10.0)	ND(5.0)	ND(5.0)	ND(25.0)	ND(25.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(4.0)	ND(4.0)	ND(2.0)	ND(5.0)	ND(10.0)	ND(10.0)

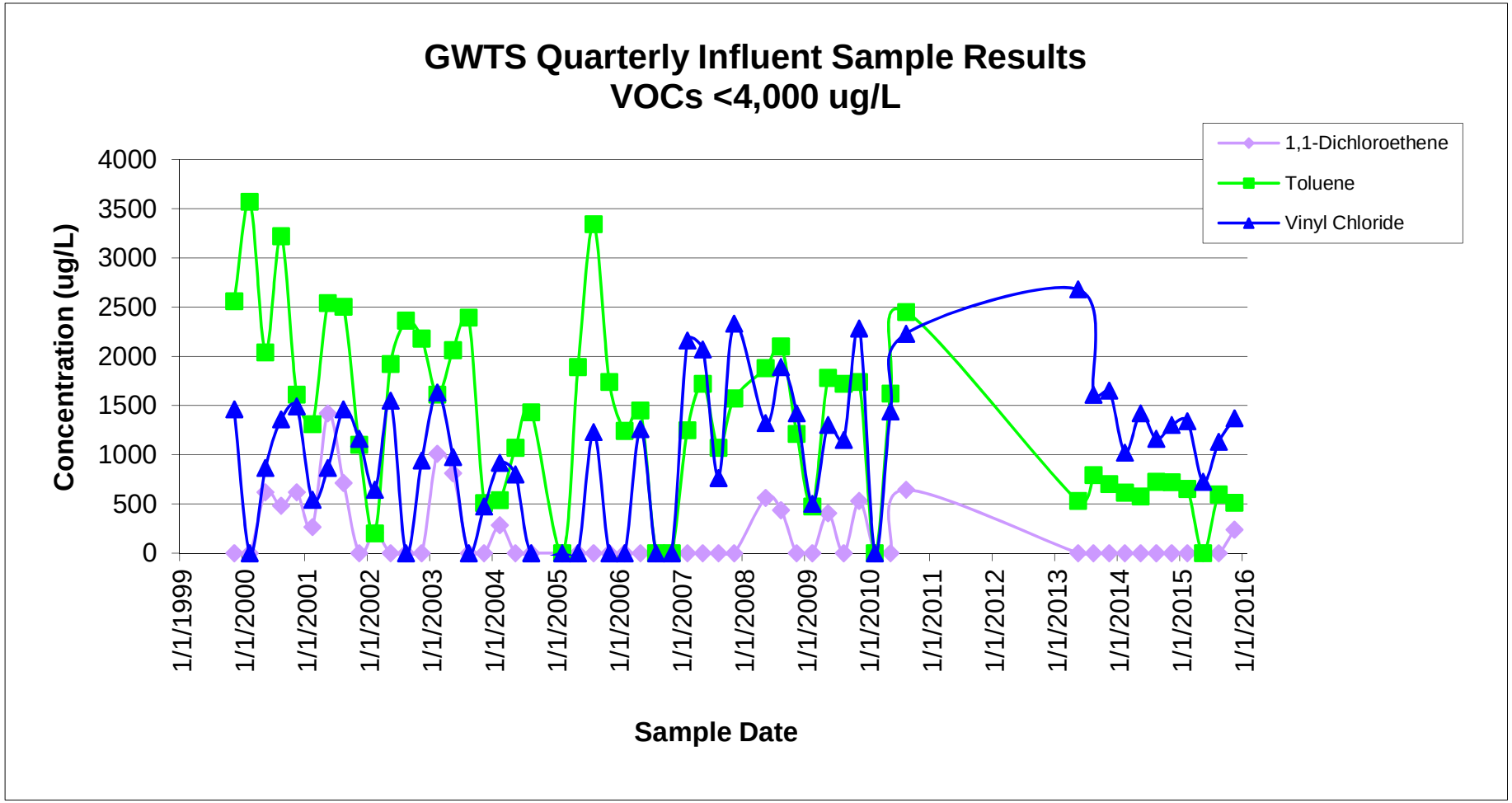
Rochester Fire Academy
Groundwater Monitoring Well Results (20011 - 2015)

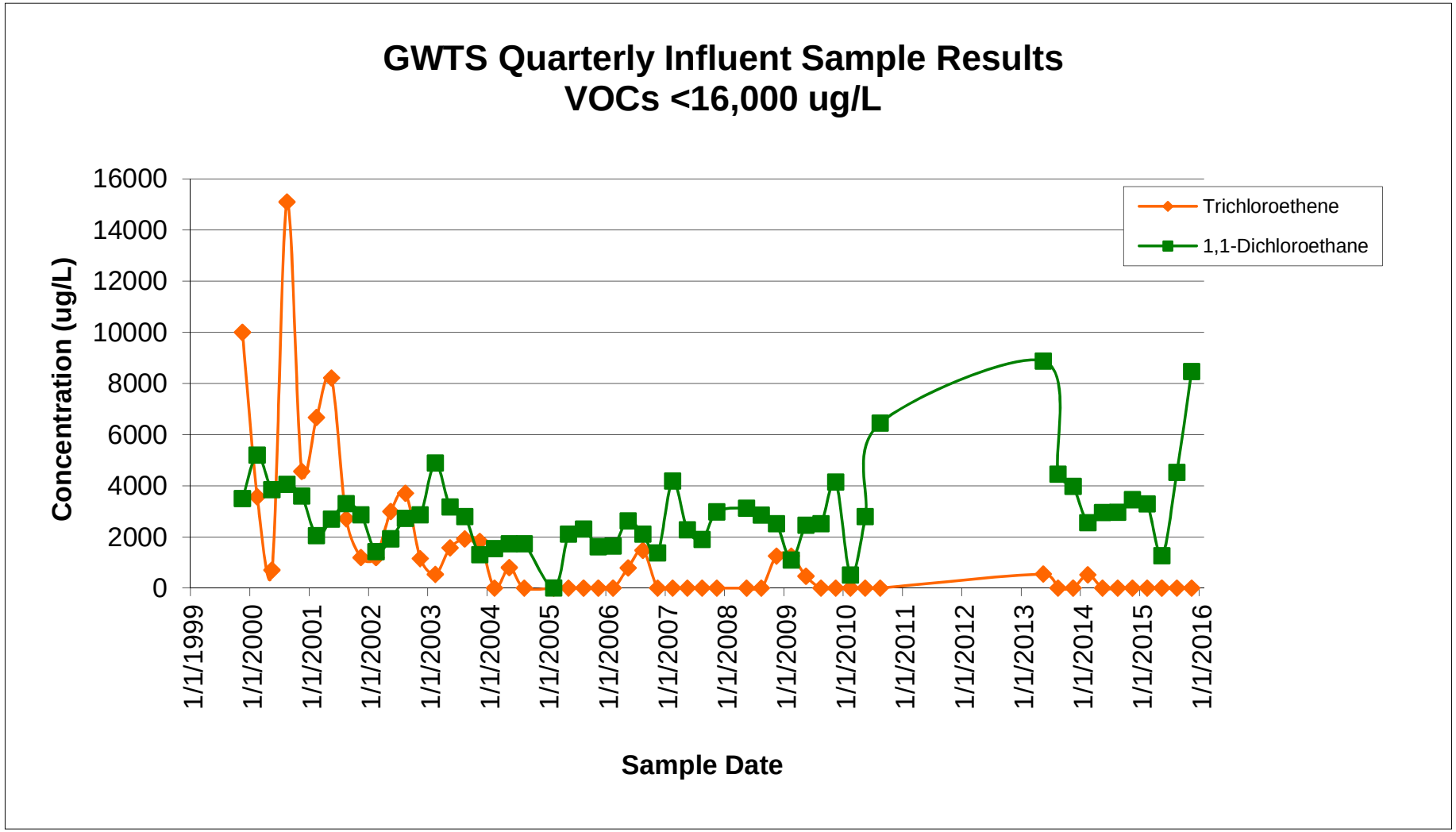
	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Chloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,2 - Dichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Tetrachloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
1,1,1 - Trichloroethane	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Trichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
MTBE	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Benzene	**1.23**	ND(0.7)	ND(0.7)	ND(5.0)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(0.7)	ND(1.0)
Ethylbenzene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Toluene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Methylene Chloride	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Chloroform	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
trans 1,2-Dichloroethene	ND(2.0)	ND(2.0)	ND(2.0)	ND(5.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)

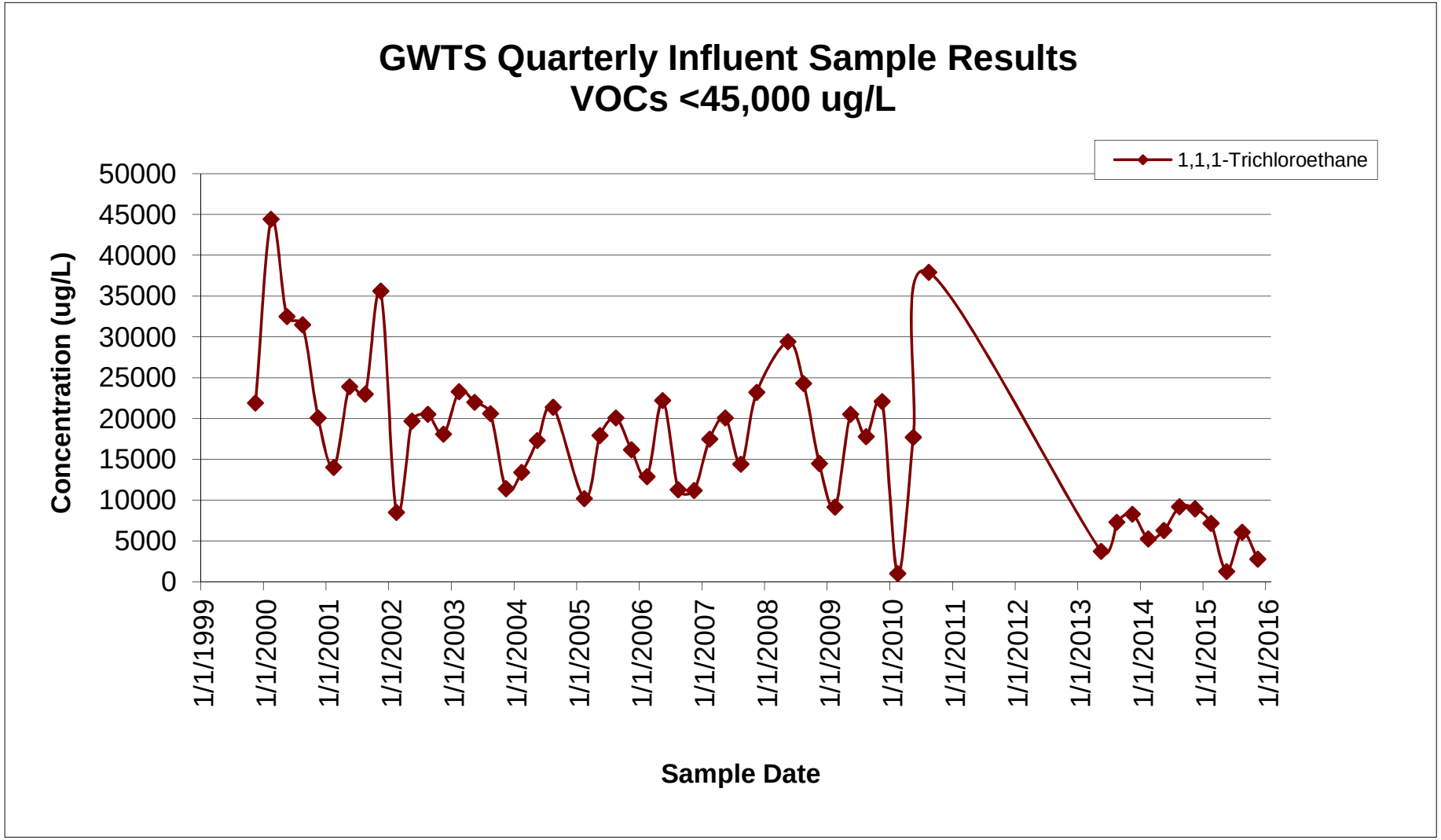
APPENDIX B

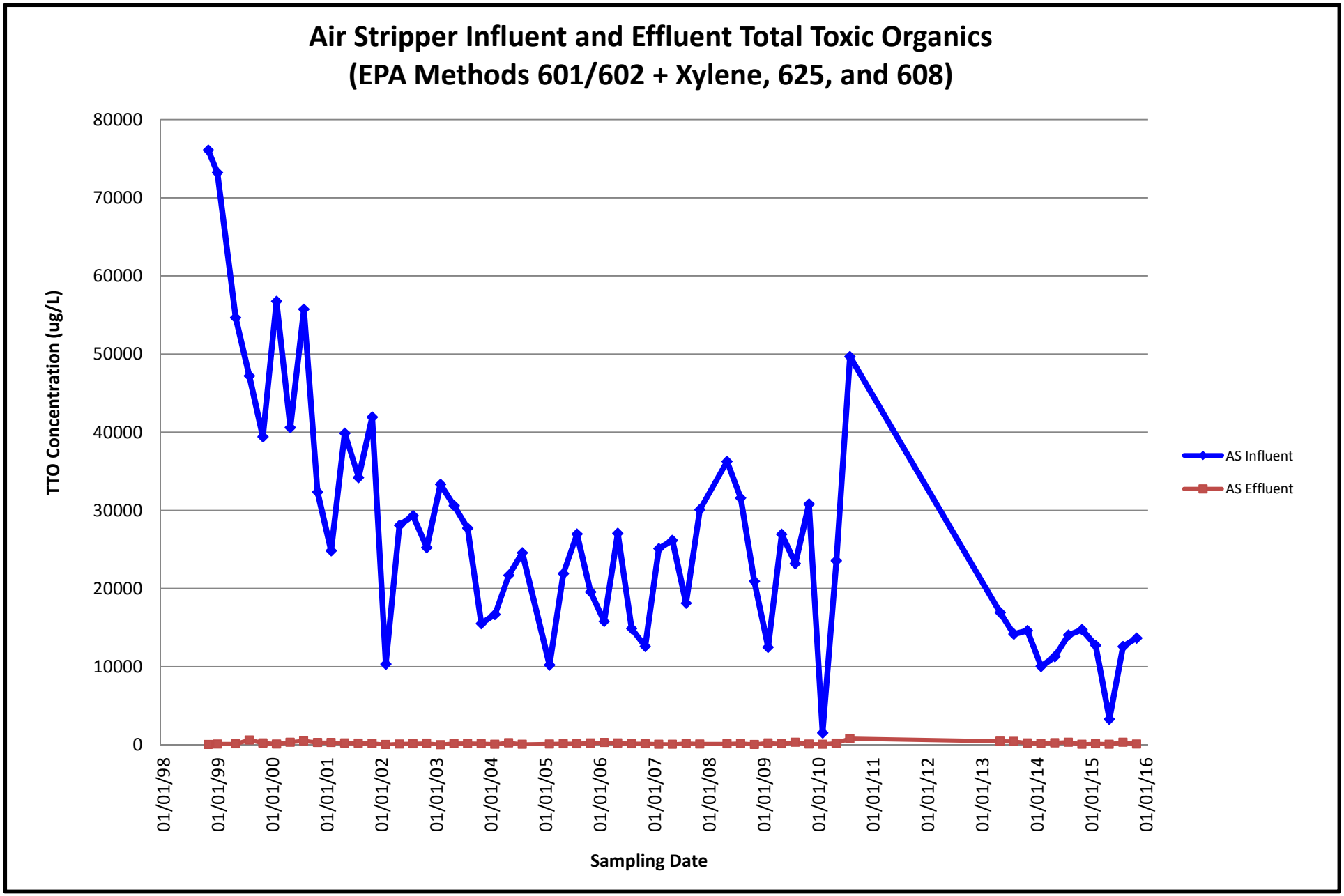
ANALYTICAL DATA
CHARTS AND GRAPHS

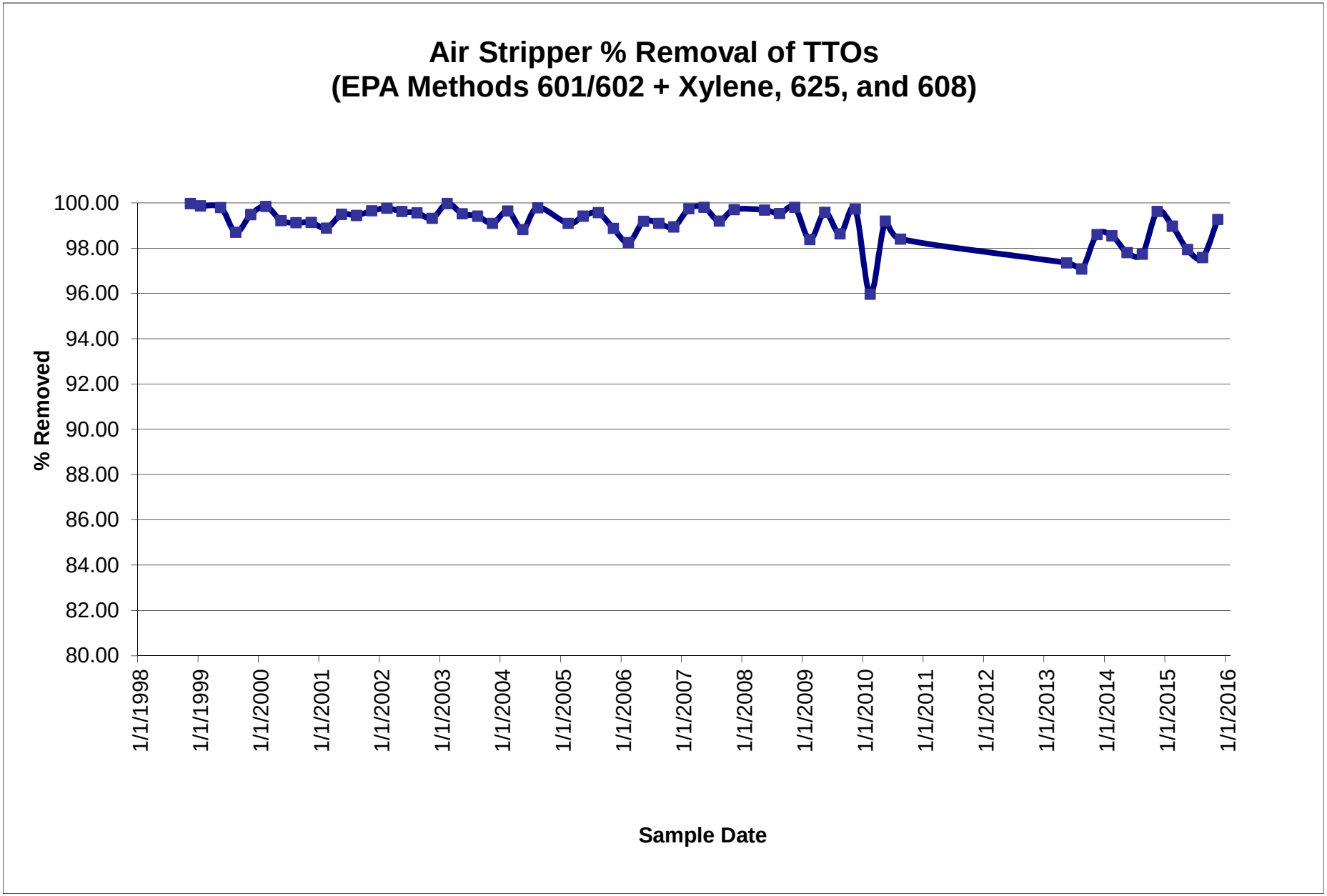
(Parameters of Interest,
1998 through 2015)

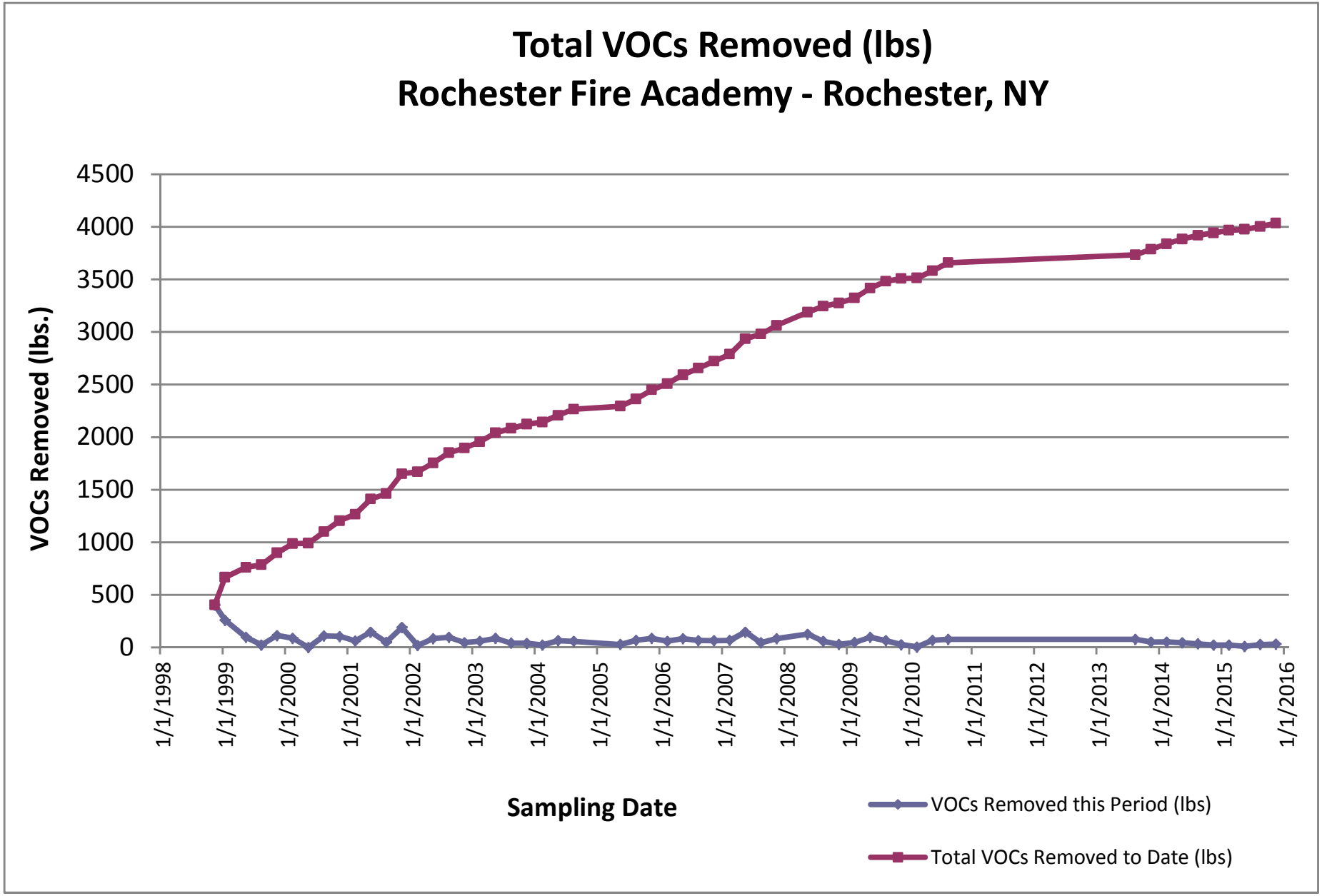

GWTS Quarterly Influent Sample Results
VOCs <4,000 ug/L
Concentration (ug/L)
4000
3500
3000
2500
2000
1500
1000
500
0
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
Sample Date
1,1-Dichloroethene
Toluene
Vinyl Chloride

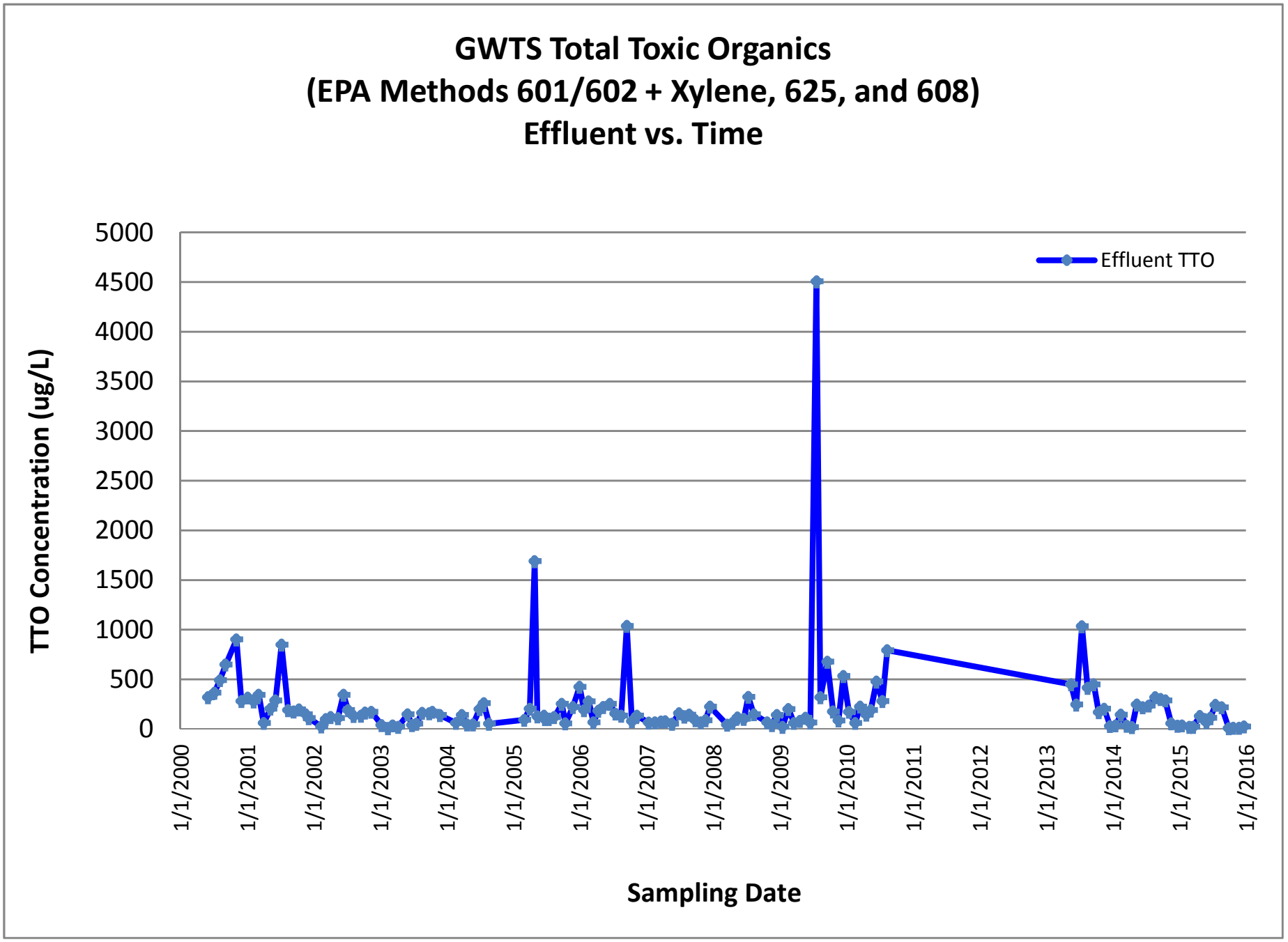

GWTS Quarterly Influent Sample Results
VOCs <16,000 ug/L
Concentration (ug/L)
16000
14000
12000
10000
8000
6000
4000
2000
0
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
Sample Date
Trichloroethene
1,1-Dichloroethane

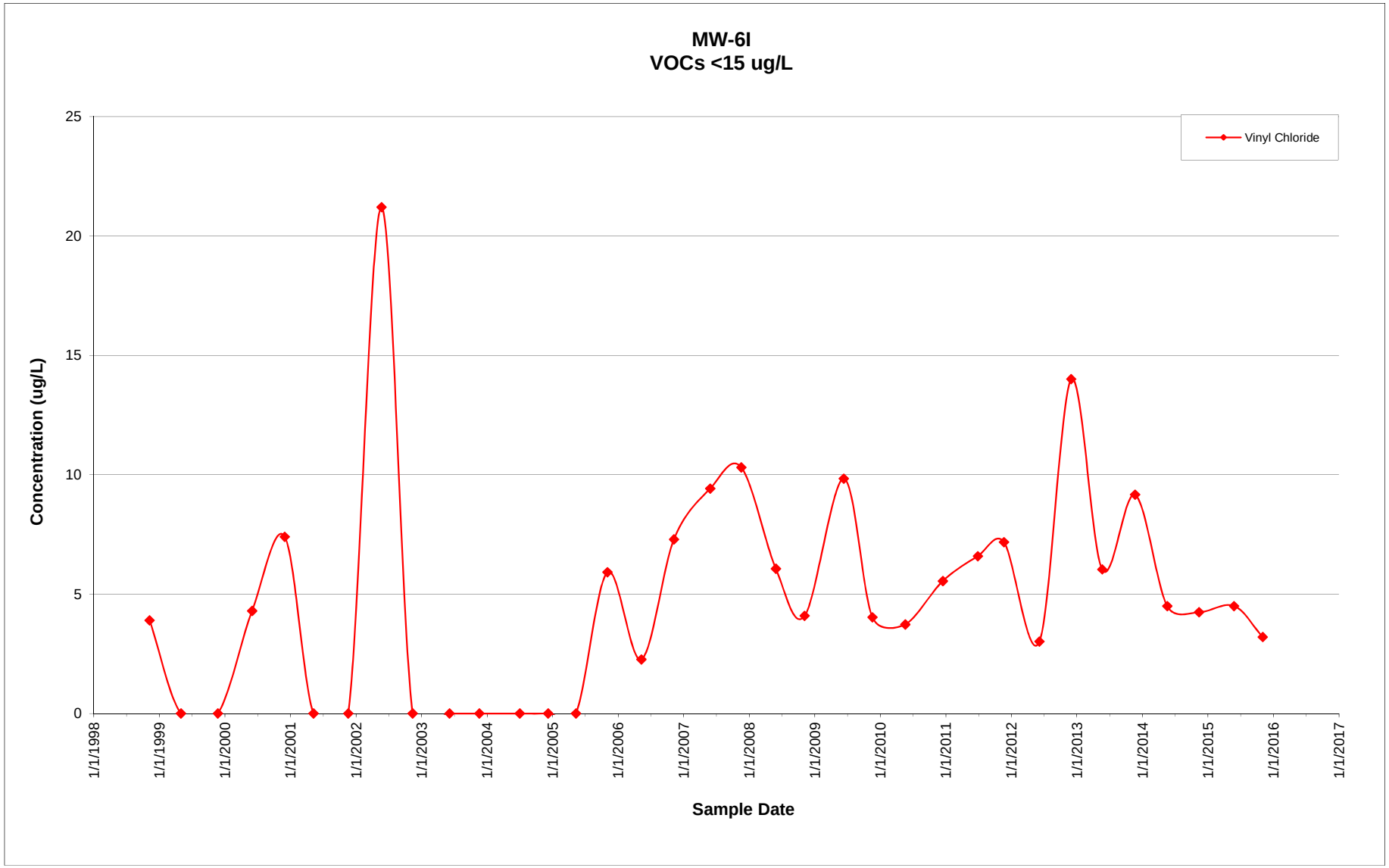

GWTS Quarterly Influent Sample Results
VOCs <45,000 ug/L
1,1,1-Trichloroethane
Concentration (ug/L)
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
Sample Date


Air Stripper Influent and Effluent Total Toxic Organics
(EPA Methods 601/602 + Xylene, 625, and 608)
TTO Concentration (ug/L)
80000
70000
60000
50000
40000
30000
20000
10000
0
01/01/98
01/01/99
01/01/00
01/01/01
01/01/02
01/01/03
01/01/04
01/01/05
01/01/06
01/01/07
01/01/08
01/01/09
01/01/10
01/01/11
01/01/12
01/01/13
01/01/14
01/01/15
01/01/16
Sampling Date
AS Influent
AS Effluent


Air Stripper % Removal of TTOs
(EPA Methods 601/602 + Xylene, 625, and 608)
% Removed
100.00
98.00
96.00
94.00
92.00
90.00
88.00
86.00
84.00
82.00
80.00
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
Sample Date


Total VOCs Removed (lbs)
Rochester Fire Academy - Rochester, NY
VOCs Removed (lbs.)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
Sampling Date
VOCs Removed this Period (lbs)
Total VOCs Removed to Date (lbs)

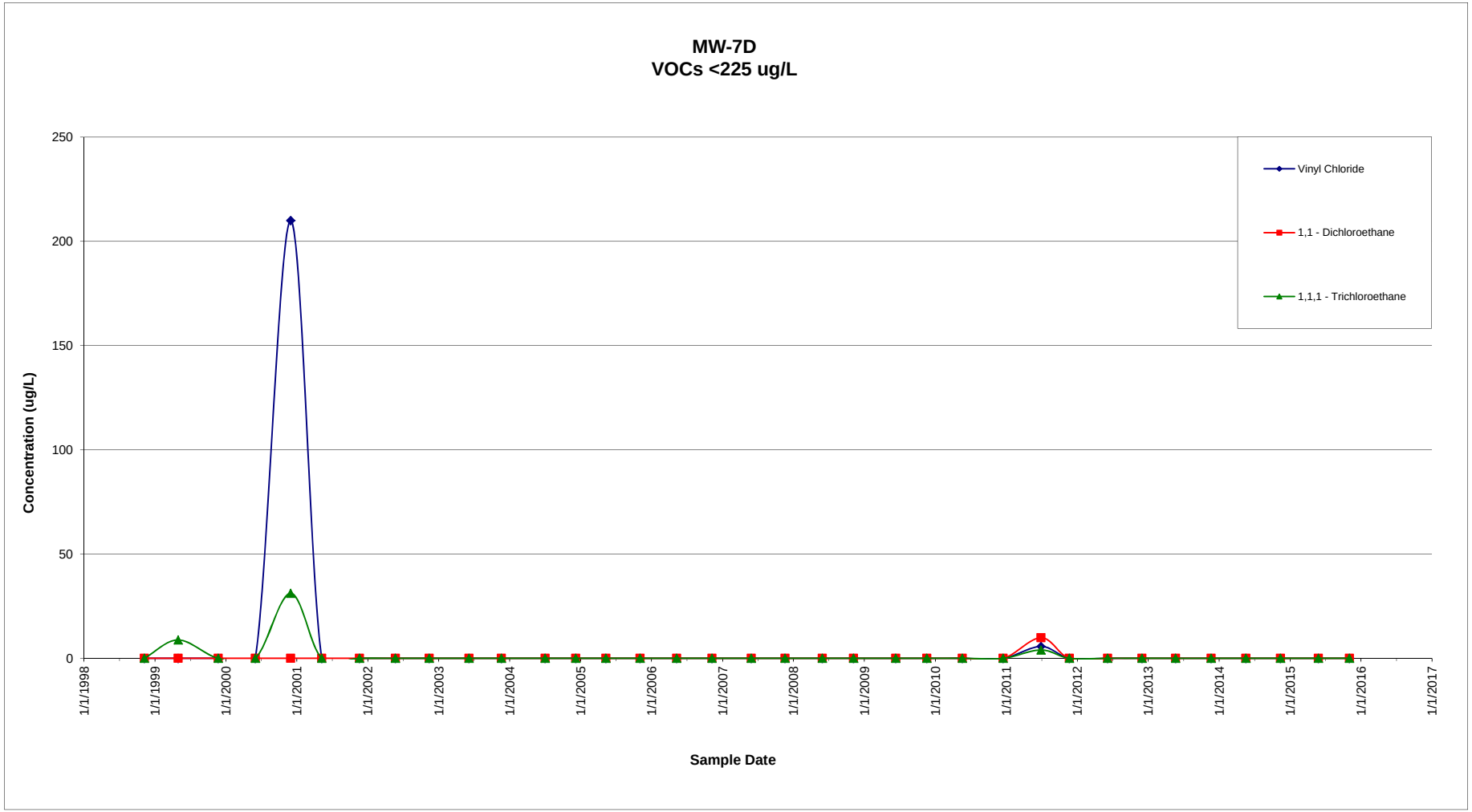

GWTS Total Toxic Organics
(EPA Methods 601/602 + Xylene, 625, and 608)
Effluent vs. Time
TTO Concentration (ug/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Effluent TTO
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
Sampling Date


MW-6I
VOCs <15 ug/L
Vinyl Chloride
Concentration (ug/L)
25
20
15
10
5
0
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date

	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I
Total VOC's (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Vinyl Chloride	**3.90**	0.00	0.00	**4.30**	**7.40**	0.00	0.00	**21.20**	0.00	0.00	0.00

	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I
Total VOC's (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Vinyl Chloride	0.00	0.00	0.00	**5.92**	**2.26**	**7.29**	**9.42**	**10.30**	**6.06**	**4.09**	**9.83**	**4.03**

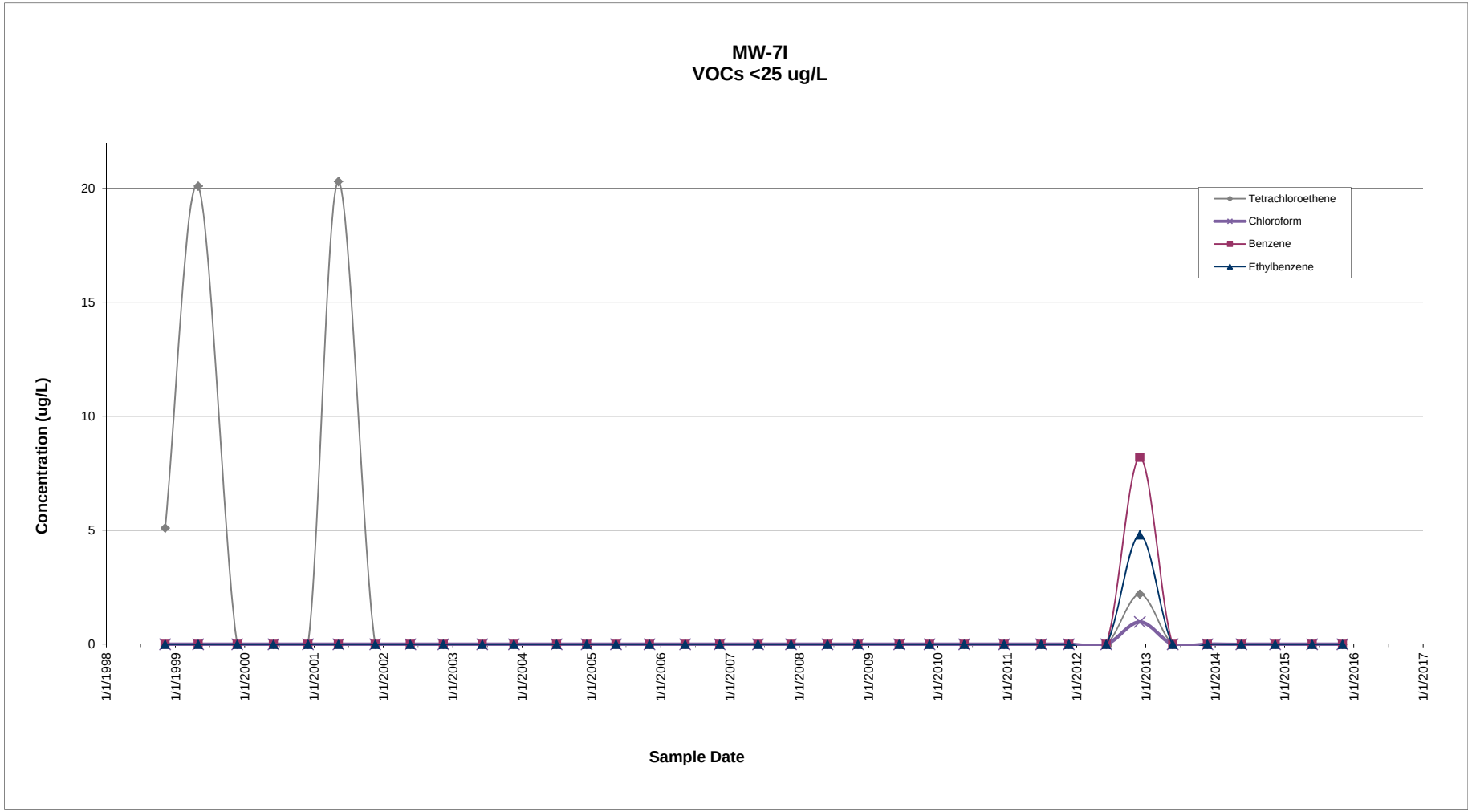
	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I
Total VOC's (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**3.73**	**5.55**	**6.59**	**7.17**	**3.01**	**14.00**	**6.03**	**9.16**	**4.5**	**4.24**	**4.5**	**3.2**

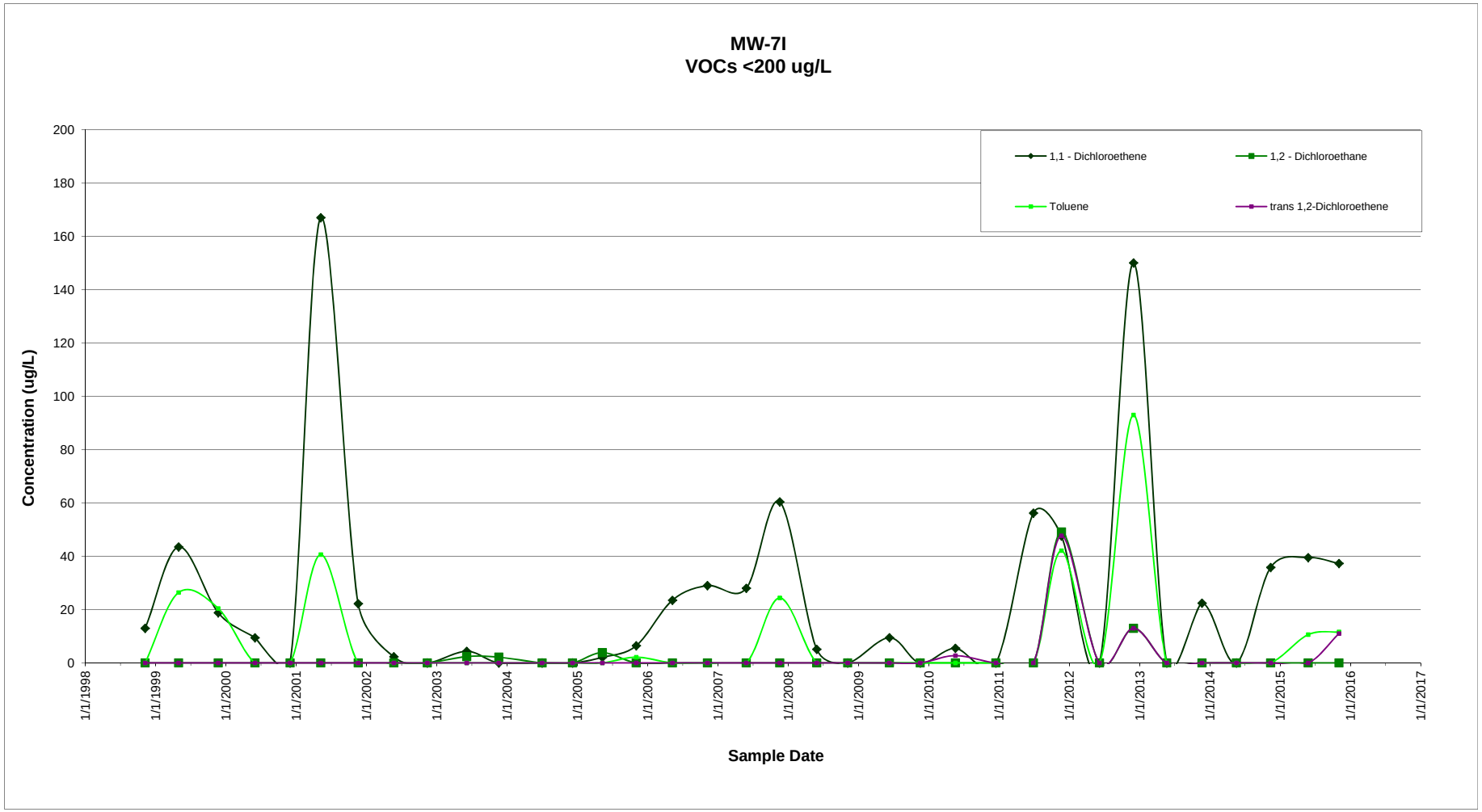

MW-7D
VOCs <225 ug/L
250
200
150
100
50
0
Concentration (ug/L)
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
Vinyl Chloride
1,1 - Dichloroethane
1,1,1 - Trichloroethane

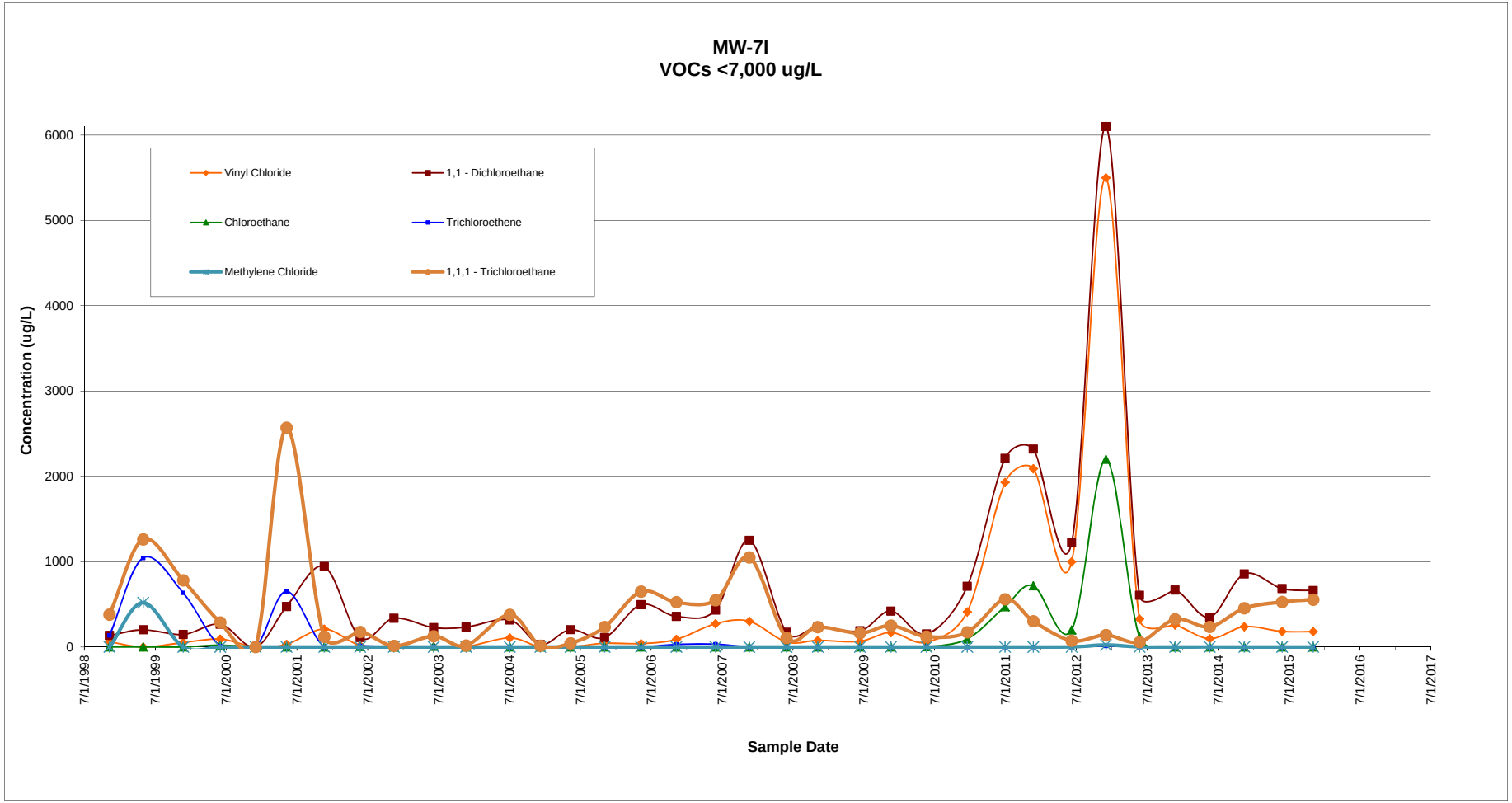
	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Vinyl Chloride	0.00	0.00	0.00	0.00	**210.00**	0.00	0.00	0.00	0.00	0.00	0.00
1,1 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	0.00	**8.80**	0.00	0.00	**31.20**	0.00	0.00	0.00	0.00	0.00	0.00

	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Vinyl Chloride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	0.00	0.00	**5.7**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1 - Dichloroethane	0.00	0.00	**9.9**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	0.00	0.00	**4.0**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00


MW-7I
VOCs <25 ug/L
Concentration (ug/L)
0
5
10
15
20
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
Tetrachloroethene
Chloroform
Benzene
Ethylbenzene


MW-7I
VOCs <200 ug/L
Concentration (ug/L)
200
180
160
140
120
100
80
60
40
20
0
1,1 - Dichloroethene
1,2 - Dichloroethane
Toluene
trans 1,2-Dichloroethene
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date


MW-7I
VOCs <7,000 ug/L
Vinyl Chloride
1,1 - Dichloroethane
Chloroethane
Trichloroethene
Methylene Chloride
1,1,1 - Trichloroethane
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
7/1/1998
7/1/1999
7/1/2000
7/1/2001
7/1/2002
7/1/2003
7/1/2004
7/1/2005
7/1/2006
7/1/2007
7/1/2008
7/1/2009
7/1/2010
7/1/2011
7/1/2012
7/1/2013
7/1/2014
7/1/2015
7/1/2016
7/1/2017
Sample Date

	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-71	MW-71	MW-71
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Tetrachloroethene	**5.10**	**20.10**	0.00	0.00	0.00	**20.30**	0.00	0.00	0.00	0.00	0.00
Chloroform	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-71	MW-71	MW-71
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Vinyl Chloride	**60.50**	**0.00**	**51.50**	**92.40**	0.00	**31.70**	**210.00**	**16.70**	**4.10**	**0.00**	**2.67**
1,1 - Dichloroethane	**135.00**	**201.30**	**146.00**	**266.00**	0.00	**475.00**	**943.00**	**110.00**	**337.00**	**227.00**	**233.00**
Chloroethane	0.00	0.00	0.00	**21.50**	0.00	0.00	0.00	**5.14**	0.00	**7.81**	0.00
Trichloroethene	**136.00**	**1044.50**	**635.00**	**9.39**	0.00	**652.00**	0.00	**13.00**	0.00	**3.84**	0.00
Methylene Chloride	0.00	**520.20**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	**380.00**	**1260.50**	**781.00**	**288.00**	0.00	**2570.00**	**121.00**	**176.00**	**13.10**	**126.00**	**17.00**

	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I	MW-71	MW-71	MW-71
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
1,1 - Dichloroethene	**13.00**	**43.50**	**18.80**	9.41	0.00	**167.00**	**22.20**	**2.33**	0.00	**4.34**	**0.00**
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.37**	**2.15**
Toluene	0.00	**26.40**	**20.40**	0.00	0.00	**40.60**	0.00	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Tetrachloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloroform	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

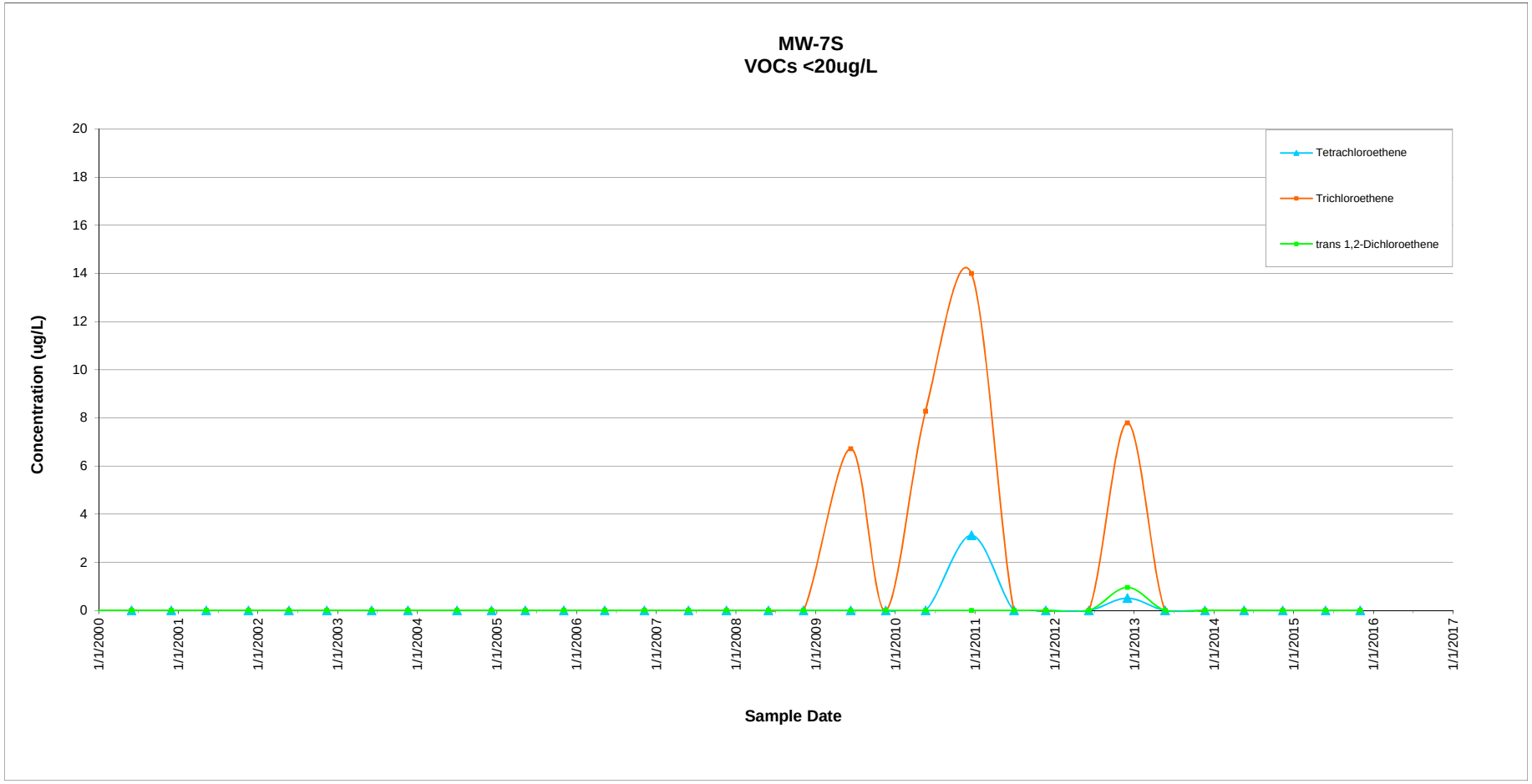
	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Vinyl Chloride	**106.00**	**0.00**	**0.00**	**43.50**	**39.50**	**89.20**	**273.00**	**301.00**	**58.6**	**76.90**	**66.2**	**170.00**
1,1 - Dichloroethane	**317.00**	**28.00**	**203.00**	**111.00**	**496.00**	**359.00**	**433.00**	**1250.00**	**172**	**239.00**	**189.0**	**421.00**
Chloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloroethene	0.00	0.00	0.00	0.00	0.00	**29.80**	**32.70**	0.00	**2.25**	0.00	**2.70**	0.00
Methylene Chloride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	**378.00**	**14.60**	**42.80**	**234.00**	**650.00**	**525.00**	**548.00**	**1050.00**	**108**	**233.00**	**162.0**	**251.00**

	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
1,1 - Dichloroethene	**0.00**	**0.00**	**2.09**	**6.45**	**23.50**	**29.00**	**28.00**	**60.40**	**5.12**	0.00	**9.46**	0.00
1,2 - Dichloroethane	0.00	0.00	**3.86**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00
Toluene	0.00	0.00	0.00	**2.15**	0.00	0.00	0.00	**24.40**	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Tetrachloroethene	0.00	0.00	0.00	0.00	0.00	**2.2**	0.00	0.00	0.00	0.00	0.00	0.00
Chloroform	0.00	0.00	0.00	0.00	0.00	**0.98**	0.00	0	0	0.00	0.00	0.00
Benzene	0.00	0.00	0.00	0.00	0.00	**8.2**	0.00	0.00	0.00	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	**4.8**	0.00	0.00	0.00	0.00	0.00	0.00

	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-7I	MW-7I	MW-7I	MW-7I	MW-7I
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**56.7**	**412.00**	**1930.0**	**2090.0**	**998.0**	**5500.0**	**328.0**	**259**	**96.8**	**238**	**182**	**180**
1,1 - Dichloroethane	**153.0**	**712.00**	**2210.0**	**2320.0**	**1220.0**	**6100.0**	**607.0**	**668**	**348**	**856**	**684**	**662**
Chloroethane	**3.23**	**93.50**	**473.0**	**717.0**	**199.0**	**2200.0**	**117.0**	0	0	0	0	0
Trichloroethene	**3.51**	0.00	0.00	0.00	0.00	**12.00**	0.00	0	0	0	0	0
Methylene Chloride	0.00	0.00	0.00	0.00	0.00	**24.0**	0.00	0	0	0	0	0
1,1,1 - Trichloroethane	**122.0**	**173.00**	**559.0**	**302.0**	**73.5**	**140.0**	**56.5**	**325**	**236**	**454**	**528**	**555**

	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-71	MW-7I	MW-7I	MW-7I	MW-7I
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
1,1 - Dichloroethene	**5.50**	0.00	**56.20**	**47.60**	0.00	**150.00**	0.00	22.4	0	**35.80**	**39.50**	**37.30**
1,2 - Dichloroethane	0.00	0.00	0.00	**49.1**	0.00	**13.0**	0.00	0	0	0.00	0.00	0.00
Toluene	0.00	0.00	0.00	**42.1**	0.00	**93.0**	0.00	0	0	0.00	**10.60**	**11.60**
trans 1,2-Dichloroethene	**2.73**	0.00	0.00	**47.7**	0.00	**13.0**	0.00	0	0	0.00	0.00	**11.00**


MW-7S
VOCs <20ug/L
Concentration (ug/L)
20
18
16
14
12
10
8
6
4
2
0
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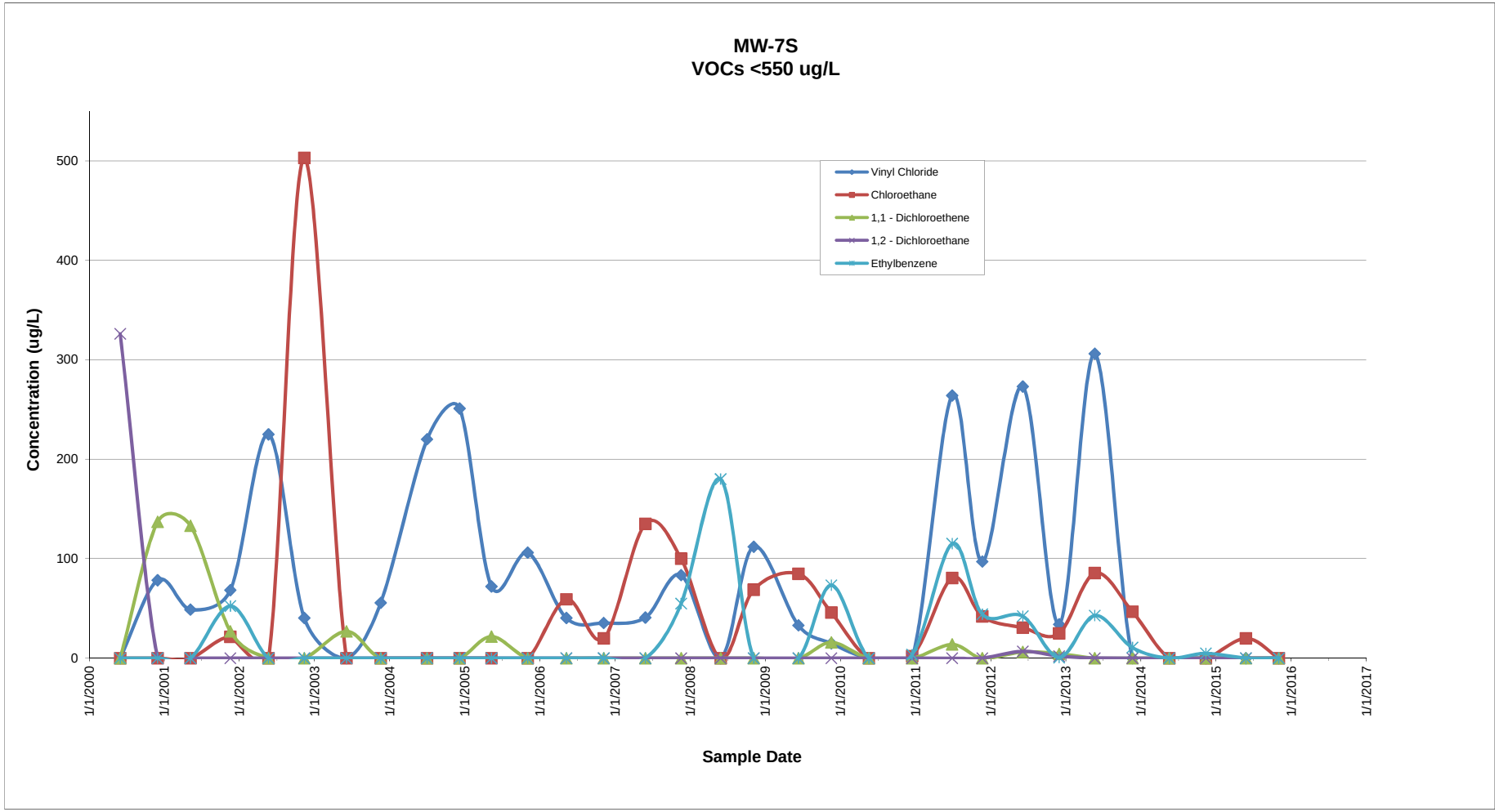
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
Tetrachloroethene
Trichloroethene
trans 1,2-Dichloroethene


MW-7S
VOCs <550 ug/L
Concentration (ug/L)
500
400
300
200
100
0
1/1/2000
1/1/2001
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1/1/2003
1/1/2004
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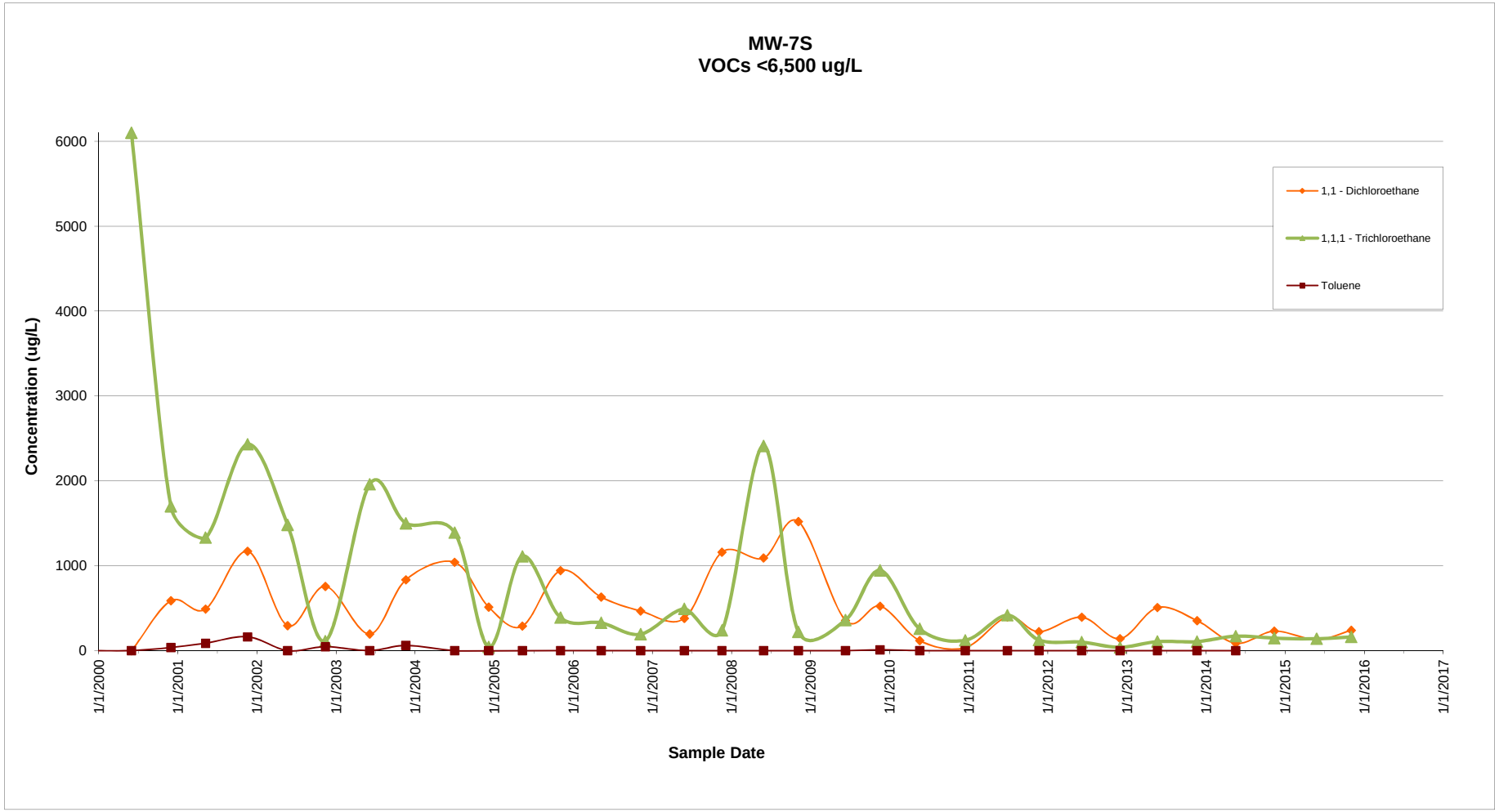
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
Vinyl Chloride
Chloroethane
1,1 - Dichloroethene
1,2 - Dichloroethane
Ethylbenzene


MW-7S
VOCs <6,500 ug/L
Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
1/1/2000
1/1/2001
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1/1/2004
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1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
1,1 - Dichloroethane
1,1,1 - Trichloroethane
Toluene

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Tetrachloroethene	NS	NS	NS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloroethene	NS	NS	NS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	NS	NS	NS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
1,1 - Dichloroethane	NS	NS	NS	0.00	**587.00**	**489.00**	**1170.00**	**293.00**	**757.00**	**195.00**	**833.00**
Toluene	NS	NS	NS	**1980.00**	0.00	0.00	0.00	**36.30**	**86.60**	**162.00**	0.00
1,1,1 - Trichloroethane	NS	NS	NS	**6100.00**	**1700.00**	**1330.00**	**2430.00**	**1480.00**	**112.00**	**1960.00**	**1500.00**

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Vinyl Chloride	NS	NS	NS	0.00	**78.40**	**48.80**	**68.40**	**225.00**	**40.30**	0.00	**55.70**
Chloroethane	NS	NS	NS	0.00	0.00	0.00	**21.40**	0.00	**503.00**	0.00	0.00
1,1 - Dichloroethene	NS	NS	NS	0.00	**137.00**	**133.00**	**26.80**	0.00	0.00	**26.90**	0.00
1,2 - Dichloroethane	NS	NS	NS	**326.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethylbenzene	NS	NS	NS	0.00	0.00	0.00	**52.40**	0.00	0.00	0.00	0.00

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Tetrachloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**6.72**	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

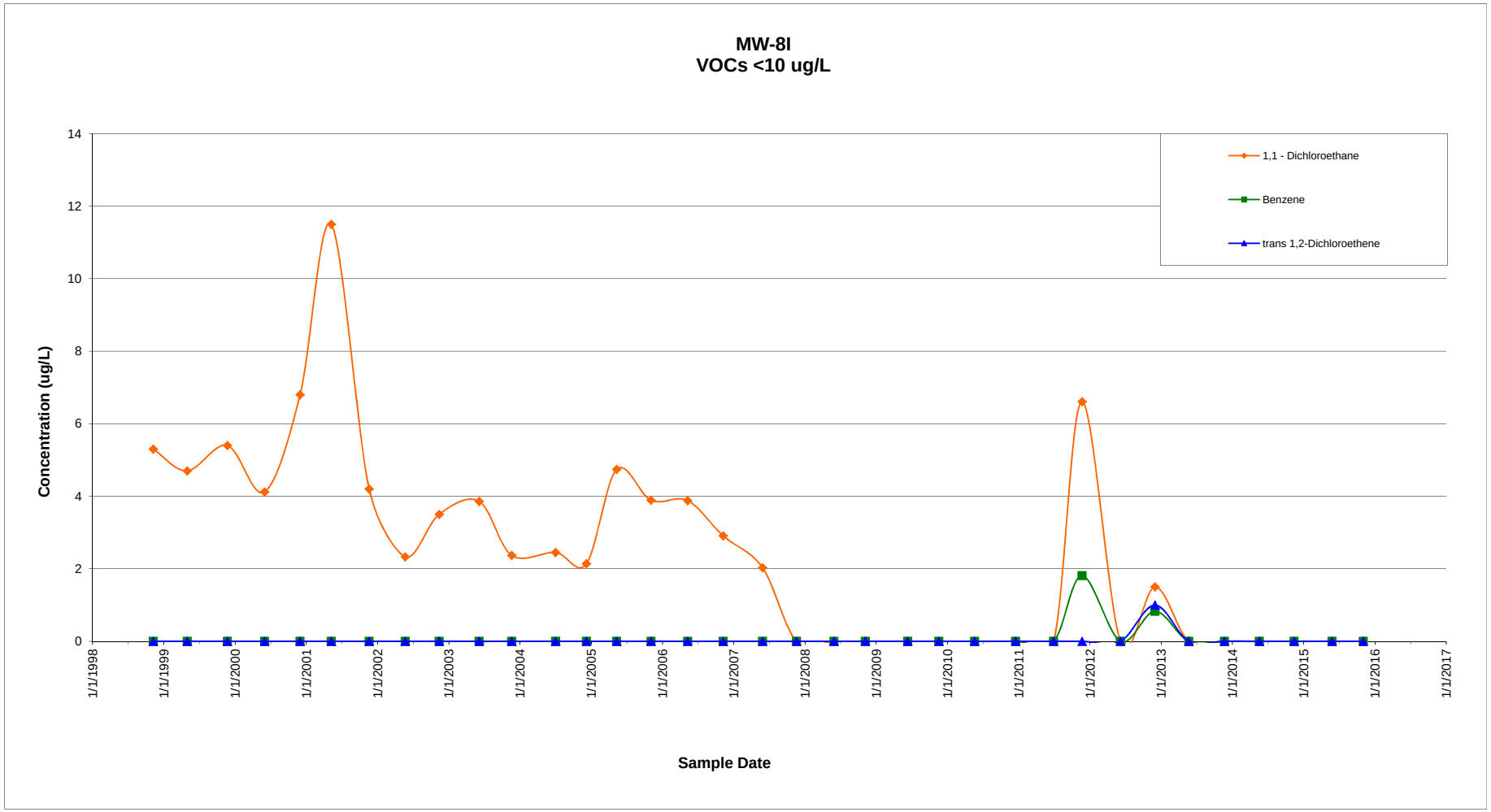
	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
1,1 - Dichloroethane	**1040.00**	**511.00**	**288.00**	**943.00**	**631.00**	**467.00**	**380.00**	**1160.00**	**1090**	**1520.00**	**356.0**	**524.00**
Toluene	**45.70**	0.00	**60.10**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	**1390.00**	**42.90**	**1110.00**	**388.00**	**328.00**	**193.00**	**491.00**	**238.00**	**2410**	**220.00**	**360.0**	**945.00**

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Vinyl Chloride	**220.00**	**251.00**	**72.00**	**106.00**	**40.30**	**35.30**	**40.80**	**83.40**	0.00	**112.00**	**33.0**	**14.80**
Chloroethane	0.00	0.00	0.00	0.00	**59.20**	**19.90**	**135.00**	**100.00**	0.00	**68.80**	**84.8**	**45.80**
1,1 - Dichloroethene	0.00	0.00	**21.70**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**15.80**
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**54.80**	**180**	0.00	0.00	**73.30**

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Tetrachloroethene	0.00	**3.12**	0.00	0.00	0.00	**0.5**	0.00	0.00	0.00	0.00	0.00	0.00
Trichloroethene	**8.28**	**14.00**	0.00	0.00	0.00	**7.80**	0.00	0.00	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	0.00	0.00	**0.96**	0.00	0.00	0.00	0.00	0.00	0.00

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
1,1 - Dichloroethane	**117.0**	**34.80**	**396.0**	**222.0**	**393.0**	**140.0**	**507.0**	**353**	**86.6**	**229**	**129**	**238**
Toluene	0.00	0.00	**8.58**	0.00	0.00	0.00	0.00	0	0	0	0	0
1,1,1 - Trichloroethane	**256.0**	**121.00**	**416.0**	**124.0**	**98.8**	**39.0**	**106.0**	**106**	**170**	**146**	**139**	**161**

	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S	MW-7S
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	0.00	0.00	**264.0**	**97.0**	**273.0**	**34.0**	**306.0**	0	0.00	0.00	0.00	0.00
Chloroethane	0.00	**2.01**	**80.7**	**41.9**	**30.6**	**25.0**	**85.6**	**46.7**	0.00	0.00	19.90	0.00
1,1 - Dichloroethene	0.00	0.00	**13.7**	0.00	**6.2**	**4.3**	0.00	0	0.00	0.00	0.00	0.00
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	**6.8**	**1.9**	0.00	0	0.00	0.00	0.00	0.00
Ethylbenzene	0.00	**3.39**	**115.0**	**44.1**	**42.1**	**0.5**	**42.8**	**10.6**	0.00	4.73	0.00	0.00


MW-8I
VOCs <10 ug/L
Concentration (ug/L)
14
12
10
8
6
4
2
0
1/1/1998
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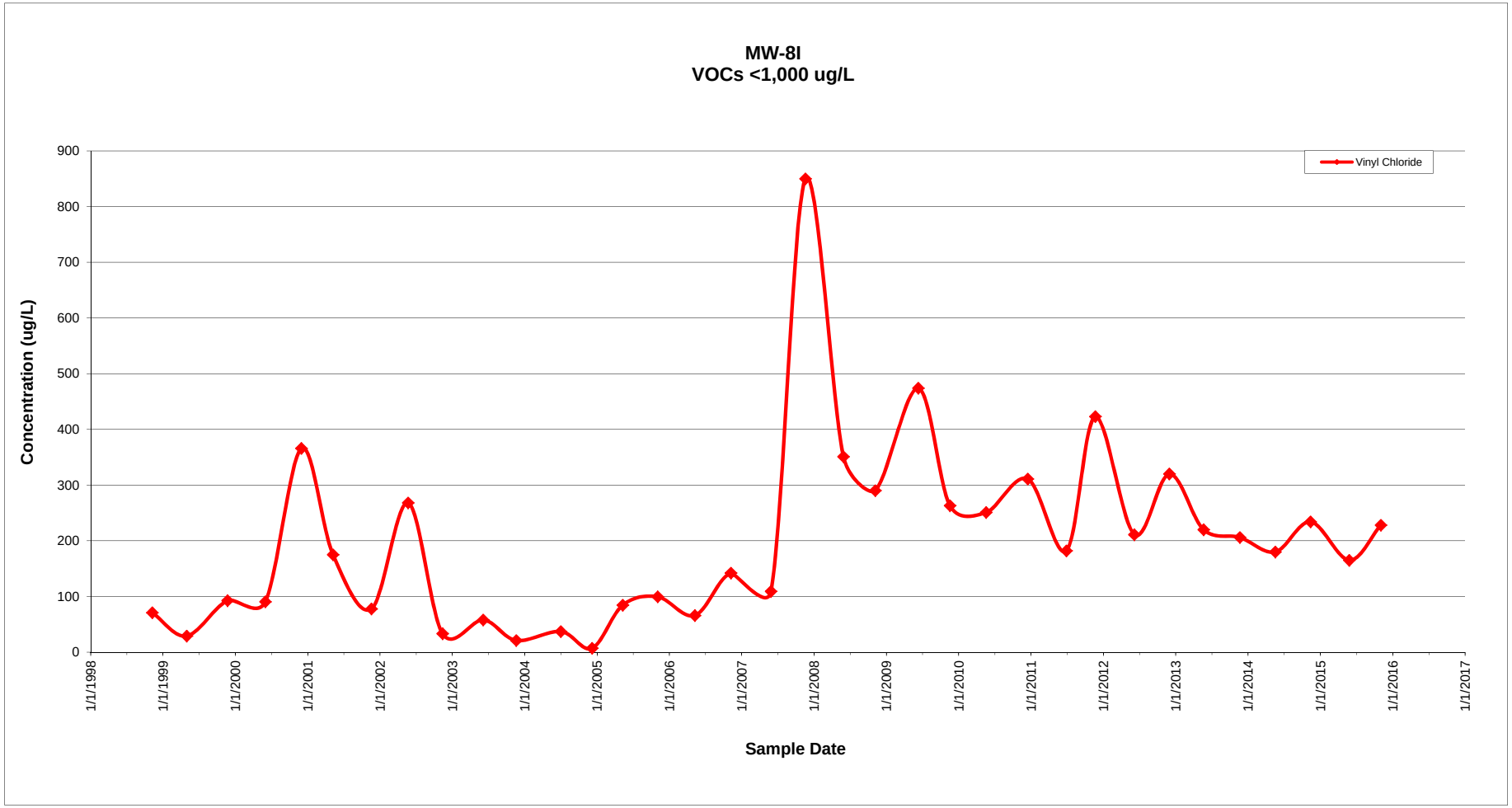
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
1,1 - Dichloroethane
Benzene
trans 1,2-Dichloroethene


MW-8I
VOCs <1,000 ug/L
Vinyl Chloride
Concentration (ug/L)
900
800
700
600
500
400
300
200
100
0
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
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1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date

	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**	**7/2/2004**	**12/7/2004**
1,1 - Dichloroethane	**5.30**	**4.70**	**5.40**	**4.12**	**6.80**	**11.50**	**4.20**	**2.33**	**3.50**	**3.86**	**2.37**	**2.45**	**2.14**
Benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

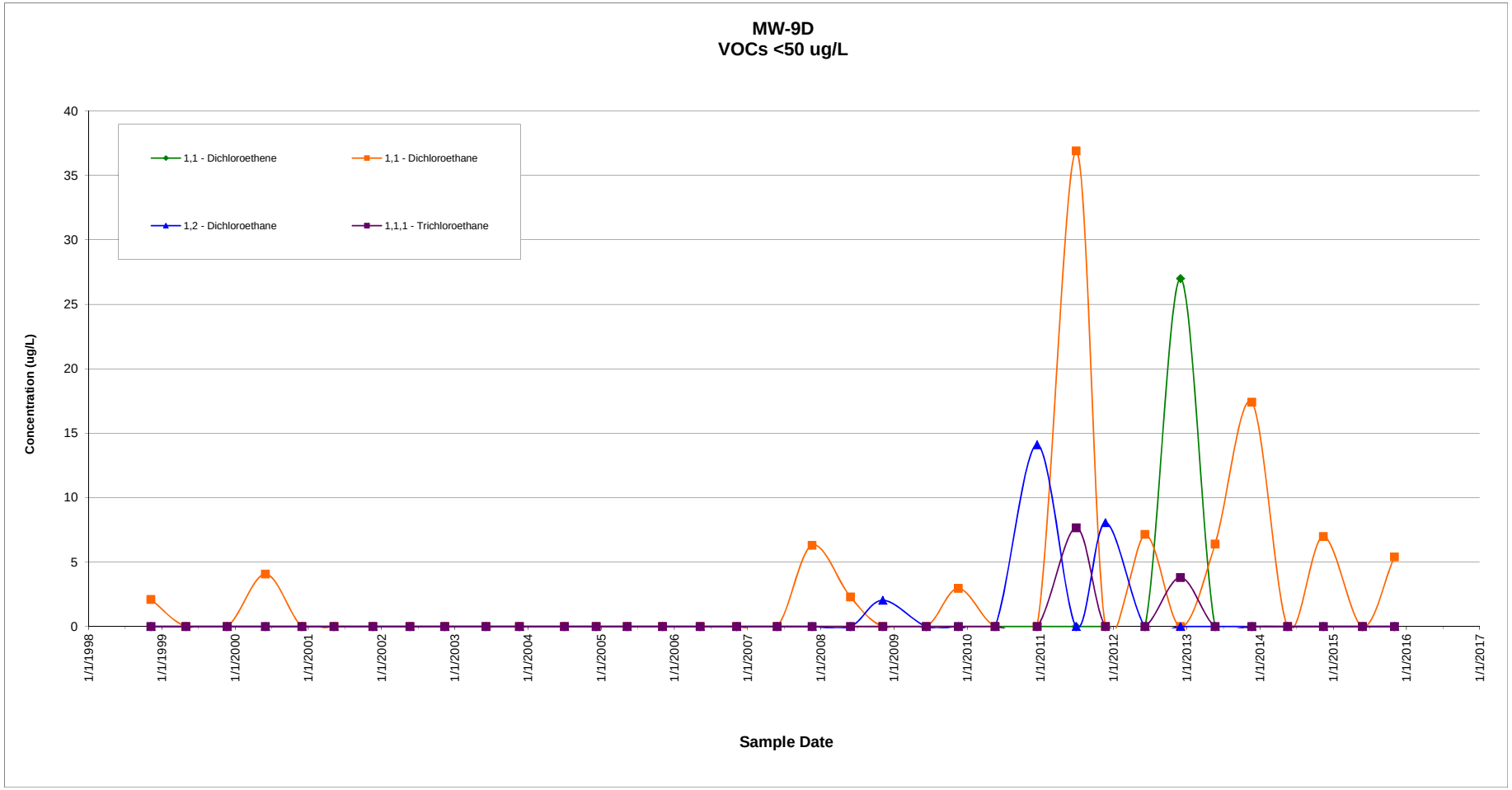
	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**	**7/2/2004**	**12/7/2004**
Vinyl Chloride	**70.80**	**29.00**	**92.50**	**90.40**	**366.00**	**175.00**	**77.70**	**268.00**	**33.20**	**57.90**	**21.00**	**37.10**	**7.02**

	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**	**5/20/2010**	**12/16/2010**
1,1 - Dichloroethane	**4.74**	**3.89**	**3.88**	**2.91**	**2.03**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**	**5/20/2010**	**12/16/2010**
Vinyl Chloride	**84.50**	**99.50**	**65.90**	**142.00**	**109.00**	**850.00**	**351.0**	**290.00**	**474.0**	**263.00**	**251.0**	**311.00**

	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
1,1 - Dichloroethane	0.00	**6.6**	0.00	**1.5**	0.00	0.00	0.00	0.00	0.00	0.00
Benzene	0.00	**1.8**	0.00	**0.8**	0.00	0.00	0.00	0.00	0.00	0.00
trans 1,2-Dichloroethene	0.00	0.00	0.00	**1.0**	0.00	0.00	0.00	0.00	0.00	0.00

	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I	MW-8I
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**182.0**	**423.0**	**211.0**	**320.0**	**220.0**	**206.0**	**180.0**	**234.0**	**165.0**	**228.0**


MW-9D
VOCs <50 ug/L
1,1 - Dichloroethene
1,1 - Dichloroethane
1,2 - Dichloroethane
1,1,1 - Trichloroethane
Concentration (ug/L)
0
5
10
15
20
25
30
35
40
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
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1/1/2009
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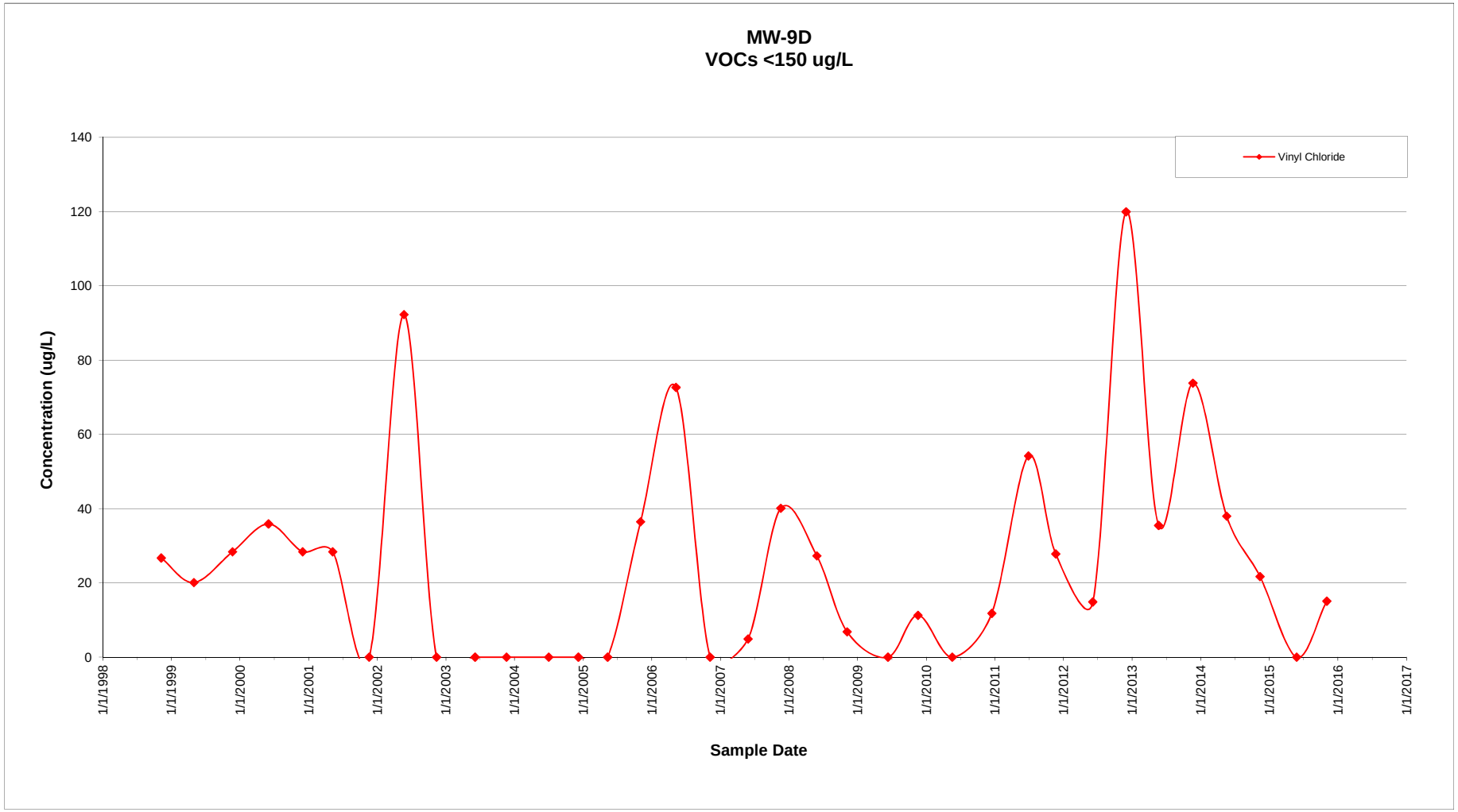
1/1/2016
1/1/2017
Sample Date


MW-9D
VOCs <150 ug/L
Vinyl Chloride
Concentration (ug/L)
0
20
40
60
80
100
120
140
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1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
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1/1/2007
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1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date

	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**	**7/2/2004**	**12/7/2004**
1,1 - Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1 - Dichloroethane	**2.10**	0.00	0.00	**4.07**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

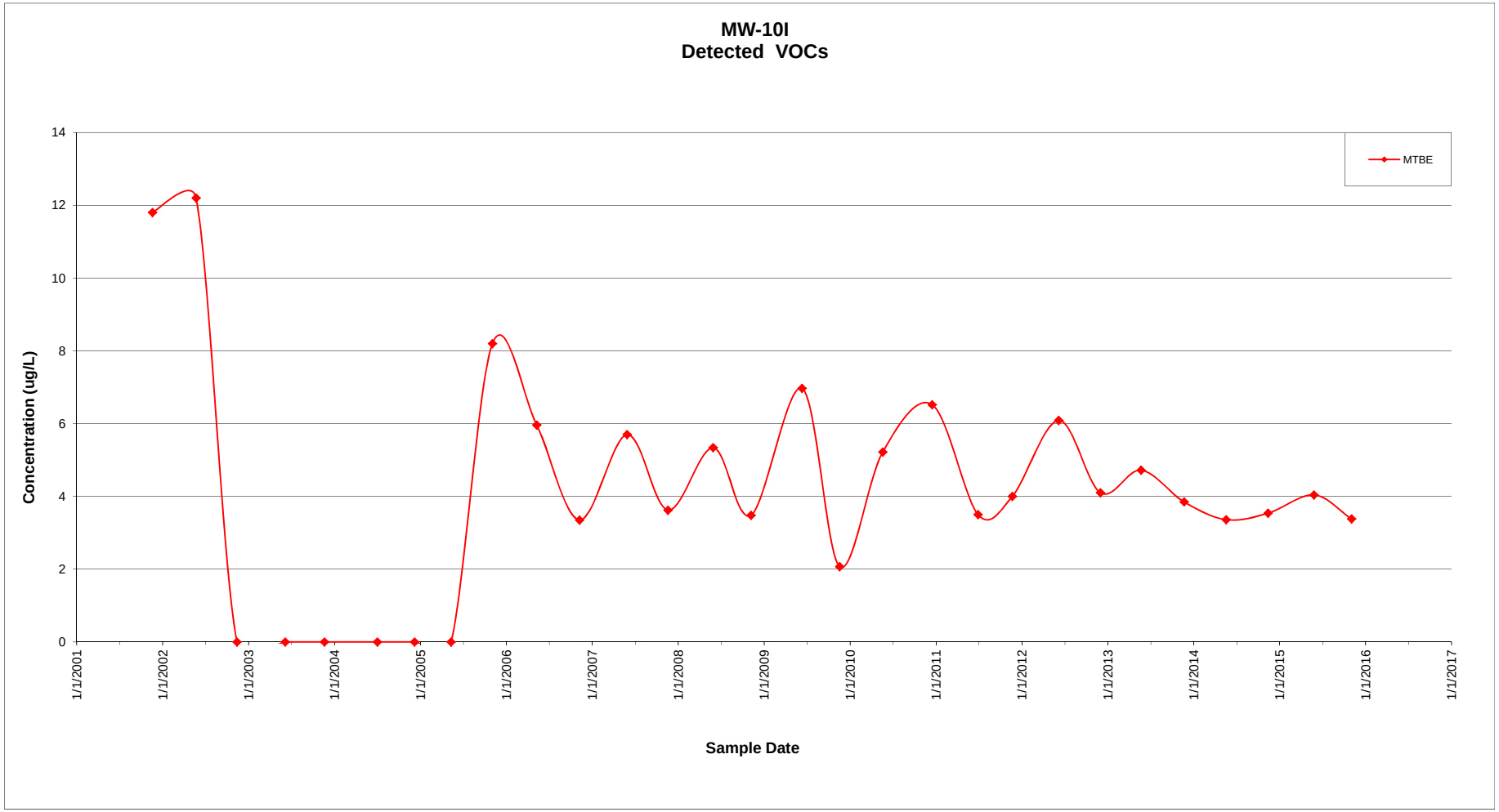
	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**	**7/2/2004**	**12/7/2004**
Vinyl Chloride	**26.70**	**20.10**	**28.40**	**35.90**	**28.40**	**28.40**	0.00	**92.30**	0.00	0.00	0.00	0.00	0.00

	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**	**5/20/2010**	**12/16/2010**
1,1 - Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00
1,1 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	**6.30**	**2.29**	0.00	0.0	**2.96**	0.00	0.00
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.04**	0.0	0.00	0.00	**14.10**
1,1,1 - Trichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00

	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**	**5/20/2010**	**12/16/2010**
Vinyl Chloride	0.00	**36.50**	**72.7**	0.00	**4.92**	**40.10**	**27.3**	**6.83**	0.00	**11.30**	0.00	**11.80**

	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
1,1 - Dichloroethene	0.00	0.00	0.00	**27.0**	0.00	0	0.00	0.00	0.00	0.00
1,1 - Dichloroethane	**36.9**	0.0	**7.2**	0.00	**6.4**	**17.4**	0.00	**6.98**	0.00	**5.40**
1,2 - Dichloroethane	0.00	**8.1**	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
1,1,1 - Trichloroethane	**7.7**	0.00	0.00	**3.8**	0.00	0	0.00	0.00	0.00	0.00

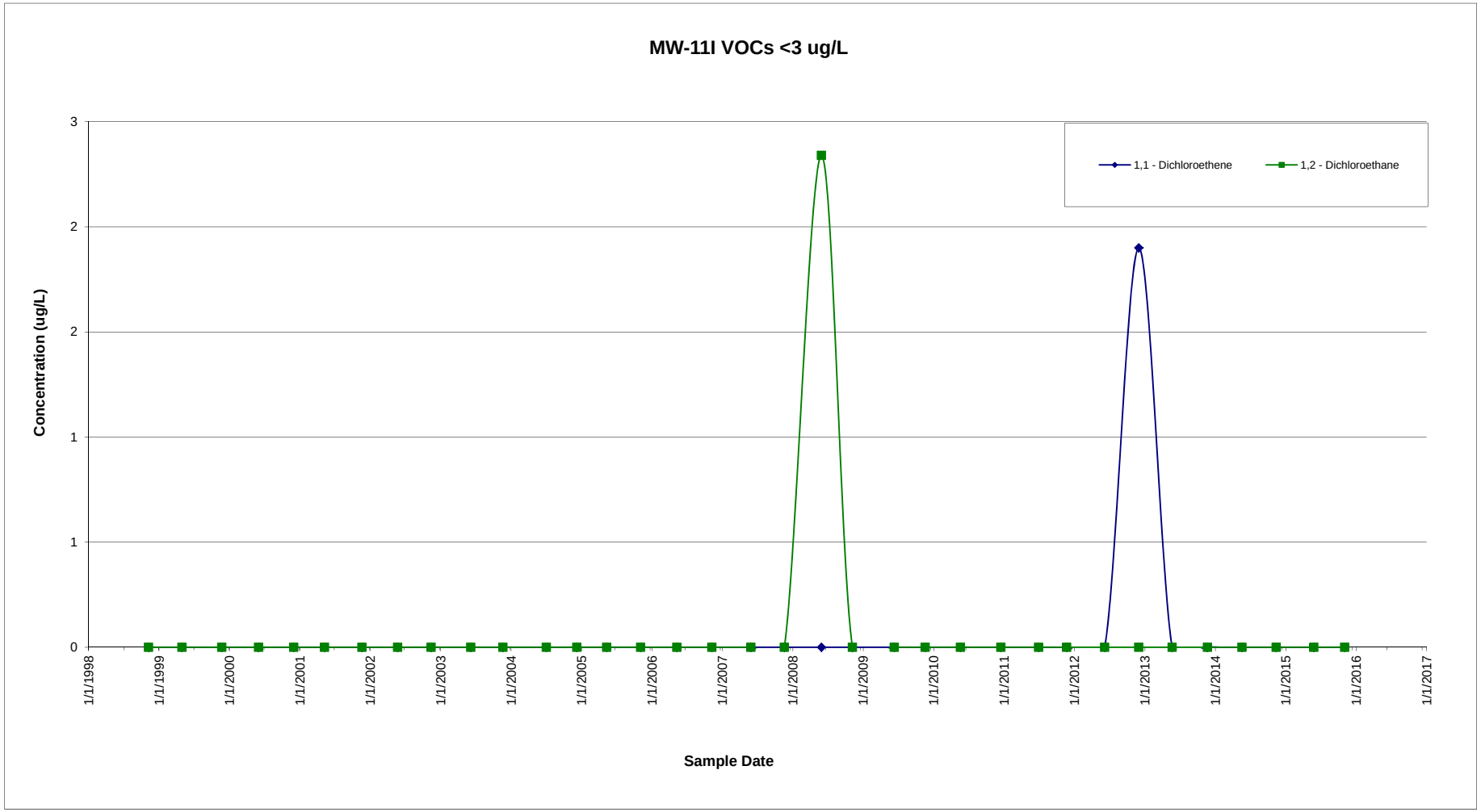
	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D
Total Volatiles (601/602) (ug/L)	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**54.2**	**27.8**	**14.9**	**120.0**	**35.5**	**73.8**	**38**	**21.7**	0	**15.1**

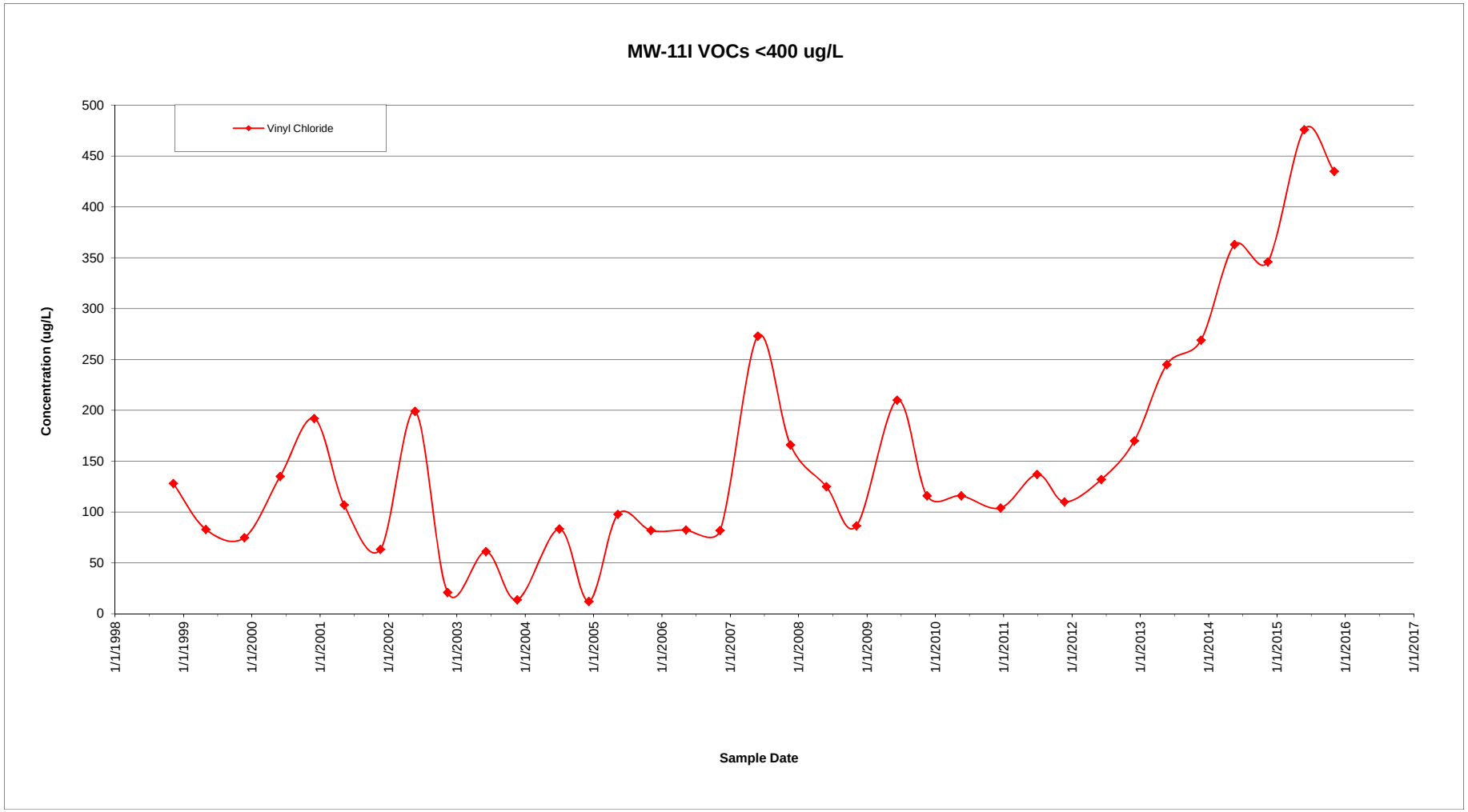

MW-10I
Detected VOCs
MTBE
Concentration (ug/L)
0
2
4
6
8
10
12
14
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date

	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
MTBE	NS	NS	NS	NS	NS	NS	**11.80**	**12.20**	0.00	0.00	0.00

	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
MTBE	0.00	0.00	0.00	**8.20**	**5.96**	**3.35**	**5.70**	**3.62**	**5.34**	**3.48**	**6.97**	**2.07**

	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I	MW-10I
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
MTBE	**5.22**	**6.52**	**3.50**	**4.00**	**6.09**	**4.10**	**4.72**	**3.85**	**3.36**	**3.54**	**4.04**	**3.38**


MW-11I VOCs <3 ug/L
Concentration (ug/L)
3
2
2
1
1
0
1,1 - Dichloroethene
1,2 - Dichloroethane
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date


MW-11I VOCs <400 ug/L
Vinyl Chloride
Concentration (ug/L)
0
50
100
150
200
250
300
350
400
450
500
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date

	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
1,1 - Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

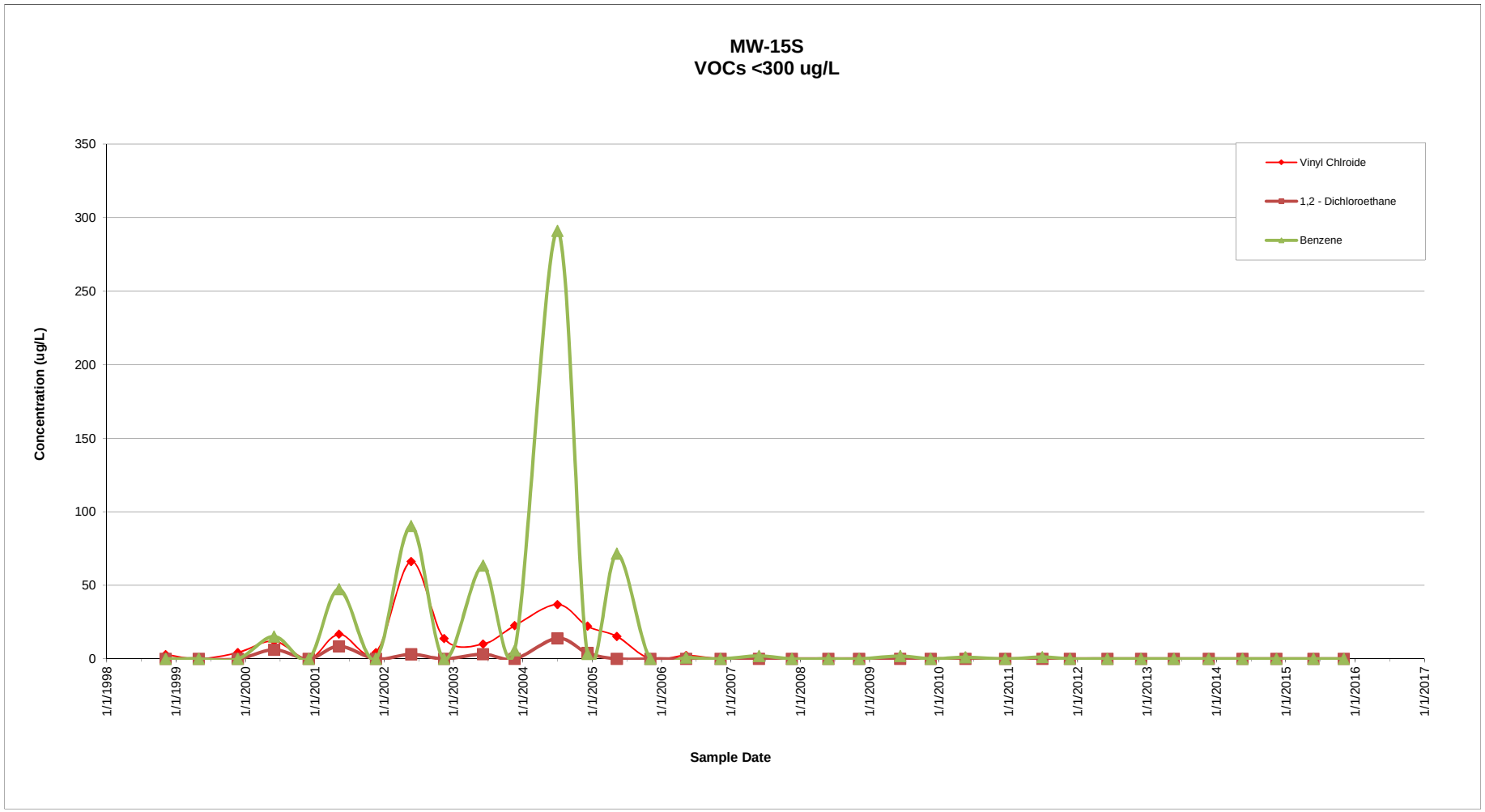
	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Vinyl Chloride	**128.10**	**82.90**	**74.80**	**135.00**	**192.00**	**107.00**	**63.30**	**199.00**	**20.90**	**61.10**	**13.70**

	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
1,1 - Dichloroethene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.34**	0.00	0.00	0.00

	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Vinyl Chloride	**83.40**	**12.10**	**97.80**	**81.90**	**82.40**	**81.80**	**273.00**	**166.00**	**125**	**86.40**	**210.0**	**116.00**

	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
1,1 - Dichloroethene	0.00	0.00	0.00	0.00	0.00	**1.9**	0.0	0	0	0	0	0
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0

	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I	MW-11I
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chloride	**116.0**	**104.00**	**137.0**	**110.0**	**132.0**	**170.0**	**245.0**	**269**	**363**	**346**	**476**	**435**


MW-15S
VOCs <300 ug/L
Concentration (ug/L)
350
300
250
200
150
100
50
0
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
1/1/2003
1/1/2004
1/1/2005
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
Sample Date
Vinyl Chlroide
1,2 - Dichloroethane
Benzene

	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S
Total Volatiles (601/602) (ug/L)	**11/8/1998**	**5/1/1999**	**11/23/1999**	**6/1/2000**	**11/30/2000**	**5/9/2001**	**11/19/2001**	**5/23/2002**	**11/13/2002**	**6/6/2003**	**11/20/2003**
Vinyl Chlroide	**3.00**	0.00	**4.30**	**12.10**	0.00	**16.80**	**4.30**	**66.30**	**13.90**	**10.10**	**22.60**
1,2 - Dichloroethane	0.00	0.00	0.00	**6.20**	0.00	**8.60**	0.00	**3.10**	0.00	**3.18**	0.00
Benzene	0.00	0.00	0.00	**15.20**	0.00	**47.40**	0.00	**90.30**	0.00	**63.40**	**5.89**

	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S
Total Volatiles (601/602) (ug/L)	**7/2/2004**	**12/7/2004**	**5/11/2005**	**11/3/2005**	**5/10/2006**	**11/8/2006**	**5/29/2007**	**11/19/2007**	**5/29/2008**	**11/6/2008**	**6/11/2009**	**11/18/2009**
Vinyl Chlroide	**37.00**	**22.20**	**15.30**	0.00	**2.33**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,2 - Dichloroethane	**14.00**	**3.98**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benzene	**291.00**	**3.37**	**71.50**	0.00	0.95	0.00	**1.98**	0.00	0.00	0.00	**1.90**	0.00

	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S	MW-15S
Total Volatiles (601/602) (ug/L)	**5/20/2010**	**12/16/2010**	**6/29/2011**	**11/22/2011**	**6/6/2012**	**11/30/2012**	**5/22/2013**	**11/21/2013**	**5/19/2014**	**11/13/2014**	**5/27/2015**	**11/3/2015**
Vinyl Chlroide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,2 - Dichloroethane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benzene	**1.04**	0.00	**1.23**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX C

ANALYTICAL DATA
LABORATORY REPORTS

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

150176

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Thursday, January 22, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150176

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	150176-01	**Date Sampled:**	1/15/2015
Matrix:	Water	**Date Received:**	1/15/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.26 @ 18.8 C	S.U.		1/16/2015 15:20

Method Reference(s): SM 4500 H+ B / EPA 9040

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**23.1**	ug/L		1/16/2015 14:53
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		1/16/2015 14:53
1,1,2-Trichloroethane	< 2.00	ug/L		1/16/2015 14:53
1,1-Dichloroethane	**12.7**	ug/L		1/16/2015 14:53
1,1-Dichloroethene	< 2.00	ug/L		1/16/2015 14:53
1,2-Dichlorobenzene	< 2.00	ug/L		1/16/2015 14:53
1,2-Dichloroethane	< 2.00	ug/L		1/16/2015 14:53
1,2-Dichloropropane	< 2.00	ug/L		1/16/2015 14:53
1,3-Dichlorobenzene	< 2.00	ug/L		1/16/2015 14:53
1,4-Dichlorobenzene	< 2.00	ug/L		1/16/2015 14:53
2-Butanone	**40.2**	ug/L		1/16/2015 14:53
2-Chloroethyl vinyl Ether	< 10.0	ug/L		1/16/2015 14:53
4-Methyl-2-pentanone	**7.61**	ug/L		1/16/2015 14:53
Acetone	**37.5**	ug/L		1/16/2015 14:53
Benzene	< 0.700	ug/L		1/16/2015 14:53
Bromodichloromethane	< 2.00	ug/L		1/16/2015 14:53
Bromoform	< 5.00	ug/L		1/16/2015 14:53
Bromomethane	< 2.00	ug/L		1/16/2015 14:53
Carbon Tetrachloride	< 2.00	ug/L		1/16/2015 14:53
Chlorobenzene	< 2.00	ug/L		1/16/2015 14:53
Chloroethane	< 2.00	ug/L		1/16/2015 14:53
Chloroform	< 2.00	ug/L		1/16/2015 14:53

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150176

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 150176-01 **Date Sampled:** 1/15/2015
Matrix: Water **Date Received:** 1/15/2015

Chloromethane	< 2.00	ug/L	1/16/2015	14:53
cis-1,3-Dichloropropene	< 2.00	ug/L	1/16/2015	14:53
Dibromochloromethane	< 2.00	ug/L	1/16/2015	14:53
Ethylbenzene	< 2.00	ug/L	1/16/2015	14:53
Methylene chloride	< 5.00	ug/L	1/16/2015	14:53
Tetrachloroethene	< 2.00	ug/L	1/16/2015	14:53
Toluene	**2.23**	ug/L	1/16/2015	14:53
trans-1,2-Dichloroethene	< 2.00	ug/L	1/16/2015	14:53
trans-1,3-Dichloropropene	< 2.00	ug/L	1/16/2015	14:53
Trichloroethene	< 2.00	ug/L	1/16/2015	14:53
Vinyl chloride	< 2.00	ug/L	1/16/2015	14:53

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**105**	85.7 - 112		1/16/2015	14:53
4-Bromofluorobenzene	**95.5**	86.6 - 110		1/16/2015	14:53
Pentafluorobenzene	**102**	94.6 - 106		1/16/2015	14:53
Toluene-D8	**102**	91.8 - 107		1/16/2015	14:53

Method Reference(s): EPA 624
Data File: x19959.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	City of Rochester	CLIENT:		LAB PROJECT ID: 150176
ADDRESS:	30 Church Street, Room 300B	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14614	CITY: STATE: ZIP:		Quotation #:
PHONE:	428-6884	PHONE:		Email: peckd@cityofrochester.gov
ATTN:	Dennis Peck	ATTN:		

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH *								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	1/15/2015	1575		X	Effluent	Water	3	X	X								624 Site Specific =VRFA Test Name	01
2																		
3																	*sample to be brought in separately Include in same job for reporting per Bruce. GP 1/15/15	
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate:	10	please indicate:		please indicate:	

Sampled By: Dennis Peck — Date/Time: 1/15/15

Relinquished By: [signature] — Date/Time: 1/15/15 15:40

Received By: [signature] — Date/Time: 1/15/15 1540

Received @ Lab By: [signature] — Date/Time: 1/15/15 16:51 – 604 vials

[signature] 1/16/15 15:10 - pH bottle

15°C 1/15/15 15:56

Total Cost:

P.I.F.

See additional page for sample conditions.

Chain of Custody Supplement

Client: City of Rochester **Completed by:** Glenn Pezzulo

Lab Project ID: 150176 **Date:** 1/16/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X VOA		X pH
Comments			
Preservation	X VOA		X pH-1
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		X pH
Comments	VOA: Cl-neg		
Holding Time	X VOA	X pH	
Comments			
Temperature		X	
Comments	15°C		
Sufficient Sample Quantity	X		
Comments	624 vials were received 1/15, client forgot to bring pH. pH bottle was dropped off 1/16.		

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

150582

Referencing

RFA Quarterly Sampling DEQ-98045

Prepared

Monday, March 09, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 150582-01 **Date Sampled:** 2/25/2015
Matrix: Wastewater **Date Received:** 2/25/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	< 0.00500	mg/L		2/27/2015 14:08
Cadmium	< 0.00250	mg/L		2/27/2015 14:08
Chromium	< 0.00500	mg/L		2/27/2015 14:08
Copper	< 0.0125	mg/L		2/27/2015 14:08
Lead	< 0.00500	mg/L		2/27/2015 14:08
Nickel	< 0.0200	mg/L		2/27/2015 14:08
Selenium	**0.0146**	mg/L		3/2/2015 11:13
Zinc	< 0.0300	mg/L		2/27/2015 14:08

Method Reference(s): EPA 200.7
Preparation Date: 2/25/2015
Data File: 022715a

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		3/3/2015 21:14
4,4-DDE	< 0.100	ug/L		3/3/2015 21:14
4,4-DDT	< 0.100	ug/L		3/3/2015 21:14
Aldrin	**0.306**	ug/L		3/3/2015 21:14
alpha-BHC	**0.117**	ug/L		3/3/2015 21:14
beta-BHC	< 0.100	ug/L		3/3/2015 21:14
cis-Chlordane	< 0.100	ug/L		3/3/2015 21:14
delta-BHC	< 0.100	ug/L		3/3/2015 21:14
Dieldrin	< 0.100	ug/L		3/3/2015 21:14
Endosulfan I	< 0.100	ug/L		3/3/2015 21:14
Endosulfan II	< 0.100	ug/L		3/3/2015 21:14
Endosulfan Sulfate	< 0.100	ug/L		3/3/2015 21:14
Endrin	< 0.100	ug/L		3/3/2015 21:14
Endrin Aldehyde	< 0.100	ug/L		3/3/2015 21:14
Endrin Ketone	< 0.100	ug/L		3/3/2015 21:14
gamma-BHC (Lindane)	< 0.100	ug/L		3/3/2015 21:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 150582-01 **Date Sampled:** 2/25/2015
Matrix: Wastewater **Date Received:** 2/25/2015

Heptachlor	< 0.100	ug/L		3/3/2015 21:14
Heptachlor Epoxide	< 0.100	ug/L		3/3/2015 21:14
Methoxychlor	< 0.100	ug/L		3/3/2015 21:14
Toxaphene	< 1.00	ug/L		3/3/2015 21:14
trans-Chlordane	< 0.100	ug/L		3/3/2015 21:14

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**80.1**	36.3 - 130		3/3/2015 21:14
Tetrachloro-m-xylene (1)	**190**	8.3 - 100.6	*	3/3/2015 21:14

Method Reference(s): EPA 608
Preparation Date: 2/27/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.27 @ 16.0 C	S.U.		2/25/2015 14:42

Method Reference(s): SM 4500 H+ B

ELAP does not offer this test for approval as part of their laboratory certification program.

Semi-Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
3&4-Methylphenol	< 10.0	ug/L		2/27/2015 22:33
Bis (2-ethylhexyl) phthalate	< 10.0	ug/L		2/27/2015 22:33
Diethyl phthalate	**31.4**	ug/L		2/27/2015 22:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**71.8**	23.4 - 104		2/27/2015 22:33
Nitrobenzene-d5	**72.3**	50.3 - 96		2/27/2015 22:33
Terphenyl-d14	**77.2**	60.9 - 109		2/27/2015 22:33

Method Reference(s): EPA 625
Preparation Date: 2/27/2015
Data File: B03797.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**9.79**	ug/L		2/26/2015 20:31
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		2/26/2015 20:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	150582-01	**Date Sampled:**	2/25/2015
Matrix:	Wastewater	**Date Received:**	2/25/2015

1,1,2-Trichloroethane	< 5.00	ug/L	2/26/2015	20:31
1,1-Dichloroethane	**12.0**	ug/L	2/26/2015	20:31
1,1-Dichloroethene	< 5.00	ug/L	2/26/2015	20:31
1,2-Dichlorobenzene	< 5.00	ug/L	2/26/2015	20:31
1,2-Dichloroethane	< 5.00	ug/L	2/26/2015	20:31
1,2-Dichloropropane	< 5.00	ug/L	2/26/2015	20:31
1,3-Dichlorobenzene	< 5.00	ug/L	2/26/2015	20:31
1,4-Dichlorobenzene	< 5.00	ug/L	2/26/2015	20:31
2-Butanone	**42.8**	ug/L	2/26/2015	20:31
2-Chloroethyl vinyl Ether	< 25.0	ug/L	2/26/2015	20:31
4-Methyl-2-pentanone	< 12.5	ug/L	2/26/2015	20:31
Acetone	**66.5**	ug/L	2/26/2015	20:31
Benzene	< 1.75	ug/L	2/26/2015	20:31
Bromodichloromethane	< 5.00	ug/L	2/26/2015	20:31
Bromoform	< 12.5	ug/L	2/26/2015	20:31
Bromomethane	< 5.00	ug/L	2/26/2015	20:31
Carbon Tetrachloride	< 5.00	ug/L	2/26/2015	20:31
Chlorobenzene	< 5.00	ug/L	2/26/2015	20:31
Chloroethane	< 5.00	ug/L	2/26/2015	20:31
Chloroform	< 5.00	ug/L	2/26/2015	20:31
Chloromethane	< 5.00	ug/L	2/26/2015	20:31
cis-1,3-Dichloropropene	< 5.00	ug/L	2/26/2015	20:31
Dibromochloromethane	< 5.00	ug/L	2/26/2015	20:31
Ethylbenzene	< 5.00	ug/L	2/26/2015	20:31
Methylene chloride	< 12.5	ug/L	2/26/2015	20:31
Tetrachloroethene	< 5.00	ug/L	2/26/2015	20:31
Toluene	< 5.00	ug/L	2/26/2015	20:31
trans-1,2-Dichloroethene	< 5.00	ug/L	2/26/2015	20:31
trans-1,3-Dichloropropene	< 5.00	ug/L	2/26/2015	20:31
Trichloroethene	< 5.00	ug/L	2/26/2015	20:31
Vinyl chloride	< 5.00	ug/L	2/26/2015	20:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 150582-01 **Date Sampled:** 2/25/2015
Matrix: Wastewater **Date Received:** 2/25/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**102**	80.4 - 116		2/26/2015 20:31
4-Bromofluorobenzene	**97.4**	87 - 109		2/26/2015 20:31
Pentafluorobenzene	**96.5**	92.8 - 109		2/26/2015 20:31
Toluene-D8	**98.3**	92.1 - 107		2/26/2015 20:31

Method Reference(s): EPA 624
Data File: x20660.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 150582-02 **Date Sampled:** 2/25/2015
Matrix: Wastewater **Date Received:** 2/25/2015

Total Alkalinity

Analyte	Result	Units	Qualifier	Date Analyzed
Alkalinity, Total	**400**	mg/L		3/4/2015

Method Reference(s): SM 2320 B
Subcontractor ELAP ID: 10709

Total Hardness

Analyte	Result	Units	Qualifier	Date Analyzed
Hardness, Total	**626**	mg/L		3/2/2015 12:25

Method Reference(s): EPA 200.7
Preparation Date: 2/27/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	< 0.00500	mg/L		3/2/2015 12:25
Cadmium	< 0.00250	mg/L		3/2/2015 12:25
Chromium	< 0.00500	mg/L		3/2/2015 12:25
Copper	< 0.0125	mg/L		3/2/2015 12:25
Lead	< 0.00500	mg/L		3/2/2015 12:25
Nickel	< 0.0200	mg/L		3/2/2015 12:25
Selenium	**0.00953**	mg/L		3/2/2015 13:49
Zinc	< 0.0300	mg/L		3/2/2015 12:25

Method Reference(s): EPA 200.7
Preparation Date: 2/27/2015
Data File: 030215a

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		3/3/2015 21:30
4,4-DDE	< 0.100	ug/L		3/3/2015 21:30
4,4-DDT	< 0.100	ug/L		3/3/2015 21:30
Aldrin	**0.113**	ug/L		3/3/2015 21:30
alpha-BHC	**0.151**	ug/L		3/3/2015 21:30

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 150582-02 **Date Sampled:** 2/25/2015
Matrix: Wastewater **Date Received:** 2/25/2015

beta-BHC	< 0.100	ug/L		3/3/2015 21:30
cis-Chlordane	< 0.100	ug/L		3/3/2015 21:30
delta-BHC	< 0.100	ug/L		3/3/2015 21:30
Dieldrin	< 0.100	ug/L		3/3/2015 21:30
Endosulfan I	< 0.100	ug/L		3/3/2015 21:30
Endosulfan II	< 0.100	ug/L		3/3/2015 21:30
Endosulfan Sulfate	< 0.100	ug/L		3/3/2015 21:30
Endrin	< 0.100	ug/L		3/3/2015 21:30
Endrin Aldehyde	< 0.100	ug/L		3/3/2015 21:30
Endrin Ketone	< 0.100	ug/L		3/3/2015 21:30
gamma-BHC (Lindane)	< 0.100	ug/L		3/3/2015 21:30
Heptachlor	< 0.100	ug/L		3/3/2015 21:30
Heptachlor Epoxide	< 0.100	ug/L		3/3/2015 21:30
Methoxychlor	< 0.100	ug/L		3/3/2015 21:30
Toxaphene	< 1.00	ug/L		3/3/2015 21:30
trans-Chlordane	< 0.100	ug/L		3/3/2015 21:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**72.6**	36.3 - 130		3/3/2015 21:30
Tetrachloro-m-xylene (1)	**196**	8.3 - 100.6	*	3/3/2015 21:30

Method Reference(s): EPA 608
Preparation Date: 2/27/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	7.03 @ 17.4 C	S.U.		2/25/2015 14:42

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**7150**	ug/L		2/26/2015 20:55
1,1,2,2-Tetrachloroethane	< 200	ug/L		2/26/2015 20:55
1,1,2-Trichloroethane	< 200	ug/L		2/26/2015 20:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier:	Influent		
Lab Sample ID:	150582-02	**Date Sampled:**	2/25/2015
Matrix:	Wastewater	**Date Received:**	2/25/2015

1,1-Dichloroethane	**3280**	ug/L	2/26/2015	20:55
1,1-Dichloroethene	< 200	ug/L	2/26/2015	20:55
1,2-Dichlorobenzene	< 200	ug/L	2/26/2015	20:55
1,2-Dichloroethane	< 200	ug/L	2/26/2015	20:55
1,2-Dichloropropane	< 200	ug/L	2/26/2015	20:55
1,3-Dichlorobenzene	< 200	ug/L	2/26/2015	20:55
1,4-Dichlorobenzene	< 200	ug/L	2/26/2015	20:55
2-Butanone	< 1000	ug/L	2/26/2015	20:55
2-Chloroethyl vinyl Ether	< 1000	ug/L	2/26/2015	20:55
4-Methyl-2-pentanone	< 500	ug/L	2/26/2015	20:55
Acetone	< 1000	ug/L	2/26/2015	20:55
Benzene	< 70.0	ug/L	2/26/2015	20:55
Bromodichloromethane	< 200	ug/L	2/26/2015	20:55
Bromoform	< 500	ug/L	2/26/2015	20:55
Bromomethane	< 200	ug/L	2/26/2015	20:55
Carbon Tetrachloride	< 200	ug/L	2/26/2015	20:55
Chlorobenzene	< 200	ug/L	2/26/2015	20:55
Chloroethane	**310**	ug/L	2/26/2015	20:55
Chloroform	< 200	ug/L	2/26/2015	20:55
Chloromethane	< 200	ug/L	2/26/2015	20:55
cis-1,3-Dichloropropene	< 200	ug/L	2/26/2015	20:55
Dibromochloromethane	< 200	ug/L	2/26/2015	20:55
Ethylbenzene	< 200	ug/L	2/26/2015	20:55
Methylene chloride	< 500	ug/L	2/26/2015	20:55
Tetrachloroethene	< 200	ug/L	2/26/2015	20:55
Toluene	**650**	ug/L	2/26/2015	20:55
trans-1,2-Dichloroethene	< 200	ug/L	2/26/2015	20:55
trans-1,3-Dichloropropene	< 200	ug/L	2/26/2015	20:55
Trichloroethene	< 200	ug/L	2/26/2015	20:55
Vinyl chloride	**1340**	ug/L	2/26/2015	20:55

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150582

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 150582-02 **Date Sampled:** 2/25/2015
Matrix: Wastewater **Date Received:** 2/25/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**101**	80.4 - 116		2/26/2015 20:55
4-Bromofluorobenzene	**95.8**	87 - 109		2/26/2015 20:55
Pentafluorobenzene	**98.5**	92.8 - 109		2/26/2015 20:55
Toluene-D8	**96.8**	92.1 - 107		2/26/2015 20:55

Method Reference(s): EPA 624
Data File: x20661.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

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Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

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LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

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LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM

REPORT TO:	INVOICE TO:	
CLIENT: City of Rochester	CLIENT:	LAB PROJECT ID: 150582
ADDRESS: 30 Church Street, Room 300B	ADDRESS:	
CITY: Rochester STATE: NY ZIP 14614	CITY: STATE: ZIP:	Quotation #:
PHONE: 428-6884	PHONE:	Email: peckd@cityofrochester.gov
ATTN: Dennis Peck	ATTN:	

PROJECT REFERENCE

RFA Quarterly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	625 Site Specific	608 Pesticides	Metals*	pH	Alkalinity	Hardness				REMARKS	PARADIGM LAB SAMPLE NUMBER
1	2/25/2015	1130		X	Effluent	Water	6	X	X	X	X	X						624 Site Specific =VRFA Test Name	01
2	2/25/2015	1155		X	Influent	Water	~~5~~ 7	X		X	X	X	X	X				625 Site Specific = SMISC	02
3							DNP 2/25/15											**SVOA List:**	
4																		Diethyl phthalate	
5																		Bis (2-ehtylhexyl) phthalate	
6																		4 Methylphenol (p cresol)	
7																		**Metals list:**	
8																		As, Cd, Cr, Cu, Pb, Ni, Se, Zn	
9																		**Alkalinity sample with No headspace.**	
10																			

* Metals = Ag, As, Ba, Cd, Cr, Cu, Pb, Ni, Se, Zn

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10		please indicate:		please indicate:	

Dennis Peck — Sampled By — 2/25/15 — Date/Time

Relinquished By — 2/25/15 1340 — Date/Time

R Hansen — Received By — 2/25/15 1340 — Date/Time

Received @ Lab By — 2/25/15 14:00 — Date/Time

Total Cost:

P.I.F. ☐

7°C iced started in field 2/25/15 13:56

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: City of Rochester **Completed by:** Glenn Perzyk

Lab Project ID: 150582 **Date:** 2/25/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container	X p3 to p2 for Alkalinity subout		X
Headspace (<1 mL)	X Alkalinity		X
Comments	Transferred portion of unpreserved Influent pH sample to p2 bottle w/ no headspace for Alkalinity subout		
Preservation	X metals 624		X
Comments	Added 3-ml HNO_3 to Influent metals sample to pH <2 (lot C473038) - leave in hold fridge til 2/26 @ 14:20 Added 3-ml 5% NaOH to Effluent 625 sample to increase pH to 7 (lot # 0828)		
Chlorine Absent (<0.10 ppm per test strip)	X 625		X
Comments	VOA: Cl- neg		
Holding Time	X	X pH	
Comments			
Temperature	X		X metals pH
Comments	7°C iced Started in field		
Sufficient Sample Quantity	X		
Comments			

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

150226020

CHAIN OF CUSTODY

ADIRONDACK: ELAP ID: 10709

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:		STD	OTHER
PROJECT NAME/SITE NAME:		ATTN:	Kate Hansen	ATTN:	Meridith Dillman	☐ 1 ☐ 2 ☐ 3 ☒ 5	☐
		COMMENTS:	Please email results to khansen@paradigmenv.com and jdaloia@paradigmenv.com	Date Due: 3/5/15	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	Alkalinity									REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	12/25/15	11:55		X	150582-02	W	1	X												0	0	1
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter		NELAC Compliance	
Container Type:	not frankies	Y ☐	N ☐
Comments:			
Preservation:	a	Y ☒	N ☐
Comments:			
Holding Time:		Y ☒	N ☐
Comments:			
Temperature:	6°c	Y ☐	N ☐
Comments:			

Client

Sampled By — Date/Time: 12/25/15 16:00

Relinquished By — Date/Time

Received By (UPS) — Date/Time: 12-26-15

Received @ Lab By — Date/Time

Total Cost:

P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

150848

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Monday, March 30, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

Report Prepared Monday, March 30, 2015

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 150848

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	150848-01	**Date Sampled:**	3/17/2015
Matrix:	Wastewater	**Date Received:**	3/17/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.26 @ 20.7	S.U.		3/17/2015 15:14

Method Reference(s): SM 4500 H+ B

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**14.1**	ug/L		3/26/2015 17:37
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		3/26/2015 17:37
1,1,2-Trichloroethane	< 2.00	ug/L		3/26/2015 17:37
1,1-Dichloroethane	**6.32**	ug/L		3/26/2015 17:37
1,1-Dichloroethene	< 2.00	ug/L		3/26/2015 17:37
1,2-Dichlorobenzene	< 2.00	ug/L		3/26/2015 17:37
1,2-Dichloroethane	< 2.00	ug/L		3/26/2015 17:37
1,2-Dichloropropane	< 2.00	ug/L		3/26/2015 17:37
1,3-Dichlorobenzene	< 2.00	ug/L		3/26/2015 17:37
1,4-Dichlorobenzene	< 2.00	ug/L		3/26/2015 17:37
2-Butanone	**14.7**	ug/L		3/26/2015 17:37
2-Chloroethyl vinyl Ether	< 10.0	ug/L		3/26/2015 17:37
4-Methyl-2-pentanone	**6.84**	ug/L		3/26/2015 17:37
Acetone	**19.4**	ug/L		3/26/2015 17:37
Benzene	< 0.700	ug/L		3/26/2015 17:37
Bromodichloromethane	< 2.00	ug/L		3/26/2015 17:37
Bromoform	< 5.00	ug/L		3/26/2015 17:37
Bromomethane	< 2.00	ug/L		3/26/2015 17:37
Carbon Tetrachloride	< 2.00	ug/L		3/26/2015 17:37
Chlorobenzene	< 2.00	ug/L		3/26/2015 17:37
Chloroethane	< 2.00	ug/L		3/26/2015 17:37
Chloroform	< 2.00	ug/L		3/26/2015 17:37
Chloromethane	< 2.00	ug/L		3/26/2015 17:37

PARADIGM ENVIRONMENTAL SERVICES, INC.

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trans-1,2-Dichloroethene	< 2.00	ug/L	3/26/2015	17:37
trans-1,3-Dichloropropene	< 2.00	ug/L	3/26/2015	17:37
Trichloroethene	**2.91**	ug/L	3/26/2015	17:37
Vinyl chloride	< 2.00	ug/L	3/26/2015	17:37

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**95.7**	80.4 - 116		3/26/2015	17:37
4-Bromofluorobenzene	**99.9**	87 - 109		3/26/2015	17:37
Pentafluorobenzene	**103**	92.8 - 109		3/26/2015	17:37
Toluene-D8	**103**	92.1 - 107		3/26/2015	17:37

Method Reference(s): EPA 624
Data File: x21477.D

Analytical Report Appendix

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All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

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Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

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Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	LAB PROJECT ID
CLIENT: City of Rochester	CLIENT:	150848
ADDRESS: 30 Church Street, Room 300B	ADDRESS:	
CITY: Rochester STATE: NY ZIP 14614	CITY: STATE: ZIP:	Quotation #:
PHONE: 428-6884	PHONE:	Email:
ATTN: Dennis Peck	ATTN:	peckd@cityofrochester.gov

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid, NQ - Non-Aqueous Liquid, WA - Water, WG - Groundwater, DW - Drinking Water, WW - Wastewater, SO - Soil, SL - Sludge, SD - Solid, PT - Paint, WP - Wipe, CK - Caulk, OL - Oil, AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	3/17/2015	1150		X	Effluent	Water	3	X	X								624 Site Specific =VRFA Test Name	01
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other please indicate: 10	X	Other please indicate:	☐	Other EDD please indicate:	☐

Signature	Date/Time
Sampled By: Dennis Peck	3/17/15
Relinquished By: Dennis M Peck	3/17/15 1427
Received By: [signature]	3/17/15 1427
Received @ Lab By: [signature]	3/17/15 1459

Total Cost: ☐

P.I.F. ☐

17°C 3/17/15 14:42

See additional page for sample conditions.

Chain of Custody Supplement

Client: City of Rochester

Lab Project ID: 1508548

Completed by: Molly Caid

Date: 3/17/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		X PM
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments	VOA: Cl⁻ ng		
Holding Time	X	X PM	
Comments			
Temperature			X
Comments	17°C 3/17/15 1442		
Sufficient Sample Quantity	X		
Comments			

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

151462

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Friday, May 01, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

K R Hansen

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 151462

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 151462-01 **Date Sampled:** 4/22/2015
Matrix: Water **Date Received:** 4/22/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.22 @ 16.7 C	S.U.		4/22/2015 16:52

Method Reference(s): SM 4500 H+ B / EPA 9040

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**86.9**	ug/L		4/30/2015 20:58
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		4/30/2015 20:58
1,1,2-Trichloroethane	< 2.00	ug/L		4/30/2015 20:58
1,1-Dichloroethane	**25.3**	ug/L		4/30/2015 20:58
1,1-Dichloroethene	< 2.00	ug/L		4/30/2015 20:58
1,2-Dichlorobenzene	< 2.00	ug/L		4/30/2015 20:58
1,2-Dichloroethane	< 2.00	ug/L		4/30/2015 20:58
1,2-Dichloropropane	< 2.00	ug/L		4/30/2015 20:58
1,3-Dichlorobenzene	< 2.00	ug/L		4/30/2015 20:58
1,4-Dichlorobenzene	< 2.00	ug/L		4/30/2015 20:58
2-Butanone	**43.8**	ug/L		4/30/2015 20:58
2-Chloroethyl vinyl Ether	< 10.0	ug/L		4/30/2015 20:58
4-Methyl-2-pentanone	**9.28**	ug/L		4/30/2015 20:58
Acetone	**45.0**	ug/L		4/30/2015 20:58
Benzene	< 0.700	ug/L		4/30/2015 20:58
Bromodichloromethane	< 2.00	ug/L		4/30/2015 20:58
Bromoform	< 5.00	ug/L		4/30/2015 20:58
Bromomethane	< 2.00	ug/L		4/30/2015 20:58
Carbon Tetrachloride	< 2.00	ug/L		4/30/2015 20:58
Chlorobenzene	< 2.00	ug/L		4/30/2015 20:58
Chloroethane	**2.24**	ug/L		4/30/2015 20:58
Chloroform	< 2.00	ug/L		4/30/2015 20:58
Chloromethane	< 2.00	ug/L		4/30/2015 20:58

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 151462

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 151462-01 **Date Sampled:** 4/22/2015
Matrix: Water **Date Received:** 4/22/2015

cis-1,3-Dichloropropene	< 2.00	ug/L	4/30/2015	20:58
Dibromochloromethane	< 2.00	ug/L	4/30/2015	20:58
Ethylbenzene	< 2.00	ug/L	4/30/2015	20:58
Methylene chloride	< 5.00	ug/L	4/30/2015	20:58
Tetrachloroethene	< 2.00	ug/L	4/30/2015	20:58
Toluene	**3.58**	ug/L	4/30/2015	20:58
trans-1,2-Dichloroethene	< 2.00	ug/L	4/30/2015	20:58
trans-1,3-Dichloropropene	< 2.00	ug/L	4/30/2015	20:58
Trichloroethene	**4.81**	ug/L	4/30/2015	20:58
Vinyl chloride	**6.75**	ug/L	4/30/2015	20:58

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**104**	80.4 - 116		4/30/2015	20:58
4-Bromofluorobenzene	**96.8**	87 - 109		4/30/2015	20:58
Pentafluorobenzene	**103**	92.8 - 109		4/30/2015	20:58
Toluene-D8	**100**	92.1 - 107		4/30/2015	20:58

Method Reference(s): EPA 624
Data File: x22373.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT: City of Rochester		CLIENT:		LAB PROJECT ID: 15 1462
ADDRESS: 30 Church Street, Room 300B		ADDRESS:		
CITY: Rochester	STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Quotation #:
PHONE: 428-6884		PHONE:		Email: peckd@cityofrochester.gov
ATTN: Dennis Peck		ATTN:		

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:

AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	4/22/2015	1400		X	Effluent	Water	3	X	X								624 Site Specific =VRFA Test Name	01
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10		please indicate:		please indicate:	

Dennis Peck — 4/22/15 — Sampled By — Date/Time

Relinquished By — 4/22/15 1630 — Date/Time

Jane J. Dalosi — 4/22/15 30 — Received By — Date/Time

Received @ Lab By — 4/22/15 16:48 — Date/Time

Total Cost:

P.I.F.

15°C 4/22/15 16:44

See additional page for sample conditions.

Chain of Custody Supplement

Client: City of Rochester Completed by: Glenn Pezzulo

Lab Project ID: 151462 Date: 4/22/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X VOA		X
Comments			
Preservation	X VOA		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		X
Comments	VOA: Cl-neg		
Holding Time	X	X pH	
Comments			
Temperature		X	
Comments	15°C		
Sufficient Sample Quantity	X		
Comments			

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

152077

Referencing

RFA Semi-Annual GW Sampling DEQ-98045

Prepared

Wednesday, June 10, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-6I
Lab Sample ID: 152077-01 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/29/2015 16:15
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/29/2015 16:15
1,1,2-Trichloroethane	< 2.00	ug/L		5/29/2015 16:15
1,1-Dichloroethane	< 2.00	ug/L		5/29/2015 16:15
1,1-Dichloroethene	< 2.00	ug/L		5/29/2015 16:15
1,2-Dichlorobenzene	< 2.00	ug/L		5/29/2015 16:15
1,2-Dichloroethane	< 2.00	ug/L		5/29/2015 16:15
1,2-Dichloropropane	< 2.00	ug/L		5/29/2015 16:15
1,3-Dichlorobenzene	< 2.00	ug/L		5/29/2015 16:15
1,4-Dichlorobenzene	< 2.00	ug/L		5/29/2015 16:15
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/29/2015 16:15
Benzene	< 0.700	ug/L		5/29/2015 16:15
Bromodichloromethane	< 2.00	ug/L		5/29/2015 16:15
Bromoform	< 5.00	ug/L		5/29/2015 16:15
Bromomethane	< 2.00	ug/L		5/29/2015 16:15
Carbon Tetrachloride	< 2.00	ug/L		5/29/2015 16:15
Chlorobenzene	< 2.00	ug/L		5/29/2015 16:15
Chloroethane	< 2.00	ug/L		5/29/2015 16:15
Chloroform	< 2.00	ug/L		5/29/2015 16:15
Chloromethane	< 2.00	ug/L		5/29/2015 16:15
cis-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 16:15
Dibromochloromethane	< 2.00	ug/L		5/29/2015 16:15
Ethylbenzene	< 2.00	ug/L		5/29/2015 16:15
Methyl tert-butyl Ether	< 2.00	ug/L		5/29/2015 16:15
Methylene chloride	< 5.00	ug/L		5/29/2015 16:15
Tetrachloroethene	< 2.00	ug/L		5/29/2015 16:15
Toluene	< 2.00	ug/L		5/29/2015 16:15
trans-1,2-Dichloroethene	< 2.00	ug/L		5/29/2015 16:15
trans-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 16:15

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-6I
Lab Sample ID: 152077-01 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 2.00	ug/L			5/29/2015 16:15
Trichlorofluoromethane	< 2.00	ug/L			5/29/2015 16:15
Vinyl chloride	**4.50**	ug/L			5/29/2015 16:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	82.3 - 115		5/29/2015 16:15
4-Bromofluorobenzene	**91.3**	85.5 - 111		5/29/2015 16:15
Pentafluorobenzene	**99.1**	91.2 - 107		5/29/2015 16:15
Toluene-D8	**94.5**	90.9 - 108		5/29/2015 16:15

Method Reference(s): EPA 624
Data File: x23177.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-7I		
Lab Sample ID:	152077-02	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**528**	ug/L		5/29/2015 16:39
1,1,2,2-Tetrachloroethane	< 10.0	ug/L		5/29/2015 16:39
1,1,2-Trichloroethane	< 10.0	ug/L		5/29/2015 16:39
1,1-Dichloroethane	**684**	ug/L		5/29/2015 16:39
1,1-Dichloroethene	**39.5**	ug/L		5/29/2015 16:39
1,2-Dichlorobenzene	< 10.0	ug/L		5/29/2015 16:39
1,2-Dichloroethane	< 10.0	ug/L		5/29/2015 16:39
1,2-Dichloropropane	< 10.0	ug/L		5/29/2015 16:39
1,3-Dichlorobenzene	< 10.0	ug/L		5/29/2015 16:39
1,4-Dichlorobenzene	< 10.0	ug/L		5/29/2015 16:39
2-Chloroethyl vinyl Ether	< 50.0	ug/L		5/29/2015 16:39
Benzene	< 3.50	ug/L		5/29/2015 16:39
Bromodichloromethane	< 10.0	ug/L		5/29/2015 16:39
Bromoform	< 25.0	ug/L		5/29/2015 16:39
Bromomethane	< 10.0	ug/L		5/29/2015 16:39
Carbon Tetrachloride	< 10.0	ug/L		5/29/2015 16:39
Chlorobenzene	< 10.0	ug/L		5/29/2015 16:39
Chloroethane	< 10.0	ug/L		5/29/2015 16:39
Chloroform	< 10.0	ug/L		5/29/2015 16:39
Chloromethane	< 10.0	ug/L		5/29/2015 16:39
cis-1,3-Dichloropropene	< 10.0	ug/L		5/29/2015 16:39
Dibromochloromethane	< 10.0	ug/L		5/29/2015 16:39
Ethylbenzene	< 10.0	ug/L		5/29/2015 16:39
Methyl tert-butyl Ether	< 10.0	ug/L		5/29/2015 16:39
Methylene chloride	< 25.0	ug/L		5/29/2015 16:39
Tetrachloroethene	< 10.0	ug/L		5/29/2015 16:39
Toluene	**10.6**	ug/L		5/29/2015 16:39
trans-1,2-Dichloroethene	< 10.0	ug/L		5/29/2015 16:39
trans-1,3-Dichloropropene	< 10.0	ug/L		5/29/2015 16:39

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-7I
Lab Sample ID: 152077-02 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 10.0	ug/L	5/29/2015	16:39
Trichlorofluoromethane	< 10.0	ug/L	5/29/2015	16:39
Vinyl chloride	**182**	ug/L	5/29/2015	16:39

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**109**	82.3 - 115		5/29/2015	16:39
4-Bromofluorobenzene	**91.3**	85.5 - 111		5/29/2015	16:39
Pentafluorobenzene	**99.6**	91.2 - 107		5/29/2015	16:39
Toluene-D8	**94.5**	90.9 - 108		5/29/2015	16:39

Method Reference(s): EPA 624
Data File: x23178.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-7D
Lab Sample ID: 152077-03 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/29/2015 17:02
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/29/2015 17:02
1,1,2-Trichloroethane	< 2.00	ug/L		5/29/2015 17:02
1,1-Dichloroethane	< 2.00	ug/L		5/29/2015 17:02
1,1-Dichloroethene	< 2.00	ug/L		5/29/2015 17:02
1,2-Dichlorobenzene	< 2.00	ug/L		5/29/2015 17:02
1,2-Dichloroethane	< 2.00	ug/L		5/29/2015 17:02
1,2-Dichloropropane	< 2.00	ug/L		5/29/2015 17:02
1,3-Dichlorobenzene	< 2.00	ug/L		5/29/2015 17:02
1,4-Dichlorobenzene	< 2.00	ug/L		5/29/2015 17:02
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/29/2015 17:02
Benzene	< 0.700	ug/L		5/29/2015 17:02
Bromodichloromethane	< 2.00	ug/L		5/29/2015 17:02
Bromoform	< 5.00	ug/L		5/29/2015 17:02
Bromomethane	< 2.00	ug/L		5/29/2015 17:02
Carbon Tetrachloride	< 2.00	ug/L		5/29/2015 17:02
Chlorobenzene	< 2.00	ug/L		5/29/2015 17:02
Chloroethane	< 2.00	ug/L		5/29/2015 17:02
Chloroform	< 2.00	ug/L		5/29/2015 17:02
Chloromethane	< 2.00	ug/L		5/29/2015 17:02
cis-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 17:02
Dibromochloromethane	< 2.00	ug/L		5/29/2015 17:02
Ethylbenzene	< 2.00	ug/L		5/29/2015 17:02
Methyl tert-butyl Ether	< 2.00	ug/L		5/29/2015 17:02
Methylene chloride	< 5.00	ug/L		5/29/2015 17:02
Tetrachloroethene	< 2.00	ug/L		5/29/2015 17:02
Toluene	< 2.00	ug/L		5/29/2015 17:02
trans-1,2-Dichloroethene	< 2.00	ug/L		5/29/2015 17:02
trans-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 17:02

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-7D

Lab Sample ID: 152077-03 **Date Sampled:** 5/27/2015

Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 2.00	ug/L			5/29/2015 17:02
Trichlorofluoromethane	< 2.00	ug/L			5/29/2015 17:02
Vinyl chloride	< 2.00	ug/L			5/29/2015 17:02

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**108**	82.3 - 115		5/29/2015 17:02
4-Bromofluorobenzene	**88.9**	85.5 - 111		5/29/2015 17:02
Pentafluorobenzene	**102**	91.2 - 107		5/29/2015 17:02
Toluene-D8	**95.5**	90.9 - 108		5/29/2015 17:02

Method Reference(s): EPA 624

Data File: x23179.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-7S		
Lab Sample ID:	152077-04	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**139**	ug/L		5/29/2015 17:26
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		5/29/2015 17:26
1,1,2-Trichloroethane	< 5.00	ug/L		5/29/2015 17:26
1,1-Dichloroethane	**129**	ug/L		5/29/2015 17:26
1,1-Dichloroethene	< 5.00	ug/L		5/29/2015 17:26
1,2-Dichlorobenzene	< 5.00	ug/L		5/29/2015 17:26
1,2-Dichloroethane	< 5.00	ug/L		5/29/2015 17:26
1,2-Dichloropropane	< 5.00	ug/L		5/29/2015 17:26
1,3-Dichlorobenzene	< 5.00	ug/L		5/29/2015 17:26
1,4-Dichlorobenzene	< 5.00	ug/L		5/29/2015 17:26
2-Chloroethyl vinyl Ether	< 25.0	ug/L		5/29/2015 17:26
Benzene	< 1.75	ug/L		5/29/2015 17:26
Bromodichloromethane	< 5.00	ug/L		5/29/2015 17:26
Bromoform	< 12.5	ug/L		5/29/2015 17:26
Bromomethane	< 5.00	ug/L		5/29/2015 17:26
Carbon Tetrachloride	< 5.00	ug/L		5/29/2015 17:26
Chlorobenzene	< 5.00	ug/L		5/29/2015 17:26
Chloroethane	**19.9**	ug/L		5/29/2015 17:26
Chloroform	< 5.00	ug/L		5/29/2015 17:26
Chloromethane	< 5.00	ug/L		5/29/2015 17:26
cis-1,3-Dichloropropene	< 5.00	ug/L		5/29/2015 17:26
Dibromochloromethane	< 5.00	ug/L		5/29/2015 17:26
Ethylbenzene	< 5.00	ug/L		5/29/2015 17:26
Methyl tert-butyl Ether	< 5.00	ug/L		5/29/2015 17:26
Methylene chloride	< 12.5	ug/L		5/29/2015 17:26
Tetrachloroethene	< 5.00	ug/L		5/29/2015 17:26
Toluene	< 5.00	ug/L		5/29/2015 17:26
trans-1,2-Dichloroethene	< 5.00	ug/L		5/29/2015 17:26
trans-1,3-Dichloropropene	< 5.00	ug/L		5/29/2015 17:26

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-7S

Lab Sample ID: 152077-04 **Date Sampled:** 5/27/2015

Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 5.00	ug/L			5/29/2015 17:26
Trichlorofluoromethane	< 5.00	ug/L			5/29/2015 17:26
Vinyl chloride	< 5.00	ug/L			5/29/2015 17:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**110**	82.3 - 115		5/29/2015 17:26
4-Bromofluorobenzene	**91.5**	85.5 - 111		5/29/2015 17:26
Pentafluorobenzene	**101**	91.2 - 107		5/29/2015 17:26
Toluene-D8	**98.6**	90.9 - 108		5/29/2015 17:26

Method Reference(s): EPA 624

Data File: x23180.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-8I		
Lab Sample ID:	152077-05	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 5.00	ug/L		5/29/2015 17:49
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		5/29/2015 17:49
1,1,2-Trichloroethane	< 5.00	ug/L		5/29/2015 17:49
1,1-Dichloroethane	< 5.00	ug/L		5/29/2015 17:49
1,1-Dichloroethene	< 5.00	ug/L		5/29/2015 17:49
1,2-Dichlorobenzene	< 5.00	ug/L		5/29/2015 17:49
1,2-Dichloroethane	< 5.00	ug/L		5/29/2015 17:49
1,2-Dichloropropane	< 5.00	ug/L		5/29/2015 17:49
1,3-Dichlorobenzene	< 5.00	ug/L		5/29/2015 17:49
1,4-Dichlorobenzene	< 5.00	ug/L		5/29/2015 17:49
2-Chloroethyl vinyl Ether	< 25.0	ug/L		5/29/2015 17:49
Benzene	< 1.75	ug/L		5/29/2015 17:49
Bromodichloromethane	< 5.00	ug/L		5/29/2015 17:49
Bromoform	< 12.5	ug/L		5/29/2015 17:49
Bromomethane	< 5.00	ug/L		5/29/2015 17:49
Carbon Tetrachloride	< 5.00	ug/L		5/29/2015 17:49
Chlorobenzene	< 5.00	ug/L		5/29/2015 17:49
Chloroethane	< 5.00	ug/L		5/29/2015 17:49
Chloroform	< 5.00	ug/L		5/29/2015 17:49
Chloromethane	< 5.00	ug/L		5/29/2015 17:49
cis-1,3-Dichloropropene	< 5.00	ug/L		5/29/2015 17:49
Dibromochloromethane	< 5.00	ug/L		5/29/2015 17:49
Ethylbenzene	< 5.00	ug/L		5/29/2015 17:49
Methyl tert-butyl Ether	< 5.00	ug/L		5/29/2015 17:49
Methylene chloride	< 12.5	ug/L		5/29/2015 17:49
Tetrachloroethene	< 5.00	ug/L		5/29/2015 17:49
Toluene	< 5.00	ug/L		5/29/2015 17:49
trans-1,2-Dichloroethene	< 5.00	ug/L		5/29/2015 17:49
trans-1,3-Dichloropropene	< 5.00	ug/L		5/29/2015 17:49

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-8I
Lab Sample ID: 152077-05 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 5.00	ug/L	5/29/2015	17:49
Trichlorofluoromethane	< 5.00	ug/L	5/29/2015	17:49
Vinyl chloride	**165**	ug/L	5/29/2015	17:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**106**	82.3 - 115		5/29/2015	17:49
4-Bromofluorobenzene	**88.5**	85.5 - 111		5/29/2015	17:49
Pentafluorobenzene	**103**	91.2 - 107		5/29/2015	17:49
Toluene-D8	**95.8**	90.9 - 108		5/29/2015	17:49

Method Reference(s): EPA 624
Data File: x23181.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-9D		
Lab Sample ID:	152077-06	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/29/2015 18:12
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/29/2015 18:12
1,1,2-Trichloroethane	< 2.00	ug/L		5/29/2015 18:12
1,1-Dichloroethane	< 2.00	ug/L		5/29/2015 18:12
1,1-Dichloroethene	< 2.00	ug/L		5/29/2015 18:12
1,2-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:12
1,2-Dichloroethane	< 2.00	ug/L		5/29/2015 18:12
1,2-Dichloropropane	< 2.00	ug/L		5/29/2015 18:12
1,3-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:12
1,4-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:12
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/29/2015 18:12
Benzene	< 0.700	ug/L		5/29/2015 18:12
Bromodichloromethane	< 2.00	ug/L		5/29/2015 18:12
Bromoform	< 5.00	ug/L		5/29/2015 18:12
Bromomethane	< 2.00	ug/L		5/29/2015 18:12
Carbon Tetrachloride	< 2.00	ug/L		5/29/2015 18:12
Chlorobenzene	< 2.00	ug/L		5/29/2015 18:12
Chloroethane	< 2.00	ug/L		5/29/2015 18:12
Chloroform	< 2.00	ug/L		5/29/2015 18:12
Chloromethane	< 2.00	ug/L		5/29/2015 18:12
cis-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 18:12
Dibromochloromethane	< 2.00	ug/L		5/29/2015 18:12
Ethylbenzene	< 2.00	ug/L		5/29/2015 18:12
Methyl tert-butyl Ether	< 2.00	ug/L		5/29/2015 18:12
Methylene chloride	< 5.00	ug/L		5/29/2015 18:12
Tetrachloroethene	< 2.00	ug/L		5/29/2015 18:12
Toluene	< 2.00	ug/L		5/29/2015 18:12
trans-1,2-Dichloroethene	< 2.00	ug/L		5/29/2015 18:12
trans-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 18:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-9D
Lab Sample ID: 152077-06 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 2.00	ug/L			5/29/2015 18:12
Trichlorofluoromethane	< 2.00	ug/L			5/29/2015 18:12
Vinyl chloride	< 2.00	ug/L			5/29/2015 18:12

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**112**	82.3 - 115		5/29/2015 18:12
4-Bromofluorobenzene	**88.3**	85.5 - 111		5/29/2015 18:12
Pentafluorobenzene	**99.5**	91.2 - 107		5/29/2015 18:12
Toluene-D8	**95.2**	90.9 - 108		5/29/2015 18:12

Method Reference(s): EPA 624
Data File: x23182.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-10I		
Lab Sample ID:	152077-07	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/29/2015 18:36
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/29/2015 18:36
1,1,2-Trichloroethane	< 2.00	ug/L		5/29/2015 18:36
1,1-Dichloroethane	< 2.00	ug/L		5/29/2015 18:36
1,1-Dichloroethene	< 2.00	ug/L		5/29/2015 18:36
1,2-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:36
1,2-Dichloroethane	< 2.00	ug/L		5/29/2015 18:36
1,2-Dichloropropane	< 2.00	ug/L		5/29/2015 18:36
1,3-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:36
1,4-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:36
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/29/2015 18:36
Benzene	< 0.700	ug/L		5/29/2015 18:36
Bromodichloromethane	< 2.00	ug/L		5/29/2015 18:36
Bromoform	< 5.00	ug/L		5/29/2015 18:36
Bromomethane	< 2.00	ug/L		5/29/2015 18:36
Carbon Tetrachloride	< 2.00	ug/L		5/29/2015 18:36
Chlorobenzene	< 2.00	ug/L		5/29/2015 18:36
Chloroethane	< 2.00	ug/L		5/29/2015 18:36
Chloroform	< 2.00	ug/L		5/29/2015 18:36
Chloromethane	< 2.00	ug/L		5/29/2015 18:36
cis-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 18:36
Dibromochloromethane	< 2.00	ug/L		5/29/2015 18:36
Ethylbenzene	< 2.00	ug/L		5/29/2015 18:36
Methyl tert-butyl Ether	**4.04**	ug/L		5/29/2015 18:36
Methylene chloride	< 5.00	ug/L		5/29/2015 18:36
Tetrachloroethene	< 2.00	ug/L		5/29/2015 18:36
Toluene	< 2.00	ug/L		5/29/2015 18:36
trans-1,2-Dichloroethene	< 2.00	ug/L		5/29/2015 18:36
trans-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 18:36

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-10I
Lab Sample ID: 152077-07 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 2.00	ug/L			5/29/2015 18:36
Trichlorofluoromethane	< 2.00	ug/L			5/29/2015 18:36
Vinyl chloride	< 2.00	ug/L			5/29/2015 18:36

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**114**	82.3 - 115		5/29/2015 18:36
4-Bromofluorobenzene	**91.8**	85.5 - 111		5/29/2015 18:36
Pentafluorobenzene	**98.9**	91.2 - 107		5/29/2015 18:36
Toluene-D8	**94.8**	90.9 - 108		5/29/2015 18:36

Method Reference(s): EPA 624
Data File: x23183.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-10S
Lab Sample ID: 152077-08 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		5/29/2015 18:59
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		5/29/2015 18:59
1,1,2-Trichloroethane	< 2.00	ug/L		5/29/2015 18:59
1,1-Dichloroethane	< 2.00	ug/L		5/29/2015 18:59
1,1-Dichloroethene	< 2.00	ug/L		5/29/2015 18:59
1,2-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:59
1,2-Dichloroethane	< 2.00	ug/L		5/29/2015 18:59
1,2-Dichloropropane	< 2.00	ug/L		5/29/2015 18:59
1,3-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:59
1,4-Dichlorobenzene	< 2.00	ug/L		5/29/2015 18:59
2-Chloroethyl vinyl Ether	< 10.0	ug/L		5/29/2015 18:59
Benzene	< 0.700	ug/L		5/29/2015 18:59
Bromodichloromethane	< 2.00	ug/L		5/29/2015 18:59
Bromoform	< 5.00	ug/L		5/29/2015 18:59
Bromomethane	< 2.00	ug/L		5/29/2015 18:59
Carbon Tetrachloride	< 2.00	ug/L		5/29/2015 18:59
Chlorobenzene	< 2.00	ug/L		5/29/2015 18:59
Chloroethane	< 2.00	ug/L		5/29/2015 18:59
Chloroform	< 2.00	ug/L		5/29/2015 18:59
Chloromethane	< 2.00	ug/L		5/29/2015 18:59
cis-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 18:59
Dibromochloromethane	< 2.00	ug/L		5/29/2015 18:59
Ethylbenzene	< 2.00	ug/L		5/29/2015 18:59
Methyl tert-butyl Ether	< 2.00	ug/L		5/29/2015 18:59
Methylene chloride	< 5.00	ug/L		5/29/2015 18:59
Tetrachloroethene	< 2.00	ug/L		5/29/2015 18:59
Toluene	< 2.00	ug/L		5/29/2015 18:59
trans-1,2-Dichloroethene	< 2.00	ug/L		5/29/2015 18:59
trans-1,3-Dichloropropene	< 2.00	ug/L		5/29/2015 18:59

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-10S

Lab Sample ID: 152077-08 **Date Sampled:** 5/27/2015

Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 2.00	ug/L			5/29/2015 18:59
Trichlorofluoromethane	< 2.00	ug/L			5/29/2015 18:59
Vinyl chloride	< 2.00	ug/L			5/29/2015 18:59

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**116**	82.3 - 115	*	5/29/2015 18:59
4-Bromofluorobenzene	**87.9**	85.5 - 111		5/29/2015 18:59
Pentafluorobenzene	**99.3**	91.2 - 107		5/29/2015 18:59
Toluene-D8	**94.9**	90.9 - 108		5/29/2015 18:59

Method Reference(s): EPA 624

Data File: x23184.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-11I		
Lab Sample ID:	152077-09	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 10.0	ug/L		5/29/2015 19:22
1,1,2,2-Tetrachloroethane	< 10.0	ug/L		5/29/2015 19:22
1,1,2-Trichloroethane	< 10.0	ug/L		5/29/2015 19:22
1,1-Dichloroethane	< 10.0	ug/L		5/29/2015 19:22
1,1-Dichloroethene	< 10.0	ug/L		5/29/2015 19:22
1,2-Dichlorobenzene	< 10.0	ug/L		5/29/2015 19:22
1,2-Dichloroethane	< 10.0	ug/L		5/29/2015 19:22
1,2-Dichloropropane	< 10.0	ug/L		5/29/2015 19:22
1,3-Dichlorobenzene	< 10.0	ug/L		5/29/2015 19:22
1,4-Dichlorobenzene	< 10.0	ug/L		5/29/2015 19:22
2-Chloroethyl vinyl Ether	< 50.0	ug/L		5/29/2015 19:22
Benzene	< 3.50	ug/L		5/29/2015 19:22
Bromodichloromethane	< 10.0	ug/L		5/29/2015 19:22
Bromoform	< 25.0	ug/L		5/29/2015 19:22
Bromomethane	< 10.0	ug/L		5/29/2015 19:22
Carbon Tetrachloride	< 10.0	ug/L		5/29/2015 19:22
Chlorobenzene	< 10.0	ug/L		5/29/2015 19:22
Chloroethane	< 10.0	ug/L		5/29/2015 19:22
Chloroform	< 10.0	ug/L		5/29/2015 19:22
Chloromethane	< 10.0	ug/L		5/29/2015 19:22
cis-1,3-Dichloropropene	< 10.0	ug/L		5/29/2015 19:22
Dibromochloromethane	< 10.0	ug/L		5/29/2015 19:22
Ethylbenzene	< 10.0	ug/L		5/29/2015 19:22
Methyl tert-butyl Ether	< 10.0	ug/L		5/29/2015 19:22
Methylene chloride	< 25.0	ug/L		5/29/2015 19:22
Tetrachloroethene	< 10.0	ug/L		5/29/2015 19:22
Toluene	< 10.0	ug/L		5/29/2015 19:22
trans-1,2-Dichloroethene	< 10.0	ug/L		5/29/2015 19:22
trans-1,3-Dichloropropene	< 10.0	ug/L		5/29/2015 19:22

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-11I
Lab Sample ID: 152077-09 **Date Sampled:** 5/27/2015
Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 10.0	ug/L	5/29/2015	19:22
Trichlorofluoromethane	< 10.0	ug/L	5/29/2015	19:22
Vinyl chloride	**476**	ug/L	5/29/2015	19:22

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**114**	82.3 - 115		5/29/2015	19:22
4-Bromofluorobenzene	**86.7**	85.5 - 111		5/29/2015	19:22
Pentafluorobenzene	**105**	91.2 - 107		5/29/2015	19:22
Toluene-D8	**94.4**	90.9 - 108		5/29/2015	19:22

Method Reference(s): EPA 624
Data File: x23185.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW-15S		
Lab Sample ID:	152077-10	**Date Sampled:**	5/27/2015
Matrix:	Water	**Date Received:**	5/27/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/1/2015 21:29
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/1/2015 21:29
1,1,2-Trichloroethane	< 2.00	ug/L		6/1/2015 21:29
1,1-Dichloroethane	< 2.00	ug/L		6/1/2015 21:29
1,1-Dichloroethene	< 2.00	ug/L		6/1/2015 21:29
1,2-Dichlorobenzene	< 2.00	ug/L		6/1/2015 21:29
1,2-Dichloroethane	< 2.00	ug/L		6/1/2015 21:29
1,2-Dichloropropane	< 2.00	ug/L		6/1/2015 21:29
1,3-Dichlorobenzene	< 2.00	ug/L		6/1/2015 21:29
1,4-Dichlorobenzene	< 2.00	ug/L		6/1/2015 21:29
2-Chloroethyl vinyl Ether	< 10.0	ug/L		6/1/2015 21:29
Benzene	< 0.700	ug/L		6/1/2015 21:29
Bromodichloromethane	< 2.00	ug/L		6/1/2015 21:29
Bromoform	< 5.00	ug/L		6/1/2015 21:29
Bromomethane	< 2.00	ug/L		6/1/2015 21:29
Carbon Tetrachloride	< 2.00	ug/L		6/1/2015 21:29
Chlorobenzene	< 2.00	ug/L		6/1/2015 21:29
Chloroethane	< 2.00	ug/L		6/1/2015 21:29
Chloroform	< 2.00	ug/L		6/1/2015 21:29
Chloromethane	< 2.00	ug/L		6/1/2015 21:29
cis-1,3-Dichloropropene	< 2.00	ug/L		6/1/2015 21:29
Dibromochloromethane	< 2.00	ug/L		6/1/2015 21:29
Ethylbenzene	< 2.00	ug/L		6/1/2015 21:29
Methyl tert-butyl Ether	< 2.00	ug/L		6/1/2015 21:29
Methylene chloride	< 5.00	ug/L		6/1/2015 21:29
Tetrachloroethene	< 2.00	ug/L		6/1/2015 21:29
Toluene	< 2.00	ug/L		6/1/2015 21:29
trans-1,2-Dichloroethene	< 2.00	ug/L		6/1/2015 21:29
trans-1,3-Dichloropropene	< 2.00	ug/L		6/1/2015 21:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152077

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW-15S

Lab Sample ID: 152077-10 **Date Sampled:** 5/27/2015

Matrix: Water **Date Received:** 5/27/2015

Trichloroethene	< 2.00	ug/L		6/1/2015 21:29
Trichlorofluoromethane	< 2.00	ug/L		6/1/2015 21:29
Vinyl chloride	< 2.00	ug/L		6/1/2015 21:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**91.8**	82.3 - 115		6/1/2015 21:29
4-Bromofluorobenzene	**93.7**	85.5 - 111		6/1/2015 21:29
Pentafluorobenzene	**104**	91.2 - 107		6/1/2015 21:29
Toluene-D8	**95.6**	90.9 - 108		6/1/2015 21:29

Method Reference(s): EPA 624

Data File: x23234.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: CITY OF ROCHESTER	COMPANY:	LAB PROJECT #: 152077 / CLIENT PROJECT #:
ADDRESS: 30 CHURCH STREET, ROOM 300B	ADDRESS:	
CITY: ROCHESTER STATE: NY ZIP: 14614	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS) STD 10 OTHER
PHONE: 585-428-6884 FAX: 585-428-6010	PHONE: FAX:	1 2 3 5 X
ATTN: DENNIS PECK	ATTN:	

PROJECT NAME/SITE NAME: RFA semi-annual GW sampli DEQ-98045

COMMENTS: email results to peckd@cityofrochester.gov

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	601/602 + MTBE									REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/27/15	1127		X	MW 6I	Water	2	X										01
2		1050		X	MW 7I	Water	2	X										02
3		1053		X	MW 7D	Water	2	X										03
4		1056		X	MW 7S	Water	2	X										04
5		1134		X	MW 8I	Water	2	X										05
6		1045		X	MW 9D	Water	2	X										06
7		1121		X	MW 10I	Water	2	X										07
8		1119		X	MW 10S	Water	2	X										08
9		1108		X	MW 11I	Water	2	X										09
10		1104		X	MW 15S	Water	2	X										10

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ☐ PRESERVATIONS: ☐ HOLDING TIME: ☐ TEMPERATURE: ☒ 16°C iced started in field 5/27/15, 1202hrs

Sampled By: Dennis Peck	Date/Time: 5/27/15	Relinquished By:	Date/Time:
Relinquished By: Dennis M Peck	Date/Time: 5/27/15 1150	Received By:	Date/Time:
Received By:	Date/Time: 5/27/15 11:51 pm	Received @ Lab By: Mol Vail	Date/Time: 5/27/15 1232

Total Cost:

P.I.F.

Chain of Custody Supplement

Client: City of Roch
Lab Project ID: 152077
Completed by: Molly Vail
Date: 5/27/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)			
Comments	VOA		
Holding Time	X		
Comments			
Temperature	X	X ECom 5/27/15	
Comments	16°C iced started in field 5/27/15 1202 hrs		
Sufficient Sample Quantity	X		
Comments			

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

City of Rochester

For Lab Project ID

152140

Referencing

RFA Quarterly Sampling DEQ-98045

Prepared

Wednesday, January 06, 2016

This project has been re-issued to correct the Total Hardness test.

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 152140-01 **Date Sampled:** 5/29/2015
Matrix: Wastewater **Date Received:** 5/29/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**0.0117**	mg/L		6/9/2015 11:51
Cadmium	< 0.00250	mg/L		6/4/2015 17:59
Chromium	< 0.00500	mg/L		6/4/2015 17:59
Copper	< 0.0125	mg/L		6/4/2015 17:59
Lead	< 0.00500	mg/L		6/4/2015 17:59
Nickel	< 0.0200	mg/L		6/4/2015 17:59
Selenium	< 0.00500	mg/L		6/8/2015 17:08
Zinc	**0.0385**	mg/L		6/4/2015 17:59

Method Reference(s): EPA 200.7
Preparation Date: 6/3/2015
Data File: 060915a

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		6/2/2015 14:26
4,4-DDE	< 0.100	ug/L		6/2/2015 14:26
4,4-DDT	< 0.100	ug/L		6/2/2015 14:26
Aldrin	< 0.100	ug/L		6/2/2015 14:26
alpha-BHC	< 0.100	ug/L		6/2/2015 14:26
beta-BHC	< 0.100	ug/L		6/2/2015 14:26
cis-Chlordane	< 0.100	ug/L		6/2/2015 14:26
delta-BHC	< 0.100	ug/L		6/2/2015 14:26
Dieldrin	< 0.100	ug/L		6/2/2015 14:26
Endosulfan I	< 0.100	ug/L		6/2/2015 14:26
Endosulfan II	< 0.100	ug/L		6/2/2015 14:26
Endosulfan Sulfate	< 0.100	ug/L		6/2/2015 14:26
Endrin	< 0.100	ug/L		6/2/2015 14:26
Endrin Aldehyde	< 0.100	ug/L		6/2/2015 14:26
gamma-BHC (Lindane)	< 0.100	ug/L		6/2/2015 14:26
Heptachlor	< 0.100	ug/L		6/2/2015 14:26

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 152140-01 **Date Sampled:** 5/29/2015
Matrix: Wastewater **Date Received:** 5/29/2015

Heptachlor Epoxide	< 0.100	ug/L		6/2/2015 14:26
Methoxychlor	< 0.100	ug/L		6/2/2015 14:26
Toxaphene	< 1.00	ug/L		6/2/2015 14:26
trans-Chlordane	< 0.100	ug/L		6/2/2015 14:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**61.9**	38.2 - 137		6/2/2015 14:26
Tetrachloro-m-xylene (1)	**48.0**	3.3 - 102.2		6/2/2015 14:26

Method Reference(s): EPA 608
Preparation Date: 6/2/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.25 @ 20.8 C	S.U.		5/29/2015 15:59

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Semi-Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
3&4-Methylphenol	< 10.0	ug/L		6/2/2015 16:47
Bis (2-ethylhexyl) phthalate	< 10.0	ug/L		6/2/2015 16:47
Diethyl phthalate	< 10.0	ug/L		6/2/2015 16:47

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**75.2**	20.2 - 94.7		6/2/2015 16:47
Nitrobenzene-d5	**72.1**	44.4 - 95.7		6/2/2015 16:47
Terphenyl-d14	**80.8**	55.1 - 112		6/2/2015 16:47

Method Reference(s): EPA 625
Preparation Date: 6/2/2015
Data File: B05494.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**26.8**	ug/L		6/9/2015 08:18
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/9/2015 08:18
1,1,2-Trichloroethane	< 2.00	ug/L		6/9/2015 08:18

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	152140-01	**Date Sampled:**	5/29/2015
Matrix:	Wastewater	**Date Received:**	5/29/2015

1,1-Dichloroethane	**31.8**	ug/L	6/9/2015	08:18
1,1-Dichloroethene	< 2.00	ug/L	6/9/2015	08:18
1,2-Dichlorobenzene	< 2.00	ug/L	6/9/2015	08:18
1,2-Dichloroethane	< 2.00	ug/L	6/9/2015	08:18
1,2-Dichloropropane	< 2.00	ug/L	6/9/2015	08:18
1,3-Dichlorobenzene	< 2.00	ug/L	6/9/2015	08:18
1,4-Dichlorobenzene	< 2.00	ug/L	6/9/2015	08:18
2-Butanone	< 10.0	ug/L	6/9/2015	08:18
2-Chloroethyl vinyl Ether	< 10.0	ug/L	6/9/2015	08:18
4-Methyl-2-pentanone	< 5.00	ug/L	6/9/2015	08:18
Acetone	< 10.0	ug/L	6/9/2015	08:18
Benzene	< 0.700	ug/L	6/9/2015	08:18
Bromodichloromethane	< 2.00	ug/L	6/9/2015	08:18
Bromoform	< 5.00	ug/L	6/9/2015	08:18
Bromomethane	< 2.00	ug/L	6/9/2015	08:18
Carbon Tetrachloride	< 2.00	ug/L	6/9/2015	08:18
Chlorobenzene	< 2.00	ug/L	6/9/2015	08:18
Chloroethane	**2.62**	ug/L	6/9/2015	08:18
Chloroform	< 2.00	ug/L	6/9/2015	08:18
Chloromethane	< 2.00	ug/L	6/9/2015	08:18
cis-1,3-Dichloropropene	< 2.00	ug/L	6/9/2015	08:18
Dibromochloromethane	< 2.00	ug/L	6/9/2015	08:18
Ethylbenzene	< 2.00	ug/L	6/9/2015	08:18
Methylene chloride	< 5.00	ug/L	6/9/2015	08:18
Tetrachloroethene	< 2.00	ug/L	6/9/2015	08:18
Toluene	< 2.00	ug/L	6/9/2015	08:18
trans-1,2-Dichloroethene	< 2.00	ug/L	6/9/2015	08:18
trans-1,3-Dichloropropene	< 2.00	ug/L	6/9/2015	08:18
Trichloroethene	< 2.00	ug/L	6/9/2015	08:18
Vinyl chloride	**6.50**	ug/L	6/9/2015	08:18

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 152140-01 **Date Sampled:** 5/29/2015
Matrix: Wastewater **Date Received:** 5/29/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**114**	82.3 - 115		6/9/2015	08:18
4-Bromofluorobenzene	**89.6**	85.5 - 111		6/9/2015	08:18
Pentafluorobenzene	**107**	91.2 - 107		6/9/2015	08:18
Toluene-D8	**96.3**	90.9 - 108		6/9/2015	08:18

Method Reference(s): EPA 624
Data File: x23497.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 152140-02 **Date Sampled:** 5/29/2015
Matrix: Wastewater **Date Received:** 5/29/2015

Total Alkalinity

Analyte	Result	Units	Qualifier	Date Analyzed
Alkalinity, Total	**390**	mg/L		6/5/2015

Method Reference(s): SM 2320 B
Subcontractor ELAP ID: 10709

Total Hardness

Analyte	Result	Units	Qualifier	Date Analyzed
Hardness, Total	**626**	mg/L		6/4/2015 18:04

Method Reference(s): EPA 200.7
Preparation Date: 6/3/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**0.0128**	mg/L		6/9/2015 11:55
Cadmium	< 0.00250	mg/L		6/4/2015 18:04
Chromium	< 0.00500	mg/L		6/4/2015 18:04
Copper	< 0.0125	mg/L		6/4/2015 18:04
Lead	< 0.00500	mg/L		6/4/2015 18:04
Nickel	< 0.0200	mg/L		6/4/2015 18:04
Selenium	< 0.00500	mg/L		6/8/2015 17:16
Zinc	**0.0608**	mg/L		6/4/2015 18:04

Method Reference(s): EPA 200.7
Preparation Date: 6/3/2015
Data File: 060915a

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		6/2/2015 14:42
4,4-DDE	< 0.100	ug/L		6/2/2015 14:42
4,4-DDT	< 0.100	ug/L		6/2/2015 14:42
Aldrin	< 0.100	ug/L		6/2/2015 14:42
alpha-BHC	< 0.100	ug/L		6/2/2015 14:42

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 152140-02 **Date Sampled:** 5/29/2015
Matrix: Wastewater **Date Received:** 5/29/2015

beta-BHC	< 0.100	ug/L			6/2/2015 14:42
cis-Chlordane	< 0.100	ug/L			6/2/2015 14:42
delta-BHC	< 0.100	ug/L			6/2/2015 14:42
Dieldrin	< 0.100	ug/L			6/2/2015 14:42
Endosulfan I	< 0.100	ug/L			6/2/2015 14:42
Endosulfan II	< 0.100	ug/L			6/2/2015 14:42
Endosulfan Sulfate	< 0.100	ug/L			6/2/2015 14:42
Endrin	< 0.100	ug/L			6/2/2015 14:42
Endrin Aldehyde	< 0.100	ug/L			6/2/2015 14:42
gamma-BHC (Lindane)	< 0.100	ug/L			6/2/2015 14:42
Heptachlor	< 0.100	ug/L			6/2/2015 14:42
Heptachlor Epoxide	< 0.100	ug/L			6/2/2015 14:42
Methoxychlor	< 0.100	ug/L			6/2/2015 14:42
Toxaphene	< 1.00	ug/L			6/2/2015 14:42
trans-Chlordane	< 0.100	ug/L			6/2/2015 14:42

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**66.9**	38.2 - 137		6/2/2015 14:42
Tetrachloro-m-xylene (1)	**49.6**	3.3 - 102.2		6/2/2015 14:42

Method Reference(s): EPA 608
Preparation Date: 6/2/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	7.06 @ 18.9 C	S.U.		5/29/2015 15:59

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**1280**	ug/L		6/9/2015 08:42
1,1,2,2-Tetrachloroethane	< 200	ug/L		6/9/2015 08:42
1,1,2-Trichloroethane	< 200	ug/L		6/9/2015 08:42
1,1-Dichloroethane	**1270**	ug/L		6/9/2015 08:42

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier:	Influent		
Lab Sample ID:	152140-02	**Date Sampled:**	5/29/2015
Matrix:	Wastewater	**Date Received:**	5/29/2015

1,1-Dichloroethene	< 200	ug/L	6/9/2015	08:42
1,2-Dichlorobenzene	< 200	ug/L	6/9/2015	08:42
1,2-Dichloroethane	< 200	ug/L	6/9/2015	08:42
1,2-Dichloropropane	< 200	ug/L	6/9/2015	08:42
1,3-Dichlorobenzene	< 200	ug/L	6/9/2015	08:42
1,4-Dichlorobenzene	< 200	ug/L	6/9/2015	08:42
2-Butanone	< 1000	ug/L	6/9/2015	08:42
2-Chloroethyl vinyl Ether	< 1000	ug/L	6/9/2015	08:42
4-Methyl-2-pentanone	< 500	ug/L	6/9/2015	08:42
Acetone	< 1000	ug/L	6/9/2015	08:42
Benzene	< 70.0	ug/L	6/9/2015	08:42
Bromodichloromethane	< 200	ug/L	6/9/2015	08:42
Bromoform	< 500	ug/L	6/9/2015	08:42
Bromomethane	< 200	ug/L	6/9/2015	08:42
Carbon Tetrachloride	< 200	ug/L	6/9/2015	08:42
Chlorobenzene	< 200	ug/L	6/9/2015	08:42
Chloroethane	< 200	ug/L	6/9/2015	08:42
Chloroform	< 200	ug/L	6/9/2015	08:42
Chloromethane	< 200	ug/L	6/9/2015	08:42
cis-1,3-Dichloropropene	< 200	ug/L	6/9/2015	08:42
Dibromochloromethane	< 200	ug/L	6/9/2015	08:42
Ethylbenzene	< 200	ug/L	6/9/2015	08:42
Methylene chloride	< 500	ug/L	6/9/2015	08:42
Tetrachloroethene	< 200	ug/L	6/9/2015	08:42
Toluene	< 200	ug/L	6/9/2015	08:42
trans-1,2-Dichloroethene	< 200	ug/L	6/9/2015	08:42
trans-1,3-Dichloropropene	< 200	ug/L	6/9/2015	08:42
Trichloroethene	< 200	ug/L	6/9/2015	08:42
Vinyl chloride	**724**	ug/L	6/9/2015	08:42

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152140

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 152140-02 **Date Sampled:** 5/29/2015
Matrix: Wastewater **Date Received:** 5/29/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**116**	82.3 - 115		6/9/2015	08:42
4-Bromofluorobenzene	**92.3**	85.5 - 111		6/9/2015	08:42
Pentafluorobenzene	**107**	91.2 - 107		6/9/2015	08:42
Toluene-D8	**95.5**	90.9 - 108		6/9/2015	08:42

Method Reference(s): EPA 624
Data File: x23498.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	City of Rochester	CLIENT:		LAB PROJECT ID: 152190
ADDRESS:	30 Church Street, Room 300B	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Quotation #:
PHONE:	428-6884	PHONE:		Email: peckd@cityofrochester.gov
ATTN:	Dennis Peck	ATTN:		

PROJECT REFERENCE

RFA Quarterly Sampling DEQ-98045

Matrix Codes:

AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific HCL	625 Site Specific	608 Pesticides	Metals* in HNO3	pH	Alkalinity	Hardness				REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/29/2015	1500		X	Effluent WW	Water	6	X	X	X	X	X						624 Site Specific =VRFA Test Name	01
2	5/29/2015	1435		X	Influent "	Water	7	X		X	X	X	X	X				625 Site Specific = SMISC	02
3					per Mikes GP 5/29/15													**SVOA List:**	
4																		Diethyl phthalate	
5																		Bis (2-ehtylhexyl) phthalate	
6																		4 Methylphenol (p cresol)	
7																		**Metals list:**	
8																		As, Cd, Cr, Cu, Pb, Ni, Se, Zn	
9																		**Alkalinity sample with No headspace.**	
10																			

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10		please indicate:		please indicate:	

Dennis Peck	5/29/15	Sampled By / Date/Time
Dennis M Peck	5/29/15 1528	Relinquished By / Date/Time
Jane J. DeBois	5/29/15 1528	Received By / Date/Time
[signature]	5/29/15 15:37	Received @ Lab By / Date/Time

Total Cost:

P.I.F.

1.4 °C 5/29/15 15:31

See additional page for sample conditions.

Chain of Custody Supplement

Client: City of Rochester Completed by: Glenn Pezzulo

Lab Project ID: 152140 Date: 5/29/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X VOA Alk		X
Comments			
Preservation	X metls VOA		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X 625		X
Comments	VOA: Cl⁻ ng		
Holding Time	X	X pH	
Comments			
Temperature		X	X metls
Comments	14°C		
Sufficient Sample Quantity	X		
Comments			

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

ADIRONDACK: ELAP ID: 10709

F20602007

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:			STD OTHER
PROJECT NAME/SITE NAME:		ATTN:	Kate Hansen	ATTN: Meridith Dillman	☐ 1 ☐ 2 ☐ 3 ☒ 5 ☐
		COMMENTS:	Please email results to khansen@paradigmenv.com and reporting@paradigmenv.com	Date Due: 6/9	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	Alkalinity	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/29/15	14:35		X	152140-02	W	1	X	001	
2										
3										
4										
5										
6										
7										
8										
9										
10										

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☑	N ☐
Comments: NOT ACES		
Preservation:	Y ☑	N ☐
Comments:		
Holding Time:	Y ☑	N ☐
Comments:		
Temperature: 4°C	Y ☑	N ☐
Comments:		

Client

Sampled By: [signature] Date/Time: 6/1/15 16:00

Relinquished By Date/Time

Total Cost:

Received By: K. Miller Date/Time: 6.2.15 9:58a

Received @ Lab By Date/Time

P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

152513

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Thursday, July 02, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152513

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	152513-01	**Date Sampled:**	6/19/2015
Matrix:	Water	**Date Received:**	6/19/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.15 @ 21.7 C	S.U.		6/19/2015 15:21

Method Reference(s): SM 4500 H+ B

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**338**	ug/L		6/30/2015 16:31
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		6/30/2015 16:31
1,1,2-Trichloroethane	< 5.00	ug/L		6/30/2015 16:31
1,1-Dichloroethane	**67.2**	ug/L		6/30/2015 16:31
1,1-Dichloroethene	**8.40**	ug/L		6/30/2015 16:31
1,2-Dichlorobenzene	< 5.00	ug/L		6/30/2015 16:31
1,2-Dichloroethane	< 5.00	ug/L		6/30/2015 16:31
1,2-Dichloropropane	< 5.00	ug/L		6/30/2015 16:31
1,3-Dichlorobenzene	< 5.00	ug/L		6/30/2015 16:31
1,4-Dichlorobenzene	< 5.00	ug/L		6/30/2015 16:31
2-Butanone	**70.2**	ug/L		6/30/2015 16:31
2-Chloroethyl vinyl Ether	< 25.0	ug/L		6/30/2015 16:31
4-Methyl-2-pentanone	< 12.5	ug/L		6/30/2015 16:31
Acetone	**66.9**	ug/L		6/30/2015 16:31
Benzene	< 2.50	ug/L		6/30/2015 16:31
Bromodichloromethane	< 5.00	ug/L		6/30/2015 16:31
Bromoform	< 12.5	ug/L		6/30/2015 16:31
Bromomethane	< 5.00	ug/L		6/30/2015 16:31
Carbon Tetrachloride	< 5.00	ug/L		6/30/2015 16:31
Chlorobenzene	< 5.00	ug/L		6/30/2015 16:31
Chloroethane	**8.05**	ug/L		6/30/2015 16:31
Chloroform	< 5.00	ug/L		6/30/2015 16:31
Chloromethane	< 5.00	ug/L		6/30/2015 16:31

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152513

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 152513-01 **Date Sampled:** 6/19/2015
Matrix: Water **Date Received:** 6/19/2015

cis-1,3-Dichloropropene	< 5.00	ug/L	6/30/2015	16:31
Dibromochloromethane	< 5.00	ug/L	6/30/2015	16:31
Ethylbenzene	< 5.00	ug/L	6/30/2015	16:31
Methylene chloride	< 12.5	ug/L	6/30/2015	16:31
Tetrachloroethene	< 5.00	ug/L	6/30/2015	16:31
Toluene	**7.26**	ug/L	6/30/2015	16:31
trans-1,2-Dichloroethene	< 5.00	ug/L	6/30/2015	16:31
trans-1,3-Dichloropropene	< 5.00	ug/L	6/30/2015	16:31
Trichloroethene	< 5.00	ug/L	6/30/2015	16:31
Vinyl chloride	**22.7**	ug/L	6/30/2015	16:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**118**	82.3 - 115	*	6/30/2015	16:31
4-Bromofluorobenzene	**91.8**	85.5 - 111		6/30/2015	16:31
Pentafluorobenzene	**100**	91.2 - 107		6/30/2015	16:31
Toluene-D8	**96.0**	90.9 - 108		6/30/2015	16:31

Method Reference(s): EPA 624
Data File: x24231.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

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Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT: City of Rochester		CLIENT:		LAB PROJECT ID: 152513
ADDRESS: 30 Church Street, Room 300B		ADDRESS:		Quotation #:
CITY: Rochester	STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Email: peckd@cityofrochester.gov
PHONE: 428-6884		PHONE:		
ATTN: Dennis Peck		ATTN:		

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/19/2015	1200		X	Effluent	Water	3	X	X								624 Site Specific =VRFA Test Name	01
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																	23°C KRH 6/19/15 1429	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10		please indicate:		please indicate:	

Dennis Peck	6/19/15	Total Cost:
Sampled By	Date/Time	
Relinquished By	6/19/15 1400	
Received By	6/19/15 1400	P.I.F.
Received @ Lab By	6/19/15 1455	

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: CDR

Lab Project ID: 152513

Completed by: KRH

Date: 6/19/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments	P2, 2V		
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	VOA X HCL		X pH
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		X pH
Comments	VOA: Cl⁻ neg		
Holding Time	X VOA	X pH	
Comments			
Temperature		X	
Comments	23°C		
Sufficient Sample Quantity	X		
Comments			

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

City of Rochester

For Lab Project ID

152988

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Wednesday, July 29, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 152988

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 152988-01 **Date Sampled:** 7/17/2015
Matrix: Water **Date Received:** 7/17/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	7.99 @ 21.3 C	S.U.		7/17/2015 14:43

Method Reference(s): SM 4500 H+ B / EPA 9040

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**159**	ug/L		7/29/2015 09:42
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		7/29/2015 09:42
1,1,2-Trichloroethane	< 5.00	ug/L		7/29/2015 09:42
1,1-Dichloroethane	**59.7**	ug/L		7/29/2015 09:42
1,1-Dichloroethene	< 5.00	ug/L		7/29/2015 09:42
1,2-Dichlorobenzene	< 5.00	ug/L		7/29/2015 09:42
1,2-Dichloroethane	< 5.00	ug/L		7/29/2015 09:42
1,2-Dichloropropane	< 5.00	ug/L		7/29/2015 09:42
1,3-Dichlorobenzene	< 5.00	ug/L		7/29/2015 09:42
1,4-Dichlorobenzene	< 5.00	ug/L		7/29/2015 09:42
2-Butanone	**60.7**	ug/L		7/29/2015 09:42
2-Chloroethyl vinyl Ether	< 25.0	ug/L		7/29/2015 09:42
4-Methyl-2-pentanone	< 12.5	ug/L		7/29/2015 09:42
Acetone	**51.9**	ug/L		7/29/2015 09:42
Benzene	< 2.50	ug/L		7/29/2015 09:42
Bromodichloromethane	< 5.00	ug/L		7/29/2015 09:42
Bromoform	< 12.5	ug/L		7/29/2015 09:42
Bromomethane	< 5.00	ug/L		7/29/2015 09:42
Carbon Tetrachloride	< 5.00	ug/L		7/29/2015 09:42
Chlorobenzene	< 5.00	ug/L		7/29/2015 09:42
Chloroethane	**6.43**	ug/L		7/29/2015 09:42
Chloroform	< 5.00	ug/L		7/29/2015 09:42
Chloromethane	< 5.00	ug/L		7/29/2015 09:42

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ENVIRONMENTAL SERVICES, INC.

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cis-1,3-Dichloropropene	< 5.00	ug/L	7/29/2015	09:42
Dibromochloromethane	< 5.00	ug/L	7/29/2015	09:42
Ethylbenzene	< 5.00	ug/L	7/29/2015	09:42
Methylene chloride	< 12.5	ug/L	7/29/2015	09:42
Tetrachloroethene	< 5.00	ug/L	7/29/2015	09:42
Toluene	< 5.00	ug/L	7/29/2015	09:42
trans-1,2-Dichloroethene	< 5.00	ug/L	7/29/2015	09:42
trans-1,3-Dichloropropene	< 5.00	ug/L	7/29/2015	09:42
Trichloroethene	< 5.00	ug/L	7/29/2015	09:42
Vinyl chloride	**16.7**	ug/L	7/29/2015	09:42

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**103**	81.1 - 116		7/29/2015	09:42
4-Bromofluorobenzene	**93.2**	82.3 - 113		7/29/2015	09:42
Pentafluorobenzene	**100**	91.1 - 110		7/29/2015	09:42
Toluene-D8	**98.7**	91.4 - 106		7/29/2015	09:42

Method Reference(s): EPA 624
Data File: x25005.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
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All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

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Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

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Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: City of Rochester	CLIENT:	LAB PROJECT ID: 152988
ADDRESS: 30 Church Street, Room 300B	ADDRESS:	
CITY: Rochester STATE: NY ZIP 14614	CITY: STATE: ZIP:	Quotation #:
PHONE: 428-6884	PHONE:	Email: peckd@cityofrochester.gov
ATTN: Dennis Peck	ATTN:	

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	7/17/2015	1115		X	Effluent	Water	3	X	X	624 Site Specific =VRFA Test Name	01
2											
3											
4											
5											
6											
7											
8											
9											
10											

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10		please indicate:		please indicate:	

Dennis Peck	7/17/15	Total Cost:
Sampled By	Date/Time	
Dennis M Peck	7/17/15 1136	
Relinquished By	Date/Time	
R Hansen	7/17/15 1140	
Received By	Date/Time	P.I.F.
	7/17/15 13:14	
Received @ Lab By	Date/Time	

21°C 7/17/15 13:12

See additional page for sample conditions.

Chain of Custody Supplement

Client: City of Rochester Completed by: Glenn Pezzulo

Lab Project ID: 152988 Date: 7/17/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X VOA		X
Comments			
Preservation	X VOA		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		X
Comments	624 VOA: Cl⁻ neg		
Holding Time	X	X pH	
Comments			
Temperature		X	
Comments	21°C		
Sufficient Sample Quantity	X		
Comments			

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

153519

Referencing

RFA Quarterly sampling DEQ - 98045

Prepared

Tuesday, September 01, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153519

Client: **City of Rochester**

Project Reference: RFA Quarterly sampling DEQ - 98045

Sample Identifier: Effluent
Lab Sample ID: 153519-01 **Date Sampled:** 8/21/2015
Matrix: Water **Date Received:** 8/21/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**0.0115**	mg/L	D	8/25/2015 17:44
Cadmium	< 0.00250	mg/L		8/24/2015 19:22
Chromium	< 0.00500	mg/L		8/24/2015 19:22
Copper	< 0.0125	mg/L		8/24/2015 19:22
Lead	< 0.00500	mg/L		8/25/2015 17:44
Nickel	< 0.0200	mg/L		8/24/2015 19:22
Selenium	**0.00750**	mg/L	D	8/25/2015 17:44
Zinc	< 0.0300	mg/L		8/24/2015 19:22

Method Reference(s): EPA 200.7
Preparation Date: 8/21/2015
Data File: 082515c

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		8/26/2015 14:40
4,4-DDE	< 0.100	ug/L		8/26/2015 14:40
4,4-DDT	< 0.100	ug/L		8/26/2015 14:40
Aldrin	< 0.100	ug/L		8/26/2015 14:40
alpha-BHC	< 0.100	ug/L		8/26/2015 14:40
beta-BHC	< 0.100	ug/L		8/26/2015 14:40
cis-Chlordane	< 0.100	ug/L		8/26/2015 14:40
delta-BHC	< 0.100	ug/L		8/26/2015 14:40
Dieldrin	< 0.100	ug/L		8/26/2015 14:40
Endosulfan I	< 0.100	ug/L		8/26/2015 14:40
Endosulfan II	< 0.100	ug/L		8/26/2015 14:40
Endosulfan Sulfate	< 0.100	ug/L		8/26/2015 14:40
Endrin	< 0.100	ug/L		8/26/2015 14:40
Endrin Aldehyde	< 0.100	ug/L		8/26/2015 14:40
gamma-BHC (Lindane)	< 0.100	ug/L		8/26/2015 14:40
Heptachlor	< 0.100	ug/L		8/26/2015 14:40

Sample Identifier: Effluent
Lab Sample ID: 153519-01 **Date Sampled:** 8/21/2015
Matrix: Water **Date Received:** 8/21/2015

Heptachlor Epoxide	< 0.100	ug/L		8/26/2015 14:40
Methoxychlor	< 0.100	ug/L		8/26/2015 14:40
Toxaphene	< 1.00	ug/L		8/26/2015 14:40
trans-Chlordane	< 0.100	ug/L		8/26/2015 14:40

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**78.9**	38.2 - 137		8/26/2015 14:40
Tetrachloro-m-xylene (1)	**45.0**	3.3 - 102.2		8/26/2015 14:40

Method Reference(s): EPA 608
Preparation Date: 8/26/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	7.94 @ 22.2 C	S.U.		8/27/2015 14:25

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Semi-Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
3&4-Methylphenol	< 10.0	ug/L		8/25/2015 21:03
Bis (2-ethylhexyl) phthalate	< 10.0	ug/L		8/25/2015 21:03
Diethyl phthalate	< 10.0	ug/L		8/25/2015 21:03

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**83.7**	27.3 - 103		8/25/2015 21:03
Nitrobenzene-d5	**80.7**	47.5 - 103		8/25/2015 21:03
Terphenyl-d14	**98.1**	53.4 - 113		8/25/2015 21:03

Method Reference(s): EPA 625
Preparation Date: 8/25/2015
Data File: B07193.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**110**	ug/L		8/26/2015 21:06
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		8/26/2015 21:06
1,1,2-Trichloroethane	< 2.00	ug/L		8/26/2015 21:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153519

Client: **City of Rochester**

Project Reference: RFA Quarterly sampling DEQ - 98045

Sample Identifier:	Effluent		
Lab Sample ID:	153519-01	**Date Sampled:**	8/21/2015
Matrix:	Water	**Date Received:**	8/21/2015

1,1-Dichloroethane	**82.9**	ug/L	8/26/2015 21:06
1,1-Dichloroethene	**3.32**	ug/L	8/26/2015 21:06
1,2-Dichlorobenzene	< 2.00	ug/L	8/26/2015 21:06
1,2-Dichloroethane	< 2.00	ug/L	8/26/2015 21:06
1,2-Dichloropropane	< 2.00	ug/L	8/26/2015 21:06
1,3-Dichlorobenzene	< 2.00	ug/L	8/26/2015 21:06
1,4-Dichlorobenzene	< 2.00	ug/L	8/26/2015 21:06
2-Butanone	**52.8**	ug/L	8/26/2015 21:06
2-Chloroethyl vinyl Ether	< 10.0	ug/L	8/26/2015 21:06
4-Methyl-2-pentanone	< 5.00	ug/L	8/26/2015 21:06
Acetone	**33.4**	ug/L	8/26/2015 21:06
Benzene	< 1.00	ug/L	8/26/2015 21:06
Bromodichloromethane	< 2.00	ug/L	8/26/2015 21:06
Bromoform	< 5.00	ug/L	8/26/2015 21:06
Bromomethane	< 2.00	ug/L	8/26/2015 21:06
Carbon Tetrachloride	< 2.00	ug/L	8/26/2015 21:06
Chlorobenzene	< 2.00	ug/L	8/26/2015 21:06
Chloroethane	**5.08**	ug/L	8/26/2015 21:06
Chloroform	< 2.00	ug/L	8/26/2015 21:06
Chloromethane	< 2.00	ug/L	8/26/2015 21:06
cis-1,3-Dichloropropene	< 2.00	ug/L	8/26/2015 21:06
Dibromochloromethane	< 2.00	ug/L	8/26/2015 21:06
Ethylbenzene	< 2.00	ug/L	8/26/2015 21:06
Methylene chloride	< 5.00	ug/L	8/26/2015 21:06
Tetrachloroethene	< 2.00	ug/L	8/26/2015 21:06
Toluene	**3.79**	ug/L	8/26/2015 21:06
trans-1,2-Dichloroethene	< 2.00	ug/L	8/26/2015 21:06
trans-1,3-Dichloropropene	< 2.00	ug/L	8/26/2015 21:06
Trichloroethene	< 2.00	ug/L	8/26/2015 21:06
Vinyl chloride	**12.1**	ug/L	8/26/2015 21:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153519

Client: **City of Rochester**

Project Reference: RFA Quarterly sampling DEQ - 98045

Sample Identifier: Effluent
Lab Sample ID: 153519-01 **Date Sampled:** 8/21/2015
Matrix: Water **Date Received:** 8/21/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**109**	81.1 - 116		8/26/2015 21:06
4-Bromofluorobenzene	**87.9**	82.3 - 113		8/26/2015 21:06
Pentafluorobenzene	**99.9**	91.1 - 110		8/26/2015 21:06
Toluene-D8	**95.5**	91.4 - 106		8/26/2015 21:06

Method Reference(s): EPA 624
Data File: x25700.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153519

Client: **City of Rochester**

Project Reference: RFA Quarterly sampling DEQ - 98045

Sample Identifier: Influent
Lab Sample ID: 153519-02 **Date Sampled:** 8/21/2015
Matrix: Water **Date Received:** 8/21/2015

Total Alkalinity

Analyte	Result	Units	Qualifier	Date Analyzed
Alkalinity, Total	**430**	mg/L		8/31/2015

Method Reference(s): SM 2320 B
Subcontractor ELAP ID: 10142

Total Hardness

Analyte	Result	Units	Qualifier	Date Analyzed
Hardness, Total	**625**	mg/L		8/24/2015 19:35

Method Reference(s): EPA 200.7
Preparation Date: 8/21/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**0.00880**	mg/L		8/25/2015 17:57
Cadmium	< 0.00250	mg/L		8/24/2015 19:35
Chromium	**2.21**	mg/L		8/24/2015 19:35
Copper	< 0.0125	mg/L		8/24/2015 19:35
Lead	< 0.00500	mg/L		8/25/2015 17:57
Nickel	**0.333**	mg/L		8/24/2015 19:35
Selenium	**0.00830**	mg/L		8/25/2015 17:57
Zinc	< 0.0300	mg/L		8/24/2015 19:35

Method Reference(s): EPA 200.7
Preparation Date: 8/21/2015
Data File: 082515c

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	< 0.100	ug/L		8/26/2015 16:47
4,4-DDE	**0.110**	ug/L		8/26/2015 16:47
4,4-DDT	< 0.100	ug/L		8/26/2015 16:47
Aldrin	< 0.100	ug/L		8/26/2015 16:47
alpha-BHC	< 0.100	ug/L		8/26/2015 16:47

Sample Identifier: Influent
Lab Sample ID: 153519-02 **Date Sampled:** 8/21/2015
Matrix: Water **Date Received:** 8/21/2015

beta-BHC	< 0.100	ug/L		8/26/2015 16:47
cis-Chlordane	< 0.100	ug/L		8/26/2015 16:47
delta-BHC	< 0.100	ug/L		8/26/2015 16:47
Dieldrin	< 0.100	ug/L		8/26/2015 16:47
Endosulfan I	< 0.100	ug/L		8/26/2015 16:47
Endosulfan II	< 0.100	ug/L		8/26/2015 16:47
Endosulfan Sulfate	< 0.100	ug/L		8/26/2015 16:47
Endrin	< 0.100	ug/L		8/26/2015 16:47
Endrin Aldehyde	< 0.100	ug/L		8/26/2015 16:47
gamma-BHC (Lindane)	< 0.100	ug/L		8/26/2015 16:47
Heptachlor	< 0.100	ug/L		8/26/2015 16:47
Heptachlor Epoxide	< 0.100	ug/L		8/26/2015 16:47
Methoxychlor	< 0.100	ug/L		8/26/2015 16:47
Toxaphene	< 1.00	ug/L		8/26/2015 16:47
trans-Chlordane	< 0.100	ug/L		8/26/2015 16:47

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl (1)	**73.0**	38.2 - 137		8/26/2015 16:47
Tetrachloro-m-xylene (1)	**36.9**	3.3 - 102.2		8/26/2015 16:47

Method Reference(s): EPA 608
Preparation Date: 8/26/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	7.00 @ 22.5 C	S.U.		8/27/2015 14:25

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**6080**	ug/L		8/26/2015 21:29
1,1,2,2-Tetrachloroethane	< 200	ug/L		8/26/2015 21:29
1,1,2-Trichloroethane	< 200	ug/L		8/26/2015 21:29
1,1-Dichloroethane	**4520**	ug/L		8/26/2015 21:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153519

Client: **City of Rochester**

Project Reference: RFA Quarterly sampling DEQ - 98045

Sample Identifier:	Influent		
Lab Sample ID:	153519-02	**Date Sampled:**	8/21/2015
Matrix:	Water	**Date Received:**	8/21/2015

1,1-Dichloroethene	< 200	ug/L	8/26/2015	21:29
1,2-Dichlorobenzene	< 200	ug/L	8/26/2015	21:29
1,2-Dichloroethane	< 200	ug/L	8/26/2015	21:29
1,2-Dichloropropane	< 200	ug/L	8/26/2015	21:29
1,3-Dichlorobenzene	< 200	ug/L	8/26/2015	21:29
1,4-Dichlorobenzene	< 200	ug/L	8/26/2015	21:29
2-Butanone	< 1000	ug/L	8/26/2015	21:29
2-Chloroethyl vinyl Ether	< 1000	ug/L	8/26/2015	21:29
4-Methyl-2-pentanone	< 500	ug/L	8/26/2015	21:29
Acetone	< 1000	ug/L	8/26/2015	21:29
Benzene	< 100	ug/L	8/26/2015	21:29
Bromodichloromethane	< 200	ug/L	8/26/2015	21:29
Bromoform	< 500	ug/L	8/26/2015	21:29
Bromomethane	< 200	ug/L	8/26/2015	21:29
Carbon Tetrachloride	< 200	ug/L	8/26/2015	21:29
Chlorobenzene	< 200	ug/L	8/26/2015	21:29
Chloroethane	**253**	ug/L	8/26/2015	21:29
Chloroform	< 200	ug/L	8/26/2015	21:29
Chloromethane	< 200	ug/L	8/26/2015	21:29
cis-1,3-Dichloropropene	< 200	ug/L	8/26/2015	21:29
Dibromochloromethane	< 200	ug/L	8/26/2015	21:29
Ethylbenzene	< 200	ug/L	8/26/2015	21:29
Methylene chloride	< 500	ug/L	8/26/2015	21:29
Tetrachloroethene	< 200	ug/L	8/26/2015	21:29
Toluene	**595**	ug/L	8/26/2015	21:29
trans-1,2-Dichloroethene	< 200	ug/L	8/26/2015	21:29
trans-1,3-Dichloropropene	< 200	ug/L	8/26/2015	21:29
Trichloroethene	< 200	ug/L	8/26/2015	21:29
Vinyl chloride	**1130**	ug/L	8/26/2015	21:29

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153519

Client: **City of Rochester**

Project Reference: RFA Quarterly sampling DEQ - 98045

Sample Identifier: Influent
Lab Sample ID: 153519-02 **Date Sampled:** 8/21/2015
Matrix: Water **Date Received:** 8/21/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**108**	81.1 - 116		8/26/2015 21:29
4-Bromofluorobenzene	**87.4**	82.3 - 113		8/26/2015 21:29
Pentafluorobenzene	**96.6**	91.1 - 110		8/26/2015 21:29
Toluene-D8	**90.9**	91.4 - 106	*	8/26/2015 21:29

Method Reference(s): EPA 624
Data File: x25701.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	City of Rochester	CLIENT:		LAB PROJECT ID: 153519
ADDRESS:	30 Church Street, Room 300B	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Quotation #:
PHONE:	428-6884	PHONE:		Email: peckd@cityofrochester.gov
ATTN:	Dennis Peck	ATTN:		

PROJECT REFERENCE

RFA Quarterly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	625 Site Specific	608 Pesticides	Metals*	pH	Alkalinity	Hardness				REMARKS	PARADIGM LAB SAMPLE NUMBER
1	8/21/2015	1040		X	Effluent	Water	6	X	X	X	X	X						624 Site Specific =VRFA Test Name	01
2	8/21/2015	1155		X	Influent	Water	7	X		X	X	X	X	X				625 Site Specific = SMISC	02
3																		**SVOA List:**	
4																		Diethyl phthalate	
5																		Bis (2-ehtylhexyl) phthalate	
6																		4 Methylphenol (p cresol)	
7																		**Metals list:**	
8																		As, Cd, Cr, Cu, Pb, Ni, Se, Zn	
9																		**Alkalinity sample with No headspace.**	
10																		20°C 8/21/15 1255 hw	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate:	10	please indicate:		please indicate:	

Sampled By: Dennis Peck	Date/Time: 8/21/15	Total Cost:
Relinquished By: Dennis Peck	Date/Time: 8/21/15 1246	
Received By:	Date/Time: 8/21/15 1247	P.I.F.
Received @ Lab By: KRL Larsen	Date/Time: 8/21/15 1338	

See additional page for sample conditions.

Chain of Custody Supplement

Client: COR **Completed by:** KRH

Lab Project ID: 153519 **Date:** 8/21/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X	X Alk	
Comments	Sample transferred to make it no headspace		
Preservation	Metals VOA X		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)	6008 X		X
Comments	VOA: Cl⁻ neg.		
Holding Time	X	X pH	
Comments			
Temperature		X	
Comments	20°C		
Sufficient Sample Quantity	X		
Comments			

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1 of 1

CHAIN OF COSTODY 94322-3

ENVIROTEST: ELAP ID: 10142

PARADIGM

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:		ADDRESS:			
CITY: STATE: ZIP:		CITY: STATE: ZIP:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:		PHONE: FAX:		☐ 1 ☐ 2 ☐ 3 ☐ 5 (STD)	☐ OTHER
ATTN:	Kate Hansen	ATTN:	Meridith Dillman		
COMMENTS:	Please email results to khansen@paradigmenv.com and reporting@paradigmenv.com			Date Due:	

PROJECT NAME/SITE NAME:

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	T. Alkalinity	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	8/21	1155			153519-02	W	1	X		
2										
3										
4										
5										
6										
7										
8										
9										
10										

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type: Comments:	Y ☑ N ☐
Preservation: Comments:	Y ☑ N ☐
Holding Time: Comments:	Y ☑ N ☐
Temperature: Comments: 6.8°C on ice	Y ☑ N ☐

Client

		Date/Time	
Sampled By	KRHansen	8/24/15 1600	Total Cost:
Relinquished By		Date/Time	
Received By	A Elmendorf ETL	8-25-15 0951	P.I.F.
Received @ Lab By		Date/Time	

custody seal intact

Page 8 of 9

09/01/2015

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

154083

Referencing

RFA

Prepared

Tuesday, October 06, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154083

Client: **City of Rochester**

Project Reference: RFA

Sample Identifier:	Effluent		
Lab Sample ID:	154083-01	**Date Sampled:**	9/28/2015
Matrix:	Water	**Date Received:**	9/28/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.35 @ 21.4 C	S.U.		9/18/2015 16:15

Method Reference(s): SM 4500 H+ B

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 5.00	ug/L		10/1/2015 19:49
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		10/1/2015 19:49
1,1,2-Trichloroethane	< 5.00	ug/L		10/1/2015 19:49
1,1-Dichloroethane	**8.96**	ug/L		10/1/2015 19:49
1,1-Dichloroethene	< 5.00	ug/L		10/1/2015 19:49
1,2-Dichlorobenzene	< 5.00	ug/L		10/1/2015 19:49
1,2-Dichloroethane	< 5.00	ug/L		10/1/2015 19:49
1,2-Dichloropropane	< 5.00	ug/L		10/1/2015 19:49
1,3-Dichlorobenzene	< 5.00	ug/L		10/1/2015 19:49
1,4-Dichlorobenzene	< 5.00	ug/L		10/1/2015 19:49
2-Butanone	**51.3**	ug/L		10/1/2015 19:49
2-Chloroethyl vinyl Ether	< 25.0	ug/L		10/1/2015 19:49
4-Methyl-2-pentanone	< 12.5	ug/L		10/1/2015 19:49
Acetone	**28.4**	ug/L		10/1/2015 19:49
Benzene	< 2.50	ug/L		10/1/2015 19:49
Bromodichloromethane	< 5.00	ug/L		10/1/2015 19:49
Bromoform	< 12.5	ug/L		10/1/2015 19:49
Bromomethane	< 5.00	ug/L		10/1/2015 19:49
Carbon Tetrachloride	< 5.00	ug/L		10/1/2015 19:49
Chlorobenzene	< 5.00	ug/L		10/1/2015 19:49
Chloroethane	< 5.00	ug/L		10/1/2015 19:49
Chloroform	< 5.00	ug/L		10/1/2015 19:49
Chloromethane	< 5.00	ug/L		10/1/2015 19:49

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154083

Client: **City of Rochester**

Project Reference: RFA

Sample Identifier: Effluent
Lab Sample ID: 154083-01 **Date Sampled:** 9/28/2015
Matrix: Water **Date Received:** 9/28/2015

cis-1,3-Dichloropropene	< 5.00	ug/L	10/1/2015	19:49
Dibromochloromethane	< 5.00	ug/L	10/1/2015	19:49
Ethylbenzene	< 5.00	ug/L	10/1/2015	19:49
Methylene chloride	< 12.5	ug/L	10/1/2015	19:49
Tetrachloroethene	< 5.00	ug/L	10/1/2015	19:49
Toluene	< 5.00	ug/L	10/1/2015	19:49
trans-1,2-Dichloroethene	< 5.00	ug/L	10/1/2015	19:49
trans-1,3-Dichloropropene	< 5.00	ug/L	10/1/2015	19:49
Trichloroethene	< 5.00	ug/L	10/1/2015	19:49
Vinyl chloride	< 5.00	ug/L	10/1/2015	19:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**99.4**	81.1 - 124		10/1/2015	19:49
4-Bromofluorobenzene	**103**	79.8 - 114		10/1/2015	19:49
Pentafluorobenzene	**103**	91.1 - 111		10/1/2015	19:49
Toluene-D8	**102**	90.7 - 107		10/1/2015	19:49

Method Reference(s): EPA 624
Data File: x26649.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

PARADIGM

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
CLIENT: City of Rochester	CLIENT:	LAB PROJECT ID 154083
ADDRESS:	ADDRESS:	
CITY: STATE: ZIP:	CITY: STATE: ZIP:	Quotation #:
PHONE:	PHONE:	Email: peckd@cityofrochester.gov
ATTN: Dennis Peck	ATTN:	

PROJECT REFERENCE: RFA

Matrix Codes:
AQ - Aqueous Liquid, NQ - Non-Aqueous Liquid, WA - Water, WG - Groundwater, DW - Drinking Water, WW - Wastewater, SO - Soil, SL - Sludge, SD - Solid, PT - Paint, WP - Wipe, CK - Caulk, OL - Oil, AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 site spec.	pH	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	9/28/15	1515		X	Effluent	WG	3	X	X		01
2						per City sample is WW					
3						MM 9/28/15					
4											
5											
6											
7											
8											
9											
10										20°C 9/28/15 1611 hrs	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other please indicate: 10	☒	Other please indicate:	☐	Other EDD please indicate:	☐

		Date/Time
Sampled By	Dennis Peck	9/28/15
Relinquished By	Dennis M Peck	9/28/15 1605
Received By	Jane J Daloia	9/28/15 1605
Received @ Lab By	Molly Vail	9/28/15 1615

Total Cost:

P.I.F.

Chain of Custody Supplement

Client: City of Roch **Completed by:** Molly Gail

Lab Project ID: 154053 **Date:** 9/28/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		X pH
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		X pH
Comments	VOA: Cl – neg.		
Holding Time	X	X pH	
Comments			
Temperature		X	
Comments	20°C 9/28/15 1611		
Sufficient Sample Quantity	X		
Comments			

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

154470

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Tuesday, November 03, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154470

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	154470-01	**Date Sampled:**	10/22/2015
Matrix:	Water	**Date Received:**	10/22/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.13 @ 17.5 C	S.U.		10/22/2015 18:35

Method Reference(s): SM 4500 H+ B

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 5.00	ug/L		10/30/2015 22:08
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		10/30/2015 22:08
1,1,2-Trichloroethane	< 5.00	ug/L		10/30/2015 22:08
1,1-Dichloroethane	**10.7**	ug/L		10/30/2015 22:08
1,1-Dichloroethene	< 5.00	ug/L		10/30/2015 22:08
1,2-Dichlorobenzene	< 5.00	ug/L		10/30/2015 22:08
1,2-Dichloroethane	< 5.00	ug/L		10/30/2015 22:08
1,2-Dichloropropane	< 5.00	ug/L		10/30/2015 22:08
1,3-Dichlorobenzene	< 5.00	ug/L		10/30/2015 22:08
1,4-Dichlorobenzene	< 5.00	ug/L		10/30/2015 22:08
2-Butanone	**50.1**	ug/L		10/30/2015 22:08
2-Chloroethyl vinyl Ether	< 25.0	ug/L		10/30/2015 22:08
4-Methyl-2-pentanone	< 12.5	ug/L		10/30/2015 22:08
Acetone	**31.0**	ug/L		10/30/2015 22:08
Benzene	< 2.50	ug/L		10/30/2015 22:08
Bromodichloromethane	< 5.00	ug/L		10/30/2015 22:08
Bromoform	< 12.5	ug/L		10/30/2015 22:08
Bromomethane	< 5.00	ug/L		10/30/2015 22:08
Carbon Tetrachloride	< 5.00	ug/L		10/30/2015 22:08
Chlorobenzene	< 5.00	ug/L		10/30/2015 22:08
Chloroethane	< 5.00	ug/L		10/30/2015 22:08
Chloroform	< 5.00	ug/L		10/30/2015 22:08
Chloromethane	< 5.00	ug/L		10/30/2015 22:08

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154470

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 154470-01 **Date Sampled:** 10/22/2015
Matrix: Water **Date Received:** 10/22/2015

cis-1,3-Dichloropropene	< 5.00	ug/L		10/30/2015 22:08
Dibromochloromethane	< 5.00	ug/L		10/30/2015 22:08
Ethylbenzene	< 5.00	ug/L		10/30/2015 22:08
Methylene chloride	< 12.5	ug/L		10/30/2015 22:08
Tetrachloroethene	< 5.00	ug/L		10/30/2015 22:08
Toluene	< 5.00	ug/L		10/30/2015 22:08
trans-1,2-Dichloroethene	< 5.00	ug/L		10/30/2015 22:08
trans-1,3-Dichloropropene	< 5.00	ug/L		10/30/2015 22:08
Trichloroethene	< 5.00	ug/L		10/30/2015 22:08
Vinyl chloride	< 5.00	ug/L		10/30/2015 22:08

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**105**	81.1 - 124		10/30/2015 22:08
4-Bromofluorobenzene	**89.5**	79.8 - 114		10/30/2015 22:08
Pentafluorobenzene	**95.9**	91.1 - 111		10/30/2015 22:08
Toluene-D8	**94.9**	90.7 - 107		10/30/2015 22:08

Method Reference(s): EPA 624
Data File: x27262.D

Analytical Report Appendix

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"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
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Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

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Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM

REPORT TO:		INVOICE TO:		
CLIENT: City of Rochester		CLIENT:		LAB PROJECT ID: 154470
ADDRESS: 30 Church Street, Room 300B		ADDRESS:		
CITY: Rochester	STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Quotation #:
PHONE: 428-6884		PHONE:		Email: peckd@cityofrochester.gov
ATTN: Dennis Peck		ATTN:		

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	10/22/2015	1315		X	Effluent	Water	3	X	X								624 Site Specific =VRFA Test Name	01
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10		please indicate:		please indicate:	

Sampled By: Dennis Peck — Date/Time: 10/22/15

Relinquished By: Dennis M Peck — Date/Time: 10/22/15 1440

Received By: [signature] — Date/Time: 10/22/15 1440

Received @ Lab By: [signature] — Date/Time: 10/22/15 16:48

19°C 10/22/15 14:40

Total Cost:

P.I.F.

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: City of Rochester **Completed by:** Glenn Pezzulo

Lab Project ID: 154470 **Date:** 10/22/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X VOA		X
Comments			
Preservation	X VOA		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X pH
Comments	VOA 624: Neg		
Holding Time	X	X pH	
Comments			
Temperature		X	
Comments	19°C		
Sufficient Sample Quantity	X		
Comments			

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

154642

Referencing

RFA Semi-Annual GW Sampling DEQ-98045

Prepared

Monday, November 09, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 6I		
Lab Sample ID:	154642-01	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/6/2015 02:11
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/6/2015 02:11
1,1,2-Trichloroethane	< 2.00	ug/L		11/6/2015 02:11
1,1-Dichloroethane	< 2.00	ug/L		11/6/2015 02:11
1,1-Dichloroethene	< 2.00	ug/L		11/6/2015 02:11
1,2-Dichlorobenzene	< 2.00	ug/L		11/6/2015 02:11
1,2-Dichloroethane	< 2.00	ug/L		11/6/2015 02:11
1,2-Dichloropropane	< 2.00	ug/L		11/6/2015 02:11
1,3-Dichlorobenzene	< 2.00	ug/L		11/6/2015 02:11
1,4-Dichlorobenzene	< 2.00	ug/L		11/6/2015 02:11
2-Chloroethyl vinyl Ether	< 10.0	ug/L		11/6/2015 02:11
Benzene	< 1.00	ug/L		11/6/2015 02:11
Bromodichloromethane	< 2.00	ug/L		11/6/2015 02:11
Bromoform	< 5.00	ug/L		11/6/2015 02:11
Bromomethane	< 2.00	ug/L		11/6/2015 02:11
Carbon Tetrachloride	< 2.00	ug/L		11/6/2015 02:11
Chlorobenzene	< 2.00	ug/L		11/6/2015 02:11
Chloroethane	< 2.00	ug/L		11/6/2015 02:11
Chloroform	< 2.00	ug/L		11/6/2015 02:11
Chloromethane	< 2.00	ug/L		11/6/2015 02:11
cis-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 02:11
Dibromochloromethane	< 2.00	ug/L		11/6/2015 02:11
Ethylbenzene	< 2.00	ug/L		11/6/2015 02:11
Methyl tert-butyl Ether	< 2.00	ug/L		11/6/2015 02:11
Methylene chloride	< 5.00	ug/L		11/6/2015 02:11
Tetrachloroethene	< 2.00	ug/L		11/6/2015 02:11
Toluene	< 2.00	ug/L		11/6/2015 02:11
trans-1,2-Dichloroethene	< 2.00	ug/L		11/6/2015 02:11
trans-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 02:11

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 6I

Lab Sample ID: 154642-01 **Date Sampled:** 11/3/2015

Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 2.00	ug/L		11/6/2015 02:11
Trichlorofluoromethane	< 2.00	ug/L		11/6/2015 02:11
Vinyl chloride	**3.20**	ug/L		11/6/2015 02:11

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**102**	81.1 - 124		11/6/2015 02:11
4-Bromofluorobenzene	**94.7**	79.8 - 114		11/6/2015 02:11
Pentafluorobenzene	**98.6**	91.1 - 111		11/6/2015 02:11
Toluene-D8	**97.1**	90.7 - 107		11/6/2015 02:11

Method Reference(s): EPA 624

Data File: x27402.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 7I		
Lab Sample ID:	154642-02	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**555**	ug/L		11/6/2015 02:34
1,1,2,2-Tetrachloroethane	< 10.0	ug/L		11/6/2015 02:34
1,1,2-Trichloroethane	< 10.0	ug/L		11/6/2015 02:34
1,1-Dichloroethane	**662**	ug/L		11/6/2015 02:34
1,1-Dichloroethene	**37.3**	ug/L		11/6/2015 02:34
1,2-Dichlorobenzene	< 10.0	ug/L		11/6/2015 02:34
1,2-Dichloroethane	< 10.0	ug/L		11/6/2015 02:34
1,2-Dichloropropane	< 10.0	ug/L		11/6/2015 02:34
1,3-Dichlorobenzene	< 10.0	ug/L		11/6/2015 02:34
1,4-Dichlorobenzene	< 10.0	ug/L		11/6/2015 02:34
2-Chloroethyl vinyl Ether	< 50.0	ug/L		11/6/2015 02:34
Benzene	< 5.00	ug/L		11/6/2015 02:34
Bromodichloromethane	< 10.0	ug/L		11/6/2015 02:34
Bromoform	< 25.0	ug/L		11/6/2015 02:34
Bromomethane	< 10.0	ug/L		11/6/2015 02:34
Carbon Tetrachloride	< 10.0	ug/L		11/6/2015 02:34
Chlorobenzene	< 10.0	ug/L		11/6/2015 02:34
Chloroethane	< 10.0	ug/L		11/6/2015 02:34
Chloroform	< 10.0	ug/L		11/6/2015 02:34
Chloromethane	< 10.0	ug/L		11/6/2015 02:34
cis-1,3-Dichloropropene	< 10.0	ug/L		11/6/2015 02:34
Dibromochloromethane	< 10.0	ug/L		11/6/2015 02:34
Ethylbenzene	< 10.0	ug/L		11/6/2015 02:34
Methyl tert-butyl Ether	< 10.0	ug/L		11/6/2015 02:34
Methylene chloride	< 25.0	ug/L		11/6/2015 02:34
Tetrachloroethene	< 10.0	ug/L		11/6/2015 02:34
Toluene	**11.6**	ug/L		11/6/2015 02:34
trans-1,2-Dichloroethene	**11.0**	ug/L		11/6/2015 02:34
trans-1,3-Dichloropropene	< 10.0	ug/L		11/6/2015 02:34

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 7I

Lab Sample ID: 154642-02 **Date Sampled:** 11/3/2015

Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 10.0	ug/L	11/6/2015	02:34
Trichlorofluoromethane	< 10.0	ug/L	11/6/2015	02:34
Vinyl chloride	**180**	ug/L	11/6/2015	02:34

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**104**	81.1 - 124		11/6/2015	02:34
4-Bromofluorobenzene	**95.7**	79.8 - 114		11/6/2015	02:34
Pentafluorobenzene	**99.4**	91.1 - 111		11/6/2015	02:34
Toluene-D8	**96.4**	90.7 - 107		11/6/2015	02:34

Method Reference(s): EPA 624

Data File: x27403.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 7D		
Lab Sample ID:	154642-03	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/6/2015 02:57
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/6/2015 02:57
1,1,2-Trichloroethane	< 2.00	ug/L		11/6/2015 02:57
1,1-Dichloroethane	< 2.00	ug/L		11/6/2015 02:57
1,1-Dichloroethene	< 2.00	ug/L		11/6/2015 02:57
1,2-Dichlorobenzene	< 2.00	ug/L		11/6/2015 02:57
1,2-Dichloroethane	< 2.00	ug/L		11/6/2015 02:57
1,2-Dichloropropane	< 2.00	ug/L		11/6/2015 02:57
1,3-Dichlorobenzene	< 2.00	ug/L		11/6/2015 02:57
1,4-Dichlorobenzene	< 2.00	ug/L		11/6/2015 02:57
2-Chloroethyl vinyl Ether	< 10.0	ug/L		11/6/2015 02:57
Benzene	< 1.00	ug/L		11/6/2015 02:57
Bromodichloromethane	< 2.00	ug/L		11/6/2015 02:57
Bromoform	< 5.00	ug/L		11/6/2015 02:57
Bromomethane	< 2.00	ug/L		11/6/2015 02:57
Carbon Tetrachloride	< 2.00	ug/L		11/6/2015 02:57
Chlorobenzene	< 2.00	ug/L		11/6/2015 02:57
Chloroethane	< 2.00	ug/L		11/6/2015 02:57
Chloroform	< 2.00	ug/L		11/6/2015 02:57
Chloromethane	< 2.00	ug/L		11/6/2015 02:57
cis-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 02:57
Dibromochloromethane	< 2.00	ug/L		11/6/2015 02:57
Ethylbenzene	< 2.00	ug/L		11/6/2015 02:57
Methyl tert-butyl Ether	< 2.00	ug/L		11/6/2015 02:57
Methylene chloride	< 5.00	ug/L		11/6/2015 02:57
Tetrachloroethene	< 2.00	ug/L		11/6/2015 02:57
Toluene	< 2.00	ug/L		11/6/2015 02:57
trans-1,2-Dichloroethene	< 2.00	ug/L		11/6/2015 02:57
trans-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 02:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 7D
Lab Sample ID: 154642-03 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 2.00	ug/L		11/6/2015 02:57
Trichlorofluoromethane	< 2.00	ug/L		11/6/2015 02:57
Vinyl chloride	< 2.00	ug/L		11/6/2015 02:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**105**	81.1 - 124		11/6/2015 02:57
4-Bromofluorobenzene	**92.6**	79.8 - 114		11/6/2015 02:57
Pentafluorobenzene	**97.8**	91.1 - 111		11/6/2015 02:57
Toluene-D8	**96.0**	90.7 - 107		11/6/2015 02:57

Method Reference(s): EPA 624
Data File: x27404.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 7S		
Lab Sample ID:	154642-04	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**161**	ug/L		11/6/2015 03:21
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		11/6/2015 03:21
1,1,2-Trichloroethane	< 5.00	ug/L		11/6/2015 03:21
1,1-Dichloroethane	**238**	ug/L		11/6/2015 03:21
1,1-Dichloroethene	< 5.00	ug/L		11/6/2015 03:21
1,2-Dichlorobenzene	< 5.00	ug/L		11/6/2015 03:21
1,2-Dichloroethane	< 5.00	ug/L		11/6/2015 03:21
1,2-Dichloropropane	< 5.00	ug/L		11/6/2015 03:21
1,3-Dichlorobenzene	< 5.00	ug/L		11/6/2015 03:21
1,4-Dichlorobenzene	< 5.00	ug/L		11/6/2015 03:21
2-Chloroethyl vinyl Ether	< 25.0	ug/L		11/6/2015 03:21
Benzene	< 2.50	ug/L		11/6/2015 03:21
Bromodichloromethane	< 5.00	ug/L		11/6/2015 03:21
Bromoform	< 12.5	ug/L		11/6/2015 03:21
Bromomethane	< 5.00	ug/L		11/6/2015 03:21
Carbon Tetrachloride	< 5.00	ug/L		11/6/2015 03:21
Chlorobenzene	< 5.00	ug/L		11/6/2015 03:21
Chloroethane	< 5.00	ug/L		11/6/2015 03:21
Chloroform	< 5.00	ug/L		11/6/2015 03:21
Chloromethane	< 5.00	ug/L		11/6/2015 03:21
cis-1,3-Dichloropropene	< 5.00	ug/L		11/6/2015 03:21
Dibromochloromethane	< 5.00	ug/L		11/6/2015 03:21
Ethylbenzene	< 5.00	ug/L		11/6/2015 03:21
Methyl tert-butyl Ether	< 5.00	ug/L		11/6/2015 03:21
Methylene chloride	< 12.5	ug/L		11/6/2015 03:21
Tetrachloroethene	< 5.00	ug/L		11/6/2015 03:21
Toluene	< 5.00	ug/L		11/6/2015 03:21
trans-1,2-Dichloroethene	< 5.00	ug/L		11/6/2015 03:21
trans-1,3-Dichloropropene	< 5.00	ug/L		11/6/2015 03:21

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 7S

Lab Sample ID: 154642-04 **Date Sampled:** 11/3/2015

Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 5.00	ug/L	11/6/2015	03:21
Trichlorofluoromethane	< 5.00	ug/L	11/6/2015	03:21
Vinyl chloride	< 5.00	ug/L	11/6/2015	03:21

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**103**	81.1 - 124		11/6/2015	03:21
4-Bromofluorobenzene	**94.9**	79.8 - 114		11/6/2015	03:21
Pentafluorobenzene	**97.1**	91.1 - 111		11/6/2015	03:21
Toluene-D8	**95.5**	90.7 - 107		11/6/2015	03:21

Method Reference(s): EPA 624

Data File: x27405.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 8I		
Lab Sample ID:	154642-05	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 5.00	ug/L		11/6/2015 03:44
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		11/6/2015 03:44
1,1,2-Trichloroethane	< 5.00	ug/L		11/6/2015 03:44
1,1-Dichloroethane	< 5.00	ug/L		11/6/2015 03:44
1,1-Dichloroethene	< 5.00	ug/L		11/6/2015 03:44
1,2-Dichlorobenzene	< 5.00	ug/L		11/6/2015 03:44
1,2-Dichloroethane	< 5.00	ug/L		11/6/2015 03:44
1,2-Dichloropropane	< 5.00	ug/L		11/6/2015 03:44
1,3-Dichlorobenzene	< 5.00	ug/L		11/6/2015 03:44
1,4-Dichlorobenzene	< 5.00	ug/L		11/6/2015 03:44
2-Chloroethyl vinyl Ether	< 25.0	ug/L		11/6/2015 03:44
Benzene	< 2.50	ug/L		11/6/2015 03:44
Bromodichloromethane	< 5.00	ug/L		11/6/2015 03:44
Bromoform	< 12.5	ug/L		11/6/2015 03:44
Bromomethane	< 5.00	ug/L		11/6/2015 03:44
Carbon Tetrachloride	< 5.00	ug/L		11/6/2015 03:44
Chlorobenzene	< 5.00	ug/L		11/6/2015 03:44
Chloroethane	< 5.00	ug/L		11/6/2015 03:44
Chloroform	< 5.00	ug/L		11/6/2015 03:44
Chloromethane	< 5.00	ug/L		11/6/2015 03:44
cis-1,3-Dichloropropene	< 5.00	ug/L		11/6/2015 03:44
Dibromochloromethane	< 5.00	ug/L		11/6/2015 03:44
Ethylbenzene	< 5.00	ug/L		11/6/2015 03:44
Methyl tert-butyl Ether	< 5.00	ug/L		11/6/2015 03:44
Methylene chloride	< 12.5	ug/L		11/6/2015 03:44
Tetrachloroethene	< 5.00	ug/L		11/6/2015 03:44
Toluene	< 5.00	ug/L		11/6/2015 03:44
trans-1,2-Dichloroethene	< 5.00	ug/L		11/6/2015 03:44
trans-1,3-Dichloropropene	< 5.00	ug/L		11/6/2015 03:44

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 8I

Lab Sample ID: 154642-05 **Date Sampled:** 11/3/2015

Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 5.00	ug/L	11/6/2015	03:44
Trichlorofluoromethane	< 5.00	ug/L	11/6/2015	03:44
Vinyl chloride	**228**	ug/L	11/6/2015	03:44

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**105**	81.1 - 124		11/6/2015	03:44
4-Bromofluorobenzene	**92.5**	79.8 - 114		11/6/2015	03:44
Pentafluorobenzene	**98.2**	91.1 - 111		11/6/2015	03:44
Toluene-D8	**94.5**	90.7 - 107		11/6/2015	03:44

Method Reference(s): EPA 624

Data File: x27406.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 9D		
Lab Sample ID:	154642-06	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/6/2015 04:08
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/6/2015 04:08
1,1,2-Trichloroethane	< 2.00	ug/L		11/6/2015 04:08
1,1-Dichloroethane	**5.40**	ug/L		11/6/2015 04:08
1,1-Dichloroethene	< 2.00	ug/L		11/6/2015 04:08
1,2-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:08
1,2-Dichloroethane	< 2.00	ug/L		11/6/2015 04:08
1,2-Dichloropropane	< 2.00	ug/L		11/6/2015 04:08
1,3-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:08
1,4-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:08
2-Chloroethyl vinyl Ether	< 10.0	ug/L		11/6/2015 04:08
Benzene	< 1.00	ug/L		11/6/2015 04:08
Bromodichloromethane	< 2.00	ug/L		11/6/2015 04:08
Bromoform	< 5.00	ug/L		11/6/2015 04:08
Bromomethane	< 2.00	ug/L		11/6/2015 04:08
Carbon Tetrachloride	< 2.00	ug/L		11/6/2015 04:08
Chlorobenzene	< 2.00	ug/L		11/6/2015 04:08
Chloroethane	< 2.00	ug/L		11/6/2015 04:08
Chloroform	< 2.00	ug/L		11/6/2015 04:08
Chloromethane	< 2.00	ug/L		11/6/2015 04:08
cis-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 04:08
Dibromochloromethane	< 2.00	ug/L		11/6/2015 04:08
Ethylbenzene	< 2.00	ug/L		11/6/2015 04:08
Methyl tert-butyl Ether	< 2.00	ug/L		11/6/2015 04:08
Methylene chloride	< 5.00	ug/L		11/6/2015 04:08
Tetrachloroethene	< 2.00	ug/L		11/6/2015 04:08
Toluene	< 2.00	ug/L		11/6/2015 04:08
trans-1,2-Dichloroethene	< 2.00	ug/L		11/6/2015 04:08
trans-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 04:08

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 9D
Lab Sample ID: 154642-06 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 2.00	ug/L	11/6/2015	04:08
Trichlorofluoromethane	< 2.00	ug/L	11/6/2015	04:08
Vinyl chloride	**15.1**	ug/L	11/6/2015	04:08

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**105**	81.1 - 124		11/6/2015	04:08
4-Bromofluorobenzene	**93.1**	79.8 - 114		11/6/2015	04:08
Pentafluorobenzene	**96.5**	91.1 - 111		11/6/2015	04:08
Toluene-D8	**96.2**	90.7 - 107		11/6/2015	04:08

Method Reference(s): EPA 624
Data File: x27407.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 10I
Lab Sample ID: 154642-07 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/6/2015 04:31
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/6/2015 04:31
1,1,2-Trichloroethane	< 2.00	ug/L		11/6/2015 04:31
1,1-Dichloroethane	< 2.00	ug/L		11/6/2015 04:31
1,1-Dichloroethene	< 2.00	ug/L		11/6/2015 04:31
1,2-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:31
1,2-Dichloroethane	< 2.00	ug/L		11/6/2015 04:31
1,2-Dichloropropane	< 2.00	ug/L		11/6/2015 04:31
1,3-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:31
1,4-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:31
2-Chloroethyl vinyl Ether	< 10.0	ug/L		11/6/2015 04:31
Benzene	< 1.00	ug/L		11/6/2015 04:31
Bromodichloromethane	< 2.00	ug/L		11/6/2015 04:31
Bromoform	< 5.00	ug/L		11/6/2015 04:31
Bromomethane	< 2.00	ug/L		11/6/2015 04:31
Carbon Tetrachloride	< 2.00	ug/L		11/6/2015 04:31
Chlorobenzene	< 2.00	ug/L		11/6/2015 04:31
Chloroethane	< 2.00	ug/L		11/6/2015 04:31
Chloroform	< 2.00	ug/L		11/6/2015 04:31
Chloromethane	< 2.00	ug/L		11/6/2015 04:31
cis-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 04:31
Dibromochloromethane	< 2.00	ug/L		11/6/2015 04:31
Ethylbenzene	< 2.00	ug/L		11/6/2015 04:31
Methyl tert-butyl Ether	**3.38**	ug/L		11/6/2015 04:31
Methylene chloride	< 5.00	ug/L		11/6/2015 04:31
Tetrachloroethene	< 2.00	ug/L		11/6/2015 04:31
Toluene	< 2.00	ug/L		11/6/2015 04:31
trans-1,2-Dichloroethene	< 2.00	ug/L		11/6/2015 04:31
trans-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 04:31

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 10I

Lab Sample ID: 154642-07 **Date Sampled:** 11/3/2015

Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 2.00	ug/L	11/6/2015	04:31
Trichlorofluoromethane	< 2.00	ug/L	11/6/2015	04:31
Vinyl chloride	< 2.00	ug/L	11/6/2015	04:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**109**	81.1 - 124		11/6/2015	04:31
4-Bromofluorobenzene	**91.9**	79.8 - 114		11/6/2015	04:31
Pentafluorobenzene	**94.5**	91.1 - 111		11/6/2015	04:31
Toluene-D8	**94.1**	90.7 - 107		11/6/2015	04:31

Method Reference(s): EPA 624

Data File: x27408.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 10S
Lab Sample ID: 154642-08 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/6/2015 04:55
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/6/2015 04:55
1,1,2-Trichloroethane	< 2.00	ug/L		11/6/2015 04:55
1,1-Dichloroethane	< 2.00	ug/L		11/6/2015 04:55
1,1-Dichloroethene	< 2.00	ug/L		11/6/2015 04:55
1,2-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:55
1,2-Dichloroethane	< 2.00	ug/L		11/6/2015 04:55
1,2-Dichloropropane	< 2.00	ug/L		11/6/2015 04:55
1,3-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:55
1,4-Dichlorobenzene	< 2.00	ug/L		11/6/2015 04:55
2-Chloroethyl vinyl Ether	< 10.0	ug/L		11/6/2015 04:55
Benzene	< 1.00	ug/L		11/6/2015 04:55
Bromodichloromethane	< 2.00	ug/L		11/6/2015 04:55
Bromoform	< 5.00	ug/L		11/6/2015 04:55
Bromomethane	< 2.00	ug/L		11/6/2015 04:55
Carbon Tetrachloride	< 2.00	ug/L		11/6/2015 04:55
Chlorobenzene	< 2.00	ug/L		11/6/2015 04:55
Chloroethane	< 2.00	ug/L		11/6/2015 04:55
Chloroform	< 2.00	ug/L		11/6/2015 04:55
Chloromethane	< 2.00	ug/L		11/6/2015 04:55
cis-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 04:55
Dibromochloromethane	< 2.00	ug/L		11/6/2015 04:55
Ethylbenzene	< 2.00	ug/L		11/6/2015 04:55
Methyl tert-butyl Ether	< 2.00	ug/L		11/6/2015 04:55
Methylene chloride	< 5.00	ug/L		11/6/2015 04:55
Tetrachloroethene	< 2.00	ug/L		11/6/2015 04:55
Toluene	< 2.00	ug/L		11/6/2015 04:55
trans-1,2-Dichloroethene	< 2.00	ug/L		11/6/2015 04:55
trans-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 04:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 10S

Lab Sample ID: 154642-08 **Date Sampled:** 11/3/2015

Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 2.00	ug/L			11/6/2015 04:55
Trichlorofluoromethane	< 2.00	ug/L			11/6/2015 04:55
Vinyl chloride	< 2.00	ug/L			11/6/2015 04:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**106**	81.1 - 124		11/6/2015 04:55
4-Bromofluorobenzene	**91.3**	79.8 - 114		11/6/2015 04:55
Pentafluorobenzene	**93.8**	91.1 - 111		11/6/2015 04:55
Toluene-D8	**93.9**	90.7 - 107		11/6/2015 04:55

Method Reference(s): EPA 624

Data File: x27409.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 11I
Lab Sample ID: 154642-09 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 10.0	ug/L		11/6/2015 05:18
1,1,2,2-Tetrachloroethane	< 10.0	ug/L		11/6/2015 05:18
1,1,2-Trichloroethane	< 10.0	ug/L		11/6/2015 05:18
1,1-Dichloroethane	< 10.0	ug/L		11/6/2015 05:18
1,1-Dichloroethene	< 10.0	ug/L		11/6/2015 05:18
1,2-Dichlorobenzene	< 10.0	ug/L		11/6/2015 05:18
1,2-Dichloroethane	< 10.0	ug/L		11/6/2015 05:18
1,2-Dichloropropane	< 10.0	ug/L		11/6/2015 05:18
1,3-Dichlorobenzene	< 10.0	ug/L		11/6/2015 05:18
1,4-Dichlorobenzene	< 10.0	ug/L		11/6/2015 05:18
2-Chloroethyl vinyl Ether	< 50.0	ug/L		11/6/2015 05:18
Benzene	< 5.00	ug/L		11/6/2015 05:18
Bromodichloromethane	< 10.0	ug/L		11/6/2015 05:18
Bromoform	< 25.0	ug/L		11/6/2015 05:18
Bromomethane	< 10.0	ug/L		11/6/2015 05:18
Carbon Tetrachloride	< 10.0	ug/L		11/6/2015 05:18
Chlorobenzene	< 10.0	ug/L		11/6/2015 05:18
Chloroethane	< 10.0	ug/L		11/6/2015 05:18
Chloroform	< 10.0	ug/L		11/6/2015 05:18
Chloromethane	< 10.0	ug/L		11/6/2015 05:18
cis-1,3-Dichloropropene	< 10.0	ug/L		11/6/2015 05:18
Dibromochloromethane	< 10.0	ug/L		11/6/2015 05:18
Ethylbenzene	< 10.0	ug/L		11/6/2015 05:18
Methyl tert-butyl Ether	< 10.0	ug/L		11/6/2015 05:18
Methylene chloride	< 25.0	ug/L		11/6/2015 05:18
Tetrachloroethene	< 10.0	ug/L		11/6/2015 05:18
Toluene	< 10.0	ug/L		11/6/2015 05:18
trans-1,2-Dichloroethene	< 10.0	ug/L		11/6/2015 05:18
trans-1,3-Dichloropropene	< 10.0	ug/L		11/6/2015 05:18

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 11I
Lab Sample ID: 154642-09 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 10.0	ug/L	11/6/2015	05:18
Trichlorofluoromethane	< 10.0	ug/L	11/6/2015	05:18
Vinyl chloride	**435**	ug/L	11/6/2015	05:18

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**106**	81.1 - 124		11/6/2015	05:18
4-Bromofluorobenzene	**89.3**	79.8 - 114		11/6/2015	05:18
Pentafluorobenzene	**95.9**	91.1 - 111		11/6/2015	05:18
Toluene-D8	**92.8**	90.7 - 107		11/6/2015	05:18

Method Reference(s): EPA 624
Data File: x27410.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier:	MW 15S		
Lab Sample ID:	154642-10	**Date Sampled:**	11/3/2015
Matrix:	Water	**Date Received:**	11/3/2015

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/6/2015 05:41
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/6/2015 05:41
1,1,2-Trichloroethane	< 2.00	ug/L		11/6/2015 05:41
1,1-Dichloroethane	< 2.00	ug/L		11/6/2015 05:41
1,1-Dichloroethene	< 2.00	ug/L		11/6/2015 05:41
1,2-Dichlorobenzene	< 2.00	ug/L		11/6/2015 05:41
1,2-Dichloroethane	< 2.00	ug/L		11/6/2015 05:41
1,2-Dichloropropane	< 2.00	ug/L		11/6/2015 05:41
1,3-Dichlorobenzene	< 2.00	ug/L		11/6/2015 05:41
1,4-Dichlorobenzene	< 2.00	ug/L		11/6/2015 05:41
2-Chloroethyl vinyl Ether	< 10.0	ug/L		11/6/2015 05:41
Benzene	< 1.00	ug/L		11/6/2015 05:41
Bromodichloromethane	< 2.00	ug/L		11/6/2015 05:41
Bromoform	< 5.00	ug/L		11/6/2015 05:41
Bromomethane	< 2.00	ug/L		11/6/2015 05:41
Carbon Tetrachloride	< 2.00	ug/L		11/6/2015 05:41
Chlorobenzene	< 2.00	ug/L		11/6/2015 05:41
Chloroethane	< 2.00	ug/L		11/6/2015 05:41
Chloroform	< 2.00	ug/L		11/6/2015 05:41
Chloromethane	< 2.00	ug/L		11/6/2015 05:41
cis-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 05:41
Dibromochloromethane	< 2.00	ug/L		11/6/2015 05:41
Ethylbenzene	< 2.00	ug/L		11/6/2015 05:41
Methyl tert-butyl Ether	< 2.00	ug/L		11/6/2015 05:41
Methylene chloride	< 5.00	ug/L		11/6/2015 05:41
Tetrachloroethene	< 2.00	ug/L		11/6/2015 05:41
Toluene	< 2.00	ug/L		11/6/2015 05:41
trans-1,2-Dichloroethene	< 2.00	ug/L		11/6/2015 05:41
trans-1,3-Dichloropropene	< 2.00	ug/L		11/6/2015 05:41

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 154642

Client: **City of Rochester**

Project Reference: RFA Semi-Annual GW Sampling DEQ-98045

Sample Identifier: MW 15S
Lab Sample ID: 154642-10 **Date Sampled:** 11/3/2015
Matrix: Water **Date Received:** 11/3/2015

Trichloroethene	< 2.00	ug/L	11/6/2015	05:41
Trichlorofluoromethane	< 2.00	ug/L	11/6/2015	05:41
Vinyl chloride	< 2.00	ug/L	11/6/2015	05:41

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**109**	81.1 - 124		11/6/2015	05:41
4-Bromofluorobenzene	**89.7**	79.8 - 114		11/6/2015	05:41
Pentafluorobenzene	**92.0**	91.1 - 111		11/6/2015	05:41
Toluene-D8	**94.7**	90.7 - 107		11/6/2015	05:41

Method Reference(s): EPA 624
Data File: x27411.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: CITY OF ROCHESTER	COMPANY:	LAB PROJECT #: 154642 / CLIENT PROJECT #:
ADDRESS: 30 CHURCH STREET, ROOM 300B	ADDRESS:	
CITY: ROCHESTER STATE: NY ZIP: 14614	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)
PHONE: 585-428-6884 FAX: 585-428-6010	PHONE: FAX:	STD / OTHER
ATTN: DENNIS PECK	ATTN:	1 / 2 / 3 / 5 / X
COMMENTS: email results to peckd@cityofrochester.gov		10 day per history mw 11/3/15

PROJECT NAME/SITE NAME: RFA semi-annual GW sampli DEQ-98045

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	601/602 + MTBE	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/3/15	1407		X	MW 6I	Water	2	X		01
2		1413		X	MW 7I	Water	2	X		02
3		1416		X	MW 7D	Water	2	X		03
4		1421		X	MW 7S	Water	2	X		04
5		1436		X	MW 8I	Water	2	X		05
6		1333		X	MW 9D	Water	2	X		06
7		1359		X	MW 10I	Water	2	X		07
8		1356		X	MW 10S	Water	2	X		08
9		1348		X	MW 11I	Water	2	X		09
10		1342		X	MW 15S	Water	2	X		10

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ☐ PRESERVATIONS: ☐ HOLDING TIME: ☐ TEMPERATURE: ☐ 19°C 11/3/15 15:24

Sampled By: Dennis Peck	Date/Time:	Relinquished By: Dennis M Peck	Date/Time: 11/3/15 1500
Relinquished By:	Date/Time:	Received By: Jane Rabon	Date/Time: 11/3/15 1500
Received By:	Date/Time:	Received @ Lab By: Molly Vail	Date/Time: 11/3/15 1534

Total Cost:

P.I.F.

Chain of Custody Supplement

Client: City of Rochester
Completed by: Molly Lail
Lab Project ID: 154642
Date: 11/3/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		
Comments	VOA: Cl⁻ N		
Holding Time	X		
Comments			
Temperature		X	
Comments	19°C 11/3/15 15:24		
Sufficient Sample Quantity	X		
Comments			

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

155055

Referencing

RFA Quarterly Sampling DEQ-98045

Prepared

Wednesday, December 09, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 155055-01 **Date Sampled:** 11/24/2015
Matrix: Water **Date Received:** 11/24/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**0.00655**	mg/L		12/8/2015 12:13
Cadmium	< 0.00250	mg/L		12/3/2015 20:46
Chromium	< 0.00500	mg/L		12/3/2015 20:46
Copper	< 0.0125	mg/L		12/3/2015 20:46
Lead	< 0.00500	mg/L		12/3/2015 20:46
Nickel	< 0.0200	mg/L		12/3/2015 20:46
Selenium	< 0.00500	mg/L		12/8/2015 12:13
Zinc	< 0.0300	mg/L		12/3/2015 20:46

Method Reference(s): EPA 200.7
Preparation Date: 12/2/2015
Data File: 120815a

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	<0.100	ug/L		12/1/2015
4,4-DDE	<0.100	ug/L		12/1/2015
4,4-DDT	<0.100	ug/L		12/1/2015
Aldrin	<0.100	ug/L		12/1/2015
alpha-BHC	<0.100	ug/L		12/1/2015
beta-BHC	<0.100	ug/L		12/1/2015
Chlordane	<0.100	ug/L		12/1/2015
cis-Chlordane	<0.100	ug/L		12/1/2015
delta-BHC	<0.100	ug/L		12/1/2015
Dieldrin	<0.100	ug/L		12/1/2015
Endosulfan I	<0.100	ug/L		12/1/2015
Endosulfan II	<0.100	ug/L		12/1/2015
Endosulfan Sulfate	<0.100	ug/L		12/1/2015
Endrin	<0.100	ug/L		12/1/2015
Endrin Aldehyde	<0.100	ug/L		12/1/2015
Endrin Ketone	<0.100	ug/L		12/1/2015

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 155055-01 **Date Sampled:** 11/24/2015
Matrix: Water **Date Received:** 11/24/2015

gamma-BHC (Lindane)	<0.100	ug/L	12/1/2015
Heptachlor	<0.100	ug/L	12/1/2015
Heptachlor Epoxide	<0.100	ug/L	12/1/2015
Methoxychlor	<0.100	ug/L	12/1/2015
Toxaphene	<1.00	ug/L	12/1/2015
trans-Chlordane	<0.100	ug/L	12/1/2015

Method Reference(s): EPA 608
Subcontractor ELAP ID: 11148

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.23 @ 22.1 C	S.U.		11/24/2015 16:42

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Semi-Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
3&4-Methylphenol	< 10.0	ug/L		12/2/2015 11:09
Bis (2-ethylhexyl) phthalate	< 10.0	ug/L		12/2/2015 11:09
Diethyl phthalate	**15.3**	ug/L		12/2/2015 11:09

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 12/1/2015
Data File: B08992.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		12/1/2015 18:12
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		12/1/2015 18:12
1,1,2-Trichloroethane	< 2.00	ug/L		12/1/2015 18:12
1,1-Dichloroethane	**12.6**	ug/L		12/1/2015 18:12
1,1-Dichloroethene	< 2.00	ug/L		12/1/2015 18:12
1,2-Dichlorobenzene	< 2.00	ug/L		12/1/2015 18:12
1,2-Dichloroethane	< 2.00	ug/L		12/1/2015 18:12

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	155055-01	**Date Sampled:**	11/24/2015
Matrix:	Water	**Date Received:**	11/24/2015

1,2-Dichloropropane	< 2.00	ug/L	12/1/2015 18:12
1,3-Dichlorobenzene	< 2.00	ug/L	12/1/2015 18:12
1,4-Dichlorobenzene	< 2.00	ug/L	12/1/2015 18:12
2-Butanone	**55.3**	ug/L	12/1/2015 18:12
2-Chloroethyl vinyl Ether	< 10.0	ug/L	12/1/2015 18:12
4-Methyl-2-pentanone	< 5.00	ug/L	12/1/2015 18:12
Acetone	**32.3**	ug/L	12/1/2015 18:12
Benzene	< 1.00	ug/L	12/1/2015 18:12
Bromodichloromethane	< 2.00	ug/L	12/1/2015 18:12
Bromoform	< 5.00	ug/L	12/1/2015 18:12
Bromomethane	< 2.00	ug/L	12/1/2015 18:12
Carbon Tetrachloride	< 2.00	ug/L	12/1/2015 18:12
Chlorobenzene	< 2.00	ug/L	12/1/2015 18:12
Chloroethane	< 2.00	ug/L	12/1/2015 18:12
Chloroform	< 2.00	ug/L	12/1/2015 18:12
Chloromethane	< 2.00	ug/L	12/1/2015 18:12
cis-1,3-Dichloropropene	< 2.00	ug/L	12/1/2015 18:12
Dibromochloromethane	< 2.00	ug/L	12/1/2015 18:12
Ethylbenzene	< 2.00	ug/L	12/1/2015 18:12
Methylene chloride	< 5.00	ug/L	12/1/2015 18:12
Tetrachloroethene	< 2.00	ug/L	12/1/2015 18:12
Toluene	< 2.00	ug/L	12/1/2015 18:12
trans-1,2-Dichloroethene	< 2.00	ug/L	12/1/2015 18:12
trans-1,3-Dichloropropene	< 2.00	ug/L	12/1/2015 18:12
Trichloroethene	< 2.00	ug/L	12/1/2015 18:12
Vinyl chloride	< 2.00	ug/L	12/1/2015 18:12

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 155055-01 **Date Sampled:** 11/24/2015
Matrix: Water **Date Received:** 11/24/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**113**	81.1 - 124		12/1/2015 18:12
4-Bromofluorobenzene	**88.5**	79.8 - 114		12/1/2015 18:12
Pentafluorobenzene	**101**	91.1 - 111		12/1/2015 18:12
Toluene-D8	**97.8**	90.7 - 107		12/1/2015 18:12

Method Reference(s): EPA 624
Data File: x27911.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 155055-02 **Date Sampled:** 11/24/2015
Matrix: Water **Date Received:** 11/24/2015

Total Alkalinity

Analyte	Result	Units	Qualifier	Date Analyzed
Alkalinity, Total	**440**	mg/L		11/30/2015

Method Reference(s): SM 2320 B
Subcontractor ELAP ID: 11148

Total Hardness

Analyte	Result	Units	Qualifier	Date Analyzed
Hardness, Total	**624**	mg/L		12/3/2015

Method Reference(s): EPA 200.7
Preparation Date: 12/1/2015

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Arsenic	**0.00640**	mg/L		12/8/2015 12:17
Cadmium	< 0.00250	mg/L		12/3/2015 16:46
Chromium	< 0.00500	mg/L		12/3/2015 16:46
Copper	< 0.0125	mg/L		12/3/2015 16:46
Lead	< 0.00500	mg/L		12/3/2015 16:46
Nickel	< 0.0200	mg/L		12/3/2015 16:46
Selenium	< 0.00500	mg/L		12/8/2015 12:17
Zinc	< 0.0300	mg/L		12/3/2015 16:46

Method Reference(s): EPA 200.7
Preparation Date: 12/1/2015
Data File: 120815a

Chlorinated Pesticides

Analyte	Result	Units	Qualifier	Date Analyzed
4,4-DDD	<0.100	ug/L		12/1/2015
4,4-DDE	<0.100	ug/L		12/1/2015
4,4-DDT	<0.100	ug/L		12/1/2015
Aldrin	<0.100	ug/L		12/1/2015
alpha-BHC	<0.100	ug/L		12/1/2015

Sample Identifier: Influent
Lab Sample ID: 155055-02 **Date Sampled:** 11/24/2015
Matrix: Water **Date Received:** 11/24/2015

beta-BHC	<0.100	ug/L		12/1/2015
Chlordane	<0.100	ug/L		12/1/2015
cis-Chlordane	<0.100	ug/L		12/1/2015
delta-BHC	<0.100	ug/L		12/1/2015
Dieldrin	<0.100	ug/L		12/1/2015
Endosulfan I	<0.100	ug/L		12/1/2015
Endosulfan II	<0.100	ug/L		12/1/2015
Endosulfan Sulfate	<0.100	ug/L		12/1/2015
Endrin	<0.100	ug/L		12/1/2015
Endrin Aldehyde	<0.100	ug/L		12/1/2015
Endrin Ketone	<0.100	ug/L		12/1/2015
gamma-BHC (Lindane)	<0.100	ug/L		12/1/2015
Heptachlor	<0.100	ug/L		12/1/2015
Heptachlor Epoxide	<0.100	ug/L		12/1/2015
Methoxychlor	<0.100	ug/L		12/1/2015
Toxaphene	<1.00	ug/L		12/1/2015
trans-Chlordane	<0.100	ug/L		12/1/2015

Method Reference(s): EPA 608
Subcontractor ELAP ID: 11148

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	7.02 @ 21.9 C	S.U.		11/24/2015 16:42

Method Reference(s): SM 4500 H+ B
ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**2770**	ug/L		12/1/2015 17:48
1,1,2,2-Tetrachloroethane	< 200	ug/L		12/1/2015 17:48
1,1,2-Trichloroethane	< 200	ug/L		12/1/2015 17:48
1,1-Dichloroethane	**8470**	ug/L		12/1/2015 17:48
1,1-Dichloroethene	**237**	ug/L		12/1/2015 17:48

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier:	Influent		
Lab Sample ID:	155055-02	**Date Sampled:**	11/24/2015
Matrix:	Water	**Date Received:**	11/24/2015

1,2-Dichlorobenzene	< 200	ug/L	12/1/2015 17:48
1,2-Dichloroethane	< 200	ug/L	12/1/2015 17:48
1,2-Dichloropropane	< 200	ug/L	12/1/2015 17:48
1,3-Dichlorobenzene	< 200	ug/L	12/1/2015 17:48
1,4-Dichlorobenzene	< 200	ug/L	12/1/2015 17:48
2-Butanone	< 1000	ug/L	12/1/2015 17:48
2-Chloroethyl vinyl Ether	< 1000	ug/L	12/1/2015 17:48
4-Methyl-2-pentanone	< 500	ug/L	12/1/2015 17:48
Acetone	< 1000	ug/L	12/1/2015 17:48
Benzene	< 100	ug/L	12/1/2015 17:48
Bromodichloromethane	< 200	ug/L	12/1/2015 17:48
Bromoform	< 500	ug/L	12/1/2015 17:48
Bromomethane	< 200	ug/L	12/1/2015 17:48
Carbon Tetrachloride	< 200	ug/L	12/1/2015 17:48
Chlorobenzene	< 200	ug/L	12/1/2015 17:48
Chloroethane	**308**	ug/L	12/1/2015 17:48
Chloroform	< 200	ug/L	12/1/2015 17:48
Chloromethane	< 200	ug/L	12/1/2015 17:48
cis-1,3-Dichloropropene	< 200	ug/L	12/1/2015 17:48
Dibromochloromethane	< 200	ug/L	12/1/2015 17:48
Ethylbenzene	< 200	ug/L	12/1/2015 17:48
Methylene chloride	< 500	ug/L	12/1/2015 17:48
Tetrachloroethene	< 200	ug/L	12/1/2015 17:48
Toluene	**510**	ug/L	12/1/2015 17:48
trans-1,2-Dichloroethene	< 200	ug/L	12/1/2015 17:48
trans-1,3-Dichloropropene	< 200	ug/L	12/1/2015 17:48
Trichloroethene	< 200	ug/L	12/1/2015 17:48
Vinyl chloride	**1370**	ug/L	12/1/2015 17:48

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155055

Client: **City of Rochester**

Project Reference: RFA Quarterly Sampling DEQ-98045

Sample Identifier: Influent
Lab Sample ID: 155055-02 **Date Sampled:** 11/24/2015
Matrix: Water **Date Received:** 11/24/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**112**	81.1 - 124		12/1/2015 17:48
4-Bromofluorobenzene	**90.1**	79.8 - 114		12/1/2015 17:48
Pentafluorobenzene	**98.4**	91.1 - 111		12/1/2015 17:48
Toluene-D8	**93.0**	90.7 - 107		12/1/2015 17:48

Method Reference(s): EPA 624
Data File: x27910.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM

REPORT TO:		INVOICE TO:		
CLIENT:	City of Rochester	CLIENT:		LAB PROJECT ID: 155055
ADDRESS:	30 Church Street, Room 300B	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Quotation #:
PHONE:	428-6884	PHONE:		Email: peckd@cityofrochester.gov
ATTN:	Dennis Peck	ATTN:		

PROJECT REFERENCE

RFA Quarterly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	625 Site Specific	608 Pesticides	Metals* (HNO3)	pH	Alkalinity	Hardness				REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/24/2015	1035		X	Effluent	Water	6	X	X	X	X	X						624 Site Specific =VRFA Test Name	01
2	11/24/2015	1030		X	Influent	Water	7	X		X	X	X	X	X				625 Site Specific = SMISC	02
3																		**SVOA List:**	
4																		Diethyl phthalate	
5																		Bis (2-ehtylhexyl) phthalate	
6																		4 Methylphenol (p cresol)	
7																		**Metals list:**	
8																		As, Cd, Cr, Cu, Pb, Ni, Se, Zn	
9																		**Alkalinity sample with No headspace.**	
10																			

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate:	10	please indicate:		please indicate:	

Sampled By: Dennis Peck	Date/Time: 11/24/15	Total Cost:
Relinquished By: Dennis Peck	Date/Time: 11/24/15 1315	
Received By:	Date/Time: 11/24/15 1315	P.I.F.
Received @ Lab By: Molly Vail	Date/Time: 11.24.15 1502	

9°C 11/24/15 13:19

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: City of Rochester
Completed by: Molly Vail
Lab Project ID: 155055
Date: 11/24/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X met		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X SVOA		X
Comments	VOA ! Cl⁻ neg.		
Holding Time	X	X pH	
Comments			
Temperature		X	X met
Comments	9°C 11/24/15 1319		
Sufficient Sample Quantity	X		
Comments			

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

Serial_No:12041513:45

1061

CHAIN OF CUSTODY

L1531040

11148

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	179 Lake Avenue	ADDRESS:			
CITY:	Rochester STATE: NY ZIP: 14608	CITY:	STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE:	FAX:	PHONE:	FAX:	STD	OTHER
PROJECT NAME/SITE NAME:		ATTN:	Kate Hansen	ATTN: Meridith Dillman	☐ 1 ☐ 2 ☐ 3 ☒ 5
		COMMENTS:	Please email results to khansen@paradigmenv.com and reporting@paradigmenv.com	Date Due:	12/4

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	Part 605	Alka linity								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/24/15	1035			155055-01	W	1	X										
2	11/24/15	1030			-02	W	2	X	X									
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments: 2.8° C Per Sub Lab		

JSD 12/08/2015

Client

	Sampled By	Date/Time
	Molly Vail	11/24/15 1600
Relinquished By		Date/Time
	AAC	11/24/15 1855
Received By		Date/Time
		11/25/15 0230
Received By		Date/Time
		11/25/15 0230
Received @ Lab By		Date/Time

Total Cost:

P.I.F. ☐

PARADIGM

Analytical Report For

City of Rochester

For Lab Project ID

155445

Referencing

RFA Monthly Sampling DEQ-98045

Prepared

Thursday, December 24, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155445

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier:	Effluent		
Lab Sample ID:	155445-01	**Date Sampled:**	12/21/2015
Matrix:	Water	**Date Received:**	12/21/2015

pH

Analyte	Result	Units	Qualifier	Date Analyzed
pH	8.32 @ 22.0 C	S.U.		12/21/2015 16:14

Method Reference(s): SM 4500 H+ B

ELAP does not offer this test for approval as part of their laboratory certification program.

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	**5.94**	ug/L		12/22/2015 18:02
1,1,2,2-Tetrachloroethane	< 5.00	ug/L		12/22/2015 18:02
1,1,2-Trichloroethane	< 5.00	ug/L		12/22/2015 18:02
1,1-Dichloroethane	**24.6**	ug/L		12/22/2015 18:02
1,1-Dichloroethene	< 5.00	ug/L		12/22/2015 18:02
1,2-Dichlorobenzene	< 5.00	ug/L		12/22/2015 18:02
1,2-Dichloroethane	< 5.00	ug/L		12/22/2015 18:02
1,2-Dichloropropane	< 5.00	ug/L		12/22/2015 18:02
1,3-Dichlorobenzene	< 5.00	ug/L		12/22/2015 18:02
1,4-Dichlorobenzene	< 5.00	ug/L		12/22/2015 18:02
2-Butanone	**57.2**	ug/L		12/22/2015 18:02
2-Chloroethyl vinyl Ether	< 25.0	ug/L		12/22/2015 18:02
4-Methyl-2-pentanone	< 12.5	ug/L		12/22/2015 18:02
Acetone	**38.8**	ug/L		12/22/2015 18:02
Benzene	< 2.50	ug/L		12/22/2015 18:02
Bromodichloromethane	< 5.00	ug/L		12/22/2015 18:02
Bromoform	< 12.5	ug/L		12/22/2015 18:02
Bromomethane	< 5.00	ug/L		12/22/2015 18:02
Carbon Tetrachloride	< 5.00	ug/L		12/22/2015 18:02
Chlorobenzene	< 5.00	ug/L		12/22/2015 18:02
Chloroethane	< 5.00	ug/L		12/22/2015 18:02
Chloroform	< 5.00	ug/L		12/22/2015 18:02
Chloromethane	< 5.00	ug/L		12/22/2015 18:02

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 155445

Client: **City of Rochester**

Project Reference: RFA Monthly Sampling DEQ-98045

Sample Identifier: Effluent
Lab Sample ID: 155445-01 **Date Sampled:** 12/21/2015
Matrix: Water **Date Received:** 12/21/2015

cis-1,3-Dichloropropene	< 5.00	ug/L		12/22/2015 18:02
Dibromochloromethane	< 5.00	ug/L		12/22/2015 18:02
Ethylbenzene	< 5.00	ug/L		12/22/2015 18:02
Methylene chloride	< 12.5	ug/L		12/22/2015 18:02
Tetrachloroethene	< 5.00	ug/L		12/22/2015 18:02
Toluene	< 5.00	ug/L		12/22/2015 18:02
trans-1,2-Dichloroethene	< 5.00	ug/L		12/22/2015 18:02
trans-1,3-Dichloropropene	< 5.00	ug/L		12/22/2015 18:02
Trichloroethene	< 5.00	ug/L		12/22/2015 18:02
Vinyl chloride	< 5.00	ug/L		12/22/2015 18:02

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	81.1 - 124		12/22/2015 18:02
4-Bromofluorobenzene	**96.8**	79.8 - 114		12/22/2015 18:02
Pentafluorobenzene	**106**	91.1 - 111		12/22/2015 18:02
Toluene-D8	**100**	90.7 - 107		12/22/2015 18:02

Method Reference(s): EPA 624
Data File: x28551.D

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

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All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

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Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	City of Rochester	CLIENT:		LAB PROJECT ID: 155445
ADDRESS:	30 Church Street, Room 300B	ADDRESS:		Quotation #:
CITY:	Rochester STATE: NY ZIP 14614	CITY:	STATE: ZIP:	Email: peckd@cityofrochester.gov
PHONE:	428-6884	PHONE:		
ATTN:	Dennis Peck	ATTN:		

PROJECT REFERENCE

RFA Monthly Sampling DEQ-98045

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	624 Site Specific	pH									REMARKS	PARADIGM LAB SAMPLE NUMBER
1	12/21/2015	14~~0:00~~		X	Effluent	Water	3	X	X									624 Site Specific =VRFA Test Name	01
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☐	NYSDEC EDD	☐
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate:	10	please indicate:		please indicate:	

Sampled By: Dennis Peck 12/21/15 Date/Time

Relinquished By: Dennis Peck 12/21/15 1551 Date/Time

Received By: Jane J Sabra 12/21/15 1551 Date/Time

Received @ Lab By: Molly Vail 12/21/15 1600 Date/Time

16 °C 12/21/15 15:57

Total Cost:

P.I.F.

See additional page for sample conditions.

PARADIGM

Chain of Custody Supplement

Client: City of Roch **Completed by:** Molly Kail

Lab Project ID: 159445 **Date:** 12/21/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X VOA		X pH
Comments			
Chlorine Absent (<0.10 ppm per test strip)	X		X pH
Comments	VOA : Cl⁻ ng.		
Holding Time	X	X pH	
Comments			
Temperature		X	
Comments	16°C 12/21/15 1557		
Sufficient Sample Quantity	X		
Comments			

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APPENDIX D

INSPECTION FORMS AND OPERATOR LOGS

Rochester Fire Academy

Cover System Inspection Checklist

Date: 2/25/15

Inspected By: DP

VISUAL EVALUATION ITEMS	Condition				Remarks
	Acceptable	Not Acceptable	Present	Not Present	
1. North Disposal Area	X				
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
2. South Disposal Area					
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
3. Training Grounds Area					
a. Surface Coarse Integrity	X				
b. Cracking				X	
c. Potholes				X	
d. Pooling/ Ponding				X	
e. Undesirable Species				X	
4. Other Comments / Problems:					

Rochester Fire Academy

Storm Water Collection System Inspection Checklist

Date: 2/25/15

Inspected By: DP

VISUAL EVALUATION ITEMS	Condition		Remarks
	Present	Not Present	
1. Drainage Channels			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Severe Cracking		X	
d. Erosion		X	
e. Slope Loss		X	
2. South Disposal Area			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Broken Pipe		X	
d. Slope Loss		X	
e. Grate Clogging		X	
3. Drainage Structures #1, #2, #3			
a. Flapper Valve Functioning	X		
b. Broken/Cracked Pipe		X	
c. Cracked headwall structure		X	
4. Other Comments / Problems:			

Rochester Fire Academy

Equipment Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DP

Item	Maintenance Activity	Recommended Frequency	Date Performed	Notes
Sequestering Agent Feed Pumps	Replace Seal Rings	Annually	NA	
	Replace check valve balls	Annually	NA	
	Replace check valve springs	Annually	NA	
Bag filter unit	Replace Bags	when differential pressure exceeds 10 psi	NA ~~NA~~ 1/13/15	Both bag filters changed
	Lubricate swing davits	Annually	NA	
Feed tank	Clean solids	when necessary	NA	
Air Stripper	Examine trays	Bi-weekly	NA	
	Clean/de-scale	Annually	NA	
Activated Carbon Vessels	N/A	N/A		Permanently taken off-line in May 2000
Discharge Tank	Clean Solids	As necessary	NA	
Other Comments/Problems:				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Groundwater Collection Trench*

Inspection

Item	Action	Action Result		Notes
1) Piezometers	Checked with water level indicator to ensure drawdown to desired elevation	Working	✓	
		Not Working		
2) Sediment Build-up in Manholes	Visually inspected manholes and pump station for sediment and obstructions	Present		
		Not Present	✓	
3) Settling Along Ground Surface	Visually inspected ground surface along collection trench	Settling		
		Not Settling	✓	
4) Manhole Covers	Visually inspected manhole and pump station covers	Present	✓	
		Not Present		
5) Pumps	Refer to Manufacturer's O&M manuals for inspection procedure	Checked	✓	
		Not Checked		
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to Manufacturer's O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed		none		
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Sequestering Agent Feed System*

Inspection

Item	Action	Action Result		Notes
1) Feed Pump	Visually inspected feed pump and its in-feed and out-feed lines	Acceptable	✓	
		Not Acceptable		
2) Calibration	Checked calibration chamber to verify pumping rate	Calibrated	✓	
		Not Calibrated		
3) Sequestering Agent	Visually inspected sequestering agent, holding area and drums	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Calibrate Pumps	Calibrate pumps during every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Filter Bag Unit(s)*

Inspection				
Item	**Action**	**Action Result**		**Notes**
1) Filter Bag Unit(s)	Visually inspect overall system	Acceptable Not Acceptable	✓	
2) Filter Bags	Check pressure relief differential. Refer to O&M manual	Checked Not Checked	✓	
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance				
Item	**Maintenance Activity**	**Maintenance Performed**		**Description of Maintenance Performed or Reason NOT Performed**
1) Swing Davit	Apply a small amount of grease to the swing davit every other (6 months) quarterly inspection	Yes No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Feed Tank*

Inspection

Item	Action	Action Result		Notes
1) Feed Tank	Visually inspected tank for solids build-up	Solids Present		
		Solids NOT Present	✓	
2) Feed Tank	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Tank	If solids build up, refer to O&M manual for procedure	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Air Stripper and Feed Pumps*

Inspection

Item	Action	Action Result		Notes
1) Air Stripper	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Stripper Trays	Visually inspected trays and checked air pressure	Acceptable	✓	
		Not Acceptable		
3) Feed Pumps	Visually inspected feed pumps and all lines	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Pumps	Refer to Manufacturers O&M manuals for maintenance	Yes		
		No	✓	
2) Stripper Trays	Clean trays every other (6 months) quarterly inspection, or when pressure is greater than 18" water	Yes		
		No	✓	
3) Additional Maintenance Performed				

Rochester Fire Academy
Quarterly Inspection and Maintenance Schedule Checklist

Date: _____ Location: *Activated Carbon System*
Inspected By: DMP

Inspection

Item	Action	Action Result		Notes
1) System	Visually inspected overall system	Acceptable Not Acceptable		N/A - Carbon Drums no longer on-line.
2) Carbon Drums	Tested for PCB breakthrough	Present Not Present		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Carbon Drums	As part of routine maintenance, check pressure drop	Yes No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Instrumentation*

Inspection

Item	Action	Action Result		Notes
1) Instrumentation	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Instrumentation	Visually inspected each instrument	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Instrumentation	Refer to each instrumentation manufacturer's O&M manual	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Building Sump Pit and Pumps*

Inspection

Item	Action	Action Result		Notes
1) North Pump	Visually inspected overall system (pump and lines)	Acceptable	✓	
		Not Acceptable		
2) South Pump	Visually inspected shaft seal and motor	Acceptable	✓	
		Not Acceptable		
3) Sump Pit	Visually inspected pit for defects and obstructions	Acceptable	✓	
		Not Acceptable		
4) Floats	Visually inspected automatic floats	Acceptable	✓	Replaced high + low floats on 2/10/15
		Not Acceptable		
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to manufacturers O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 2/25/15

Inspected By: DMP

Location: *Treatment Building & Facility Access*

Inspection Item	Action	Action Result		Notes
1) Building	Visually inspected overall appearance of the GWTP	Acceptable	✓	
		Not Acceptable		
2) Concrete	Visually inspected all concrete for cracks or other indications of structural failure	Acceptable	✓	
		Not Acceptable		
3) Building Enclosures	Visually inspected walls for bowing or indications of failure	Acceptable	✓	
		Not Acceptable		
4) Utilities	Visually inspected and checked utility service to entire building	Present	✓	
		Not Present		
5) Facility Access	Visually inspected roads, fences and gates	Acceptable	✓	
		Not Acceptable		
6) Additional Items Inspected				

Maintenance Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Overhead Door	Apply grease to track as needed	Yes		Functioning properly.
		No	✓	
2) Facility Access System	See Table 7-1 of GWTP O&M manual	Yes	✓	Functioning properly.
		No		
3) Additional Maintenance Performed				

Rochester Fire Academy

Cover System Inspection Checklist

Date: 5/29/15

Inspected By: DP

VISUAL EVALUATION ITEMS	Condition				Remarks
	Acceptable	Not Acceptable	Present	Not Present	
1. North Disposal Area					
a. Vegetative cover integrity	<				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
2. South Disposal Area					
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
3. Training Grounds Area					
a. Surface Coarse Integrity	X				
b. Cracking				X	some gaps at asphalt/concrete interface
c. Potholes				X	
d. Pooling/ Ponding				X	
e. Undesirable Species				X	
4. Other Comments / Problems:					

Rochester Fire Academy

Storm Water Collection System Inspection Checklist

Date: 5/29/15

Inspected By: DP

VISUAL EVALUATION ITEMS	Condition		Remarks
	Present	Not Present	
1. Drainage Channels			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Severe Cracking		X	
d. Erosion		X	
e. Slope Loss		X	
2. South Disposal Area			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Broken Pipe		X	
d. Slope Loss		X	
e. Grate Clogging		X	
3. Drainage Structures #1, #2, #3			
a. Flapper Valve Functioning	X		
b. Broken/Cracked Pipe		X	
c. Cracked headwall structure		X	
4. Other Comments / Problems:			

Rochester Fire Academy

Equipment Maintenance Schedule Checklist

Date: 5/29/15

Inspected By: DP

Item	Maintenance Activity	Recommended Frequency	Date Performed	Notes
Sequestering Agent Feed Pumps	Replace Seal Rings	Annually	NA	
	Replace check valve balls	Annually	NA	
	Replace check valve springs	Annually	NA	
Bag filter unit	Replace Bags	when differential pressure exceeds 10 psi	NA	
	Lubricate swing davits	Annually	NA	
Feed tank	Clean solids	when necessary	NA	
Air Stripper	Examine trays	Bi-weekly	NA	
	Clean/de-scale	Annually	NA	
Activated Carbon Vessels	N/A	N/A	NA	Permanently taken off-line in May 2000
Discharge Tank	Clean Solids	As necessary	NA	
Other Comments/Problems:				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/29/15

Inspected By: DMP

Location: *Groundwater Collection Trench*

Inspection

Item	Action	Action Result		Notes
1) Piezometers	Checked with water level indicator to ensure drawdown to desired elevation	Working	✓	
		Not Working		
2) Sediment Build-up in Manholes	Visually inspected manholes and pump station for sediment and obstructions	Present		
		Not Present	✓	
3) Settling Along Ground Surface	Visually inspected ground surface along collection trench	Settling		
		Not Settling	✓	
4) Manhole Covers	Visually inspected manhole and pump station covers	Present	✓	
		Not Present		
5) Pumps	Refer to Manufacturer's O&M manuals for inspection procedure	Checked	✓	
		Not Checked		
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to Manufacturer's O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed		none		5/14/15 leak in PVC piping repaired
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Sequestering Agent Feed System*

Inspection

Item	Action	Action Result		Notes
1) Feed Pump	Visually inspected feed pump and its in-feed and out-feed lines	Acceptable	✓	
		Not Acceptable		
2) Calibration	Checked calibration chamber to verify pumping rate	Calibrated	✓	
		Not Calibrated		
3) Sequestering Agent	Visually inspected sequestering agent, holding area and drums	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Calibrate Pumps	Calibrate pumps during every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: _____ Location: *Filter Bag Unit(s)*

Inspected By: DMP

Inspection

Item	Action	Action Result		Notes
1) Filter Bag Unit(s)	Visually inspect overall system	Acceptable	✓	
		Not Acceptable		
2) Filter Bags	Check pressure relief differential. Refer to O&M manual	Checked	✓	
		Not Checked		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Swing Davit	Apply a small amount of grease to the swing davit every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Feed Tank*

Inspection

Item	Action	Action Result		Notes
1) Feed Tank	Visually inspected tank for solids build-up	Solids Present		
		Solids NOT Present	✓	
2) Feed Tank	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Tank	If solids build up, refer to O&M manual for procedure	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Air Stripper and Feed Pumps*

Inspection

Item	Action	Action Result		Notes
1) Air Stripper	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Stripper Trays	Visually inspected trays and checked air pressure	Acceptable	✓	
		Not Acceptable		
3) Feed Pumps	Visually inspected feed pumps and all lines	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Pumps	Refer to Manufacturers O&M manuals for maintenance	Yes		
		No	✓	
2) Stripper Trays	Clean trays every other (6 months) quarterly inspection, or when pressure is greater than 18" water	Yes		
		No	✓	
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Activated Carbon System*

Inspection

Item	Action	Action Result		Notes
1) System	Visually inspected overall system	Acceptable Not Acceptable		N/A - Carbon Drums no longer on-line.
2) Carbon Drums	Tested for PCB breakthrough	Present Not Present		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Carbon Drums	As part of routine maintenance, check pressure drop	Yes No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Instrumentation*

Inspection

Item	Action	Action Result		Notes
1) Instrumentation	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Instrumentation	Visually inspected each instrument	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Instrumentation	Refer to each instrumentation manufacturer's O&M manual	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Building Sump Pit and Pumps*

Inspection

Item	Action	Action Result		Notes
1) North Pump	Visually inspected overall system (pump and lines)	Acceptable	✓	
		Not Acceptable		
2) South Pump	Visually inspected shaft seal and motor	Acceptable	✓	
		Not Acceptable		
3) Sump Pit	Visually inspected pit for defects and obstructions	Acceptable	✓	
		Not Acceptable		
4) Floats	Visually inspected automatic floats	Acceptable	✓	
		Not Acceptable		
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to manufacturers O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 5/25/15

Inspected By: DMP

Location: *Treatment Building & Facility Access*

Inspection Item	Action	Action Result		Notes
1) Building	Visually inspected overall appearance of the GWTP	Acceptable	✓	
		Not Acceptable		
2) Concrete	Visually inspected all concrete for cracks or other indications of structural failure	Acceptable	✓	
		Not Acceptable		
3) Building Enclosures	Visually inspected walls for bowing or indications of failure	Acceptable	✓	
		Not Acceptable		
4) Utilities	Visually inspected and checked utility service to entire building	Present	✓	
		Not Present		
5) Facility Access	Visually inspected roads, fences and gates	Acceptable	✓	
		Not Acceptable		
6) Additional Items Inspected				

Maintenance Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Overhead Door	Apply grease to track as needed	Yes		Functioning properly.
		No	✓	
2) Facility Access System	See Table 7-1 of GWTP O&M manual	Yes		Functioning properly.
		No	✓	
3) Additional Maintenance Performed				

Rochester Fire Academy

Cover System Inspection Checklist

Date: 8/21/15

Inspected By: DP

VISUAL EVALUATION ITEMS	Condition				Remarks
	Acceptable	Not Acceptable	Present	Not Present	
1. North Disposal Area					
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
2. South Disposal Area					
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
3. Training Grounds Area					
a. Surface Coarse Integrity	X				
b. Cracking				X	some gaps at asphalt / concrete interface
c. Potholes				X	
d. Pooling/ Ponding				X	
e. Undesirable Species				X	
4. Other Comments / Problems:					

Rochester Fire Academy

Storm Water Collection System Inspection Checklist

Date: 8/21/15

Inspected By: DP

VISUAL EVALUATION ITEMS	Condition		Remarks
	Present	Not Present	
1. Drainage Channels			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Severe Cracking		X	
d. Erosion		X	
e. Slope Loss		X	
2. South Disposal Area			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Broken Pipe		X	
d. Slope Loss		X	
e. Grate Clogging		X	
3. Drainage Structures #1, #2, #3			
a. Flapper Valve Functioning	✓		
b. Broken/Cracked Pipe		X	
c. Cracked headwall structure		X	
4. Other Comments / Problems:			

Rochester Fire Academy

Equipment Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DP

Item	Maintenance Activity	Recommended Frequency	Date Performed	Notes
Sequestering Agent Feed Pumps	Replace Seal Rings Replace check valve balls Replace check valve springs	Annually Annually Annually	NA NA NA	
Bag filter unit	Replace Bags Lubricate swing davits	when differential pressure exceeds 10 psi Annually	6/5/15 NA	DP replaced bags unit #1
Feed tank	Clean solids	when necessary	NA	
Air Stripper	Examine trays Clean/de-scale	Bi-weekly Annually	NA NA	
Activated Carbon Vessels	N/A	N/A	NA	Permanently taken off-line in May 2000
Discharge Tank	Clean Solids	As necessary	NA	
Other Comments/Problems:				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Groundwater Collection Trench*

Inspection

Item	Action	Action Result		Notes
1) Piezometers	Checked with water level indicator to ensure drawdown to desired elevation	Working	✓	
		Not Working		
2) Sediment Build-up in Manholes	Visually inspected manholes and pump station for sediment and obstructions	Present		
		Not Present	✓	
3) Settling Along Ground Surface	Visually inspected ground surface along collection trench	Settling		
		Not Settling	✓	
4) Manhole Covers	Visually inspected manhole and pump station covers	Present	✓	
		Not Present		
5) Pumps	Refer to Manufacturer's O&M manuals for inspection procedure	Checked	✓	
		Not Checked		
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to Manufacturer's O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed		none		
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Sequestering Agent Feed System*

Inspection

Item	Action	Action Result		Notes
1) Feed Pump	Visually inspected feed pump and its in-feed and out-feed lines	Acceptable	✓	
		Not Acceptable		
2) Calibration	Checked calibration chamber to verify pumping rate	Calibrated	✓	
		Not Calibrated		
3) Sequestering Agent	Visually inspected sequestering agent, holding area and drums	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Calibrate Pumps	Calibrate pumps during every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Filter Bag Unit(s)*

Inspection

Item	Action	Action Result		Notes
1) Filter Bag Unit(s)	Visually inspect overall system	Acceptable	✓	
		Not Acceptable		
2) Filter Bags	Check pressure relief differential. Refer to O&M manual	Checked	✓	
		Not Checked		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Swing Davit	Apply a small amount of grease to the swing davit every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Feed Tank*

Inspection

Item	Action	Action Result		Notes
1) Feed Tank	Visually inspected tank for solids build-up	Solids Present		
		Solids NOT Present	✓	
2) Feed Tank	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Tank	If solids build up, refer to O&M manual for procedure	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Air Stripper and Feed Pumps*

Inspection

Item	Action	Action Result		Notes
1) Air Stripper	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Stripper Trays	Visually inspected trays and checked air pressure	Acceptable	✓	
		Not Acceptable		
3) Feed Pumps	Visually inspected feed pumps and all lines	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Pumps	Refer to Manufacturer's O&M manuals for maintenance	Yes		
		No	✓	
2) Stripper Trays	Clean trays every other (6 months) quarterly inspection, or when pressure is greater than 18" water	Yes		
		No	✓	
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Activated Carbon System*

Inspection

Item	Action	Action Result		Notes
1) System	Visually inspected overall system	Acceptable Not Acceptable		N/A - Carbon Drums no longer on-line.
2) Carbon Drums	Tested for PCB breakthrough	Present Not Present		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Carbon Drums	As part of routine maintenance, check pressure drop	Yes No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Instrumentation*

Inspection

Item	Action	Action Result		Notes
1) Instrumentation	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Instrumentation	Visually inspected each instrument	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Instrumentation	Refer to each instrumentation manufacturer's O&M manual	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Building Sump Pit and Pumps*

Inspection

Item	Action	Action Result		Notes
1) North Pump	Visually inspected overall system (pump and lines)	Acceptable	✓	
		Not Acceptable		
2) South Pump	Visually inspected shaft seal and motor	Acceptable	✓	
		Not Acceptable		
3) Sump Pit	Visually inspected pit for defects and obstructions	Acceptable	✓	
		Not Acceptable		
4) Floats	Visually inspected automatic floats	Acceptable	✓	
		Not Acceptable		
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to manufacturer's O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 8/21/15

Inspected By: DMP

Location: *Treatment Building & Facility Access*

Inspection

Item	Action	Action Result		Notes
1) Building	Visually inspected overall appearance of the GWTP	Acceptable	✓	
		Not Acceptable		
2) Concrete	Visually inspected all concrete for cracks or other indications of structural failure	Acceptable	✓	
		Not Acceptable		
3) Building Enclosures	Visually inspected walls for bowing or indications of failure	Acceptable	✓	
		Not Acceptable		
4) Utilities	Visually inspected and checked utility service to entire building	Present	✓	
		Not Present		
5) Facility Access	Visually inspected roads, fences and gates	Acceptable	✓	
		Not Acceptable		
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Overhead Door	Apply grease to track as needed	Yes		Functioning properly.
		No	✓	
2) Facility Access System	See Table 7-1 of GWTP O&M manual	Yes		Functioning properly.
		No	✓	
3) Additional Maintenance Performed				

Rochester Fire Academy

Cover System Inspection Checklist

Date: 11/24/15

Inspected By: DD

VISUAL EVALUATION ITEMS	Condition				Remarks
	Acceptable	Not Acceptable	Present	Not Present	
1. North Disposal Area					
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
2. South Disposal Area					
a. Vegetative cover integrity	X				
b. Erosion				X	
c. Settling				X	
d. Slope Loss				X	
e. Pooling/ Ponding				X	
f. Undesirable Species				X	
3. Training Grounds Area					
a. Surface Coarse Integrity	X				some gaps at asphalt/concrete interface
b. Cracking				X	
c. Potholes				X	
d. Pooling/ Ponding				X	
e. Undesirable Species				X	
4. Other Comments / Problems:					

Rochester Fire Academy

Storm Water Collection System Inspection Checklist

Date: 11/24/15

Inspected By: DD

VISUAL EVALUATION ITEMS	Condition		Remarks
	Present	Not Present	
1. Drainage Channels			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Severe Cracking		X	
d. Erosion		X	
e. Slope Loss		X	
2. South Disposal Area			
a. Sediment Build-up		X	
b. Pooling/ Ponding		X	
c. Broken Pipe		X	
d. Slope Loss		X	
e. Grate Clogging		X	
3. Drainage Structures #1, #2, #3			
a. Flapper Valve Functioning	X		
b. Broken/Cracked Pipe		X	
c. Cracked headwall structure		X	
4. Other Comments / Problems:			

Rochester Fire Academy

Equipment Maintenance Schedule Checklist

Date: 11/24/15

Inspected By: DD

Item	Maintenance Activity	Recommended Frequency	Date Performed	Notes
Sequestering Agent Feed Pumps	Replace Seal Rings	Annually	NA	
	Replace check valve balls	Annually	NA	
	Replace check valve springs	Annually	NA	
Bag filter unit	Replace Bags	when differential pressure exceeds 10 psi	NA	
	Lubricate swing davits	Annually	NA	
Feed tank	Clean solids	when necessary	NA	
Air Stripper	Examine trays	Bi-weekly	NA	
	Clean/de-scale	Annually	NA	
Activated Carbon Vessels	N/A	N/A	NA	Permanently taken off-line in May 2000
Discharge Tank	Clean Solids	As necessary	NA	
Other Comments/Problems:				

Rochester Fire Academy
Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15
Inspected By: DMP
Location: *Groundwater Collection Trench*

Inspection

Item	Action	Action Result		Notes
1) Piezometers	Checked with water level indicator to ensure drawdown to desired elevation	Working	✓	
		Not Working		
2) Sediment Build-up in Manholes	Visually inspected manholes and pump station for sediment and obstructions	Present		
		Not Present	✓	
3) Settling Along Ground Surface	Visually inspected ground surface along collection trench	Settling		
		Not Settling	✓	
4) Manhole Covers	Visually inspected manhole and pump station covers	Present	✓	
		Not Present		
5) Pumps	Refer to Manufacturer•s O&M manuals for inspection procedure	Checked	✓	
		Not Checked		
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to Manufacturer•s O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed		none		
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15 Location: *Sequestering Agent Feed System*

Inspected By: DMP

Inspection

Item	Action	Action Result		Notes
1) Feed Pump	Visually inspected feed pump and its in-feed and out-feed lines	Acceptable	✓	
		Not Acceptable		
2) Calibration	Checked calibration chamber to verify pumping rate	Calibrated	✓	
		Not Calibrated		
3) Sequestering Agent	Visually inspected sequestering agent, holding area and drums	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Calibrate Pumps	Calibrate pumps during every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15

Inspected By: DMP

Location: *Filter Bag Unit(s)*

Inspection

Item	Action	Action Result		Notes
1) Filter Bag Unit(s)	Visually inspect overall system	Acceptable	✓	
		Not Acceptable		
2) Filter Bags	Check pressure relief differential. Refer to O&M manual	Checked	✓	
		Not Checked		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Swing Davit	Apply a small amount of grease to the swing davit every other (6 months) quarterly inspection	Yes	✓	
		No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15

Inspected By: DMP

Location: *Feed Tank*

Inspection

Item	Action	Action Result		Notes
1) Feed Tank	Visually inspected tank for solids build-up	Solids Present		
		Solids NOT Present	✓	
2) Feed Tank	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Tank	If solids build up, refer to O&M manual for procedure	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy
Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15
Inspected By: DMP
Location: *Air Stripper and Feed Pumps*

Inspection

Item	Action	Action Result		Notes
1) Air Stripper	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Stripper Trays	Visually inspected trays and checked air pressure	Acceptable	✓	
		Not Acceptable		
3) Feed Pumps	Visually inspected feed pumps and all lines	Acceptable	✓	
		Not Acceptable		
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Feed Pumps	Refer to Manufacturers O&M manuals for maintenance	Yes		
		No	✓	
2) Stripper Trays	Clean trays every other (6 months) quarterly inspection, or when pressure is greater than 18" water	Yes		
		No	✓	
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15 Location: *Activated Carbon System*

Inspected By: DMP

Inspection

Item	Action	Action Result		Notes
1) System	Visually inspected overall system	Acceptable Not Acceptable		N/A - Carbon Drums no longer on-line.
2) Carbon Drums	Tested for PCB breakthrough	Present Not Present		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Carbon Drums	As part of routine maintenance, check pressure drop	Yes No		
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15

Inspected By: DMP

Location: *Instrumentation*

Inspection

Item	Action	Action Result		Notes
1) Instrumentation	Visually inspected overall system	Acceptable	✓	
		Not Acceptable		
2) Instrumentation	Visually inspected each instrument	Acceptable	✓	
		Not Acceptable		
3) Additional Items Inspected				
4) Additional Items Inspected				
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Instrumentation	Refer to each instrumentation manufacturer's O&M manual	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15

Inspected By: DMP

Location: *Building Sump Pit and Pumps*

Inspection

Item	Action	Action Result		Notes
1) North Pump	Visually inspected overall system (pump and lines)	Acceptable	✓	
		Not Acceptable		
2) South Pump	Visually inspected shaft seal and motor	Acceptable	✓	
		Not Acceptable		
3) Sump Pit	Visually inspected pit for defects and obstructions	Acceptable	✓	
		Not Acceptable		
4) Floats	Visually inspected automatic floats	Acceptable	✓	
		Not Acceptable		
5) Additional Items Inspected				
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Pumps	Refer to manufacturers O&M manuals for maintenance	Yes		
		No	✓	
2) Additional Maintenance Performed				
3) Additional Maintenance Performed				

Rochester Fire Academy

Quarterly Inspection and Maintenance Schedule Checklist

Date: 11/24/15 Location: *Treatment Building & Facility Access*

Inspected By: DMP

Inspection

Item	Action	Action Result		Notes
1) Building	Visually inspected overall appearance of the GWTP	Acceptable Not Acceptable		
2) Concrete	Visually inspected all concrete for cracks or other indications of structural failure	Acceptable Not Acceptable		
3) Building Enclosures	Visually inspected walls for bowing or indications of failure	Acceptable Not Acceptable		
4) Utilities	Visually inspected and checked utility service to entire building	Present Not Present		
5) Facility Access	Visually inspected roads, fences and gates	Acceptable Not Acceptable		
6) Additional Items Inspected				

Maintenance

Item	Maintenance Activity	Maintenance Performed		Description of Maintenance Performed or Reason NOT Performed
1) Overhead Door	Apply grease to track as needed	Yes No		Functioning properly.
2) Facility Access System	See Table 7-1 of GWTP O&M manual	Yes No		Functioning properly.
3) Additional Maintenance Performed				

January 2015

Rochester Fire Academy Weekly Log

January 2015

Date	Th 1/1/15	F 1/2	S 1/3	S 1/4	M 1/5	T 1/6	W 1/7
Daily Influent Meter Reading (gal)							
Total Influent since ~~3/1/2014~~ 1/1/15 (gal)							
Daily Effluent Meter Reading (gal)	2530	2140	2130	6340	3770	3380	
Total Effluent since ~~3/1/2014~~ 1/1/15 (gal)	2500	4614	6716	12,992	16,717	20,024	
Building Inlet Gauge (gpm)	28						41
Lead Bag Filter Inlet/ Outlet (psi)							16/5
Lag Bag Filter Inlet/Outlet (psi)							7/1
Feed Tank Pump (5 to 20 psi)							13
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							39.4
Visual Inspection NDA							✓
Visual Inspection TGA							✓
Cleaned/Changed Bag Filter #1							–
Cleaned/Changed Bag Filter #2							–
Cleaned Feed/ Discharge Tanks							–
Performed Monthly/Quarterly Sampling							–
Tested Sump Pump Operation							–
Cleaned Sump and Drain							–
Any Alarms?	NO	—	—	—	—	—	NO

40.7 12/29

Additional Tasks/ Notes:

ON: 9.5

OFF: 9.0

1/1/15 reset influent + effluent totals for new calendar year. Now 0,000

1330 Started GW trench pump

1/3/15 ½" rain

1/4/15 50° windy

M 1/5/15 start of very cold windy week 10±5° + 20+ mph wind

12/31/14 influent total 971,523 effluent total 961,950

12/31 daily 3140

Rochester Fire Academy Weekly Log

	Th	F	S	S	M	T	W
Date	1/8	1/9	1/10	1/11	1/12	1/13	1/14
Daily Influent Meter Reading (gal)							
Total Influent since ~~3/1/2014~~ (gal) 1/1/15	~~24,5~~						
Daily Effluent Meter Reading (gal)	2170	6340	3050	2450	2000	2670	1910
Total Effluent since ~~3/1/2014~~ (gal) 1/1/15	24,786	31,056	34,086	36,528	~~38,507~~	41,095	42,987
Building Inlet Gauge (gpm)						48* gauge	
Lead Bag Filter Inlet/ Outlet (psi)						6.5/5	
Lag Bag Filter Inlet/Outlet (psi)						0/0	
Feed Tank Pump (5 to 20 psi)						5	
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)					38.9	38.8	
Visual Inspection NDA					✓	✓	✓
Visual Inspection TGA					✓	✓	✓
Cleaned/Changed Bag Filter #1					—	✓	—
Cleaned/Changed Bag Filter #2					—	✓	—
Cleaned Feed/ Discharge Tanks					—	—	—
Performed Monthly/ Quarterly Sampling					—	—	—
Tested Sump Pump Operation					—	—	—
Cleaned Sump and Drain					—	✓	—
Any Alarms?	NO	—	—	—	NO	NO	NO
Additional Tasks/ Notes:							
ON:	9.5	—		8.5	8.5	8.5	8.5
OFF:	9.0	—		8.0	8.0	8.0	8.0

1/13/15 cleaned trench drain, (cleaned both bag filters)

Rochester Fire Academy Weekly Log

					Holiday		
	Th				M		W
Date	1/15/15	1/16	1/17	1/18	1/19	1/20	1/21
Daily Influent Meter Reading (gal)							
Total Influent since ~~3/1/2014~~ (gal) 1/1/15							
Daily Effluent Meter Reading (gal)	2300	1870	2590	2590	1200	2490	2740
Total Effluent since ~~3/1/2014~~ (gal) 1/1/15	45,263	47,126	49,705	52,283	53,484	55,967	58,661
Building Inlet Gauge (gpm)	49						
Lead Bag Filter Inlet/ Outlet (psi)	6/4						
Lag Bag Filter Inlet/Outlet (psi)	0/0						
Feed Tank Pump (5 to 20 psi)	5						
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)	38.6					38.1	
Visual Inspection NDA	✓	✓			✓	✓	
Visual Inspection TGA	✓	✓			✓	✓	
Cleaned/Changed Bag Filter #1	—	—			—	—	
Cleaned/Changed Bag Filter #2	—	—			—	—	
Cleaned Feed/ Discharge Tanks	—	—			—	—	
Performed Monthly/ Quarterly Sampling	✓	—			—	—	
Tested Sump Pump Operation	—	—			—	—	
Cleaned Sump and Drain	—	—			—	—	
Any Alarms?	NO	NO	—	—	NO	NO	

Additional Tasks/ Notes:

ON:	8:5	8:5	—
OFF:	8:0	8:0	—

1/15 Monthly effluent sample

Rochester Fire Academy Weekly Log

	Th	F			M	T	W
Date	1/22	1/23	1/24	1/25	1/26	1/27	1/28
Daily Influent Meter Reading (gal)							
Total Influent since ~~3/1/2014~~ (gal) 1/16							
Daily Effluent Meter Reading (gal)	1360	9180	2340	2650	2260	2040	3220
Total Effluent since ~~3/1/2014~~ (gal) 1/16	66,018	69,077	71,371	73,989	76,206	78,232	81,447
Building Inlet Gauge (gpm)		27					
Lead Bag Filter Inlet/ Outlet (psi)		4/2					
Lag Bag Filter Inlet/Outlet (psi)		0/0					
Feed Tank Pump (5 to 20 psi)		2					
Air Stripper Pressure (psi)		16					
Pump 400 (psi)							
Pump 401 (psi)		21					
Sequestering Agent Level (inches)							
Visual Inspection NDA	✓	✓		✓	✓		✓
Visual Inspection TGA	✓	✓		✓	✓		✓
Cleaned/Changed Bag Filter #1	—	—		—	—		—
Cleaned/Changed Bag Filter #2	—	—		—	—		—
Cleaned Feed/ Discharge Tanks	—	—		—	—		—
Performed Monthly/Quarterly Sampling	—	—		—	—		—
Tested Sump Pump Operation	—	—		—	—		—
Cleaned Sump and Drain	—	—			—		—
Any Alarms?	NO	NO			NO		NO
Additional Tasks/ Notes:		1/23 1500					
ON:	8.5	8.5 / 6.5	6.5	6.5	6.5	→	6.5
OFF:	8.0	8.0 / 6.0	6.0	6.0	6.0	→	6.0

Rochester Fire Academy Weekly Log

Date	1/29	1/30	1/31/15	2~~/~~/15			
Daily Influent Meter Reading (gal)							
Total Influent since ~~5/1/2014~~ (gal)							
Daily Effluent Meter Reading (gal)		4500	2600				
Total Effluent since ~~5/1/2014~~ (gal)		85,863	88,448				
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?	NO →		→				

Additional Tasks/ Notes:

ON: 6.5 →

OFF: 6.0 →

Rochester Fire Academy Weekly Log

	S	M	T	W	Th	F	S
Date	2/1/15	2/2	2/3	2/4	2/5	2/6	2/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)		91,698					
Daily Effluent Meter Reading (gal)	1930	2180	2120	2560	1890	1660	3110
Total Effluent since 1/1/2015 (gal)	90,365	92,513	94,614	97130	98971	100,641	103,683
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		36.7					
Visual Inspection NDA		✓	✓		✓		
Visual Inspection TGA		✓	✓		✓		
Cleaned/Changed Bag Filter #1		—	—		—		
Cleaned/Changed Bag Filter #2		—	—		—		
Cleaned Feed/ Discharge Tanks		—	—		—		
Performed Monthly/Quarterly Sampling		—	—		—		
Tested Sump Pump Operation		—	—		—		
Cleaned Sump and Drain		—	—		—		
Any Alarms?	No	No	No		No		
Additional Tasks/ Notes:							
ON:		6.5	6.5		6.5	6.5	
OFF:		6.0	6.0		6.0	6.0	

2/1 - 2/2 overnight snow storm ~12" cold, windy

Rochester Fire Academy Weekly Log

	~~SAS~~	M	T	W	TH	F	S
Date	2/8/15	2/9	2/10	2/11	2/12	2/13	2/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	1690	8500	2720	2380	3390	1850	3070
Total Effluent since 1/1/2015 (gal)	105,339	113,698	116,391	118,762	122,078	123,897	126,945
Building Inlet Gauge (gpm)					27 E		
Lead Bag Filter Inlet/ Outlet (psi)					4/3		
Lag Bag Filter Inlet/Outlet (psi)					0/0		
Feed Tank Pump (5 to 20 psi)					1		
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		35.7	Fill ~~GW~~	~~GW~~	64.2		
Visual Inspection NDA		✓	✓	✓	✓		
Visual Inspection TGA		✓	✓	✓	✓		
Cleaned/Changed Bag Filter #1		—	—	—	—		
Cleaned/Changed Bag Filter #2		—	—	—	—		
Cleaned Feed/ Discharge Tanks		—	—	—	—		
Performed Monthly/ Quarterly Sampling		—	—	—	—		
Tested Sump Pump Operation		—	—	—	—		
Cleaned Sump and Drain		—	—	—	—		
Any Alarms?		NO	NO	NO	NO		

Additional Tasks/ Notes:

ON:	6.5	6.5/4.5		4.5	4.5
OFF:	6.0	6.0/4.0		4.0	4.0

change ~1200 NOON

2/10 Replaced Hi + Lo floats (on/off) in Bldg Sump.
Mixed new batch of CD-900 4 gal product + 40 gal water

Rochester Fire Academy Weekly Log

Prev. Day

	S	M	T		Th		S
Date	2/15	2/16	2/17	2/18	2/19	2/20	2/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015(gal)							
Daily Effluent Meter Reading (gal)	1940	2500	1940	3470	1960	3250	1900
Total Effluent since 1/1/2015 (gal)	~~126,851~~	131,318	133,231	136,663	138,607	141,798	143,699
Building Inlet Gauge (gpm)			46 W				
Lead Bag Filter Inlet/ Outlet (psi)			6/4				
Lag Bag Filter Inlet/Outlet (psi)			0/0				
Feed Tank Pump (5 to 20 psi)			4				
Air Stripper Pressure (psi)			14				
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)			63.4		63.3		
Visual Inspection NDA			✓		✓		
Visual Inspection TGA			✓		✓		
Cleaned/Changed Bag Filter #1			—		—		
Cleaned/Changed Bag Filter #2			—		—		
Cleaned Feed/ Discharge Tanks			—		—		
Performed Monthly/ Quarterly Sampling			—		—		
Tested Sump Pump Operation			—		—		
Cleaned Sump and Drain			—		—		
Any Alarms?			NO		NO		

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Rochester Fire Academy Weekly Log

	S		T			F	
Date	2/22	2/23	2/24	2/25	2/26	2/27	2/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2120	2350	2120	3390	2250	1950	2360
Total Effluent since 1/1/2015 (gal)	145,777	148,109	150,196	153,544	155,771	157,671	159,990
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		~~62.7~~	62.7	62.5			
Visual Inspection NDA			✓	✓			
Visual Inspection TGA			✓	✓			
Cleaned/Changed Bag Filter #1			—	—			
Cleaned/Changed Bag Filter #2			—	—			
Cleaned Feed/ Discharge Tanks			—	—			
Performed Monthly/Quarterly Sampling			—	✓			
Tested Sump Pump Operation			—	—			
Cleaned Sump and Drain			—	—			
Any Alarms?	NO	—	NO	NO			
Additional Tasks/ Notes:							
ON:		4.5	4.5				
OFF:		4.0	4.0				

2/25 Quarterly influent + effluent sampling

Coldest Month in recorded local history. Avg temp 12.2°. 4 days below zero ~45" snow.

Rochester Fire Academy Weekly Log

March 2015

	S	M		W			S
Date	3/1/15	3/2	3/3	3/4	3/5	3/6	3/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2670	1970	2470	2510	2360	2630	1830
Total Effluent since 1/1/2015 (gal)	162,590	164,549	167,004	169,495	171,838	174,489	176,298
Building Inlet Gauge (gpm)			46W				
Lead Bag Filter Inlet/ Outlet (psi)			6/5				
Lag Bag Filter Inlet/Outlet (psi)			0/1				
Feed Tank Pump (5 to 20 psi)			5				
Air Stripper Pressure (psi)			16				
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)			62.0			61.6	
Visual Inspection NDA		✓	✓	✓		✓	
Visual Inspection TGA		✓	✓	✓		✓	
Cleaned/Changed Bag Filter #1		–	–	–		–	
Cleaned/Changed Bag Filter #2		–	–	–		–	
Cleaned Feed/ Discharge Tanks		–	–	–		–	
Performed Monthly/Quarterly Sampling		–	–	–		–	
Tested Sump Pump Operation		–	–	–		–	
Cleaned Sump and Drain		–	–	–		–	
Any Alarms?		NC	NO	NO		NC	
Additional Tasks/ Notes:							
ON:		4.5	4.5	4.5		4.5	
OFF:		4.0	4.0	4.0		4.0	

Rochester Fire Academy Weekly Log

Date	S 3/8	M 3/9	3/10	3/11	3/12	3/13	3/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2570	1940	3430	6730	10870	6150	8050
Total Effluent since 1/1/2015 (gal)	178,856	180,793	184,199	190,823	201,510	207,558	215,454
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		61.3					
Visual Inspection NDA		✓	✓		✓		
Visual Inspection TGA		✓	✓		✓		
Cleaned/Changed Bag Filter #1		–	–		–		
Cleaned/Changed Bag Filter #2		–	–		–		
Cleaned Feed/ Discharge Tanks		–	–		–		
Performed Monthly/Quarterly Sampling		–	–		–		
Tested Sump Pump Operation		–	–		–		
Cleaned Sump and Drain		–	–		–		
Any Alarms?		No	No		No		
Additional Tasks/ Notes:					~~✓~~		
ON:		4.5	4.5		4.5		
OFF:		4.0	4.0		4.0		

3/9 Start of gradual thaw Forecast for the week Hi - low 40s Lows 25-30 after a very cold and very snowy Feb. + early March. Still ~2 ft. snowpack

Rochester Fire Academy Weekly Log

5

Date	3/15	3/16	3/17	3/18	3/19	3/20	3/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	11,230	9710	17,420	10,980	5880	5940	5690
Total Effluent since 1/1/2015 (gal)	226,510	236,080	253,340	264,189	269,994	275,833	281,438
Building Inlet Gauge (gpm)			46				
Lead Bag Filter Inlet/ Outlet (psi)			7/5				
Lag Bag Filter Inlet/Outlet (psi)			0/1				
Feed Tank Pump (5 to 20 psi)			5				
Air Stripper Pressure (psi)			16				
Pump 400 (psi)			17				
Pump 401 (psi)							
Sequestering Agent Level (inches)			58.9				
Visual Inspection NDA		✓	✓				
Visual Inspection TGA		✓	✓				
Cleaned/Changed Bag Filter #1		—	—				
Cleaned/Changed Bag Filter #2		—	—				
Cleaned Feed/ Discharge Tanks		—	—				
Performed Monthly/ Quarterly Sampling		—	—				
Tested Sump Pump Operation		—	—				
Cleaned Sump and Drain		—	—				
Any Alarms?	no	no	yes				

Additional Tasks/ Notes:

ON:	4.5	4.5	4.5
OFF:	40	40	40

3/17 TGA pump sta alarms. Cleared within 20 min

Rochester Fire Academy Weekly Log

Date	3/22	3/23	3/24	3/25	3/26	3/27	3/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015(gal)							
Daily Effluent Meter Reading (gal)	6420	4410	4550	4490	5480	6250	5460
Total Effluent since 1/1/2015 (gal)	287,767	292,090	296,566	301,012	306,448	312,640	318,020
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		57.1					
Visual Inspection NDA		✓					
Visual Inspection TGA		✓					
Cleaned/Changed Bag Filter #1		—					
Cleaned/Changed Bag Filter #2		—					
Cleaned Feed/ Discharge Tanks		—					
Performed Monthly/ Quarterly Sampling		—					
Tested Sump Pump Operation		—					
Cleaned Sump and Drain		—					
Any Alarms?		NO					

Additional Tasks/ Notes:

ON: 4,5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	3/29	3/30	3/31				
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3960	4160	4422				
Total Effluent since 1/1/2015 (gal)	321,907	326,040	330,226				
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		55.9					
Visual Inspection NDA		✓					
Visual Inspection TGA		✓					
Cleaned/Changed Bag Filter #1		—					
Cleaned/Changed Bag Filter #2		—					
Cleaned Feed/ Discharge Tanks		—					
Performed Monthly/Quarterly Sampling		—					
Tested Sump Pump Operation		—					
Cleaned Sump and Drain		—					
Any Alarms?		—					

Additional Tasks/ Notes:

ON:	4.5	4.5	4.5
OFF:	4.0	4.0	4.0

Rochester Fire Academy Weekly Log

T

Date	4/1/15	4/2	4/3	4/4	4/5	4/6	4/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	4260	3430	3830	4670	5170	3900	4130
Total Effluent since 1/1/2015 (gal)	334,435	337,836	341,588	346,207	351,306	355,128	359,166
Building Inlet Gauge (gpm)						46 ①	
Lead Bag Filter Inlet/ Outlet (psi)						6/4	
Lag Bag Filter Inlet/Outlet (psi)						0/1	
Feed Tank Pump (5 to 20 psi)						6	
Air Stripper Pressure (psi)						16	
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)						54.7	
Visual Inspection NDA						✓	✓
Visual Inspection TGA						✓	✓
Cleaned/Changed Bag Filter #1						—	—
Cleaned/Changed Bag Filter #2						—	—
Cleaned Feed/ Discharge Tanks						—	—
Performed Monthly/Quarterly Sampling						—	—
Tested Sump Pump Operation						—	—
Cleaned Sump and Drain						—	—
Any Alarms?						No	No
Additional Tasks/ Notes:							
ON:						4.5	4.5
OFF:						4.0	4.0

Rochester Fire Academy Weekly Log

Date	W 4/8/15	4/9	4/10	4/11	4/12	M 4/13	T 4/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	5080	6270	7560	5930	4060	3890	3980
Total Effluent since 1/1/2015 (gal)	364,171	370,418	377,898	383,676	387,689	391,544	395,507
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)	16						
Pump 400 (psi)							
Pump 401 (psi)	21						
Sequestering Agent Level (inches)							53.4
Visual Inspection NDA	✓					✓	✓
Visual Inspection TGA	✓					✓	✓
Cleaned/Changed Bag Filter #1	—					—	—
Cleaned/Changed Bag Filter #2	—					—	—
Cleaned Feed/ Discharge Tanks	—					—	—
Performed Monthly/Quarterly Sampling	—					—	—
Tested Sump Pump Operation	—					—	—
Cleaned Sump and Drain	—					—	—
Any Alarms?	NO					NO	NO

Additional Tasks/ Notes:

ON:	4.5				4.5		4.5
OFF:	4.0				4.0		4.0

4/12 Sunny 65°

Rochester Fire Academy Weekly Log

	W					M	T
Date	4/15/15	4/16	4/17	4/18	4/19	4/20	4/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	4060	26K	3990	3350	3870	3700	6840
Total Effluent since 1/1/2015 (gal)	399,542	402,127	406,074	409,376	413,235	416,935	423,701
Building Inlet Gauge (gpm)	44						42 ①
Lead Bag Filter Inlet/ Outlet (psi)	8/5	~~7/5~~					7/5
Lag Bag Filter Inlet/Outlet (psi)	0/1	~~0/1~~					0/1
Feed Tank Pump (5 to 20 psi)	6	~~7/6~~					6
Air Stripper Pressure (psi)	16.5						16
Pump 400 (psi)							
Pump 401 (psi)	21						21
Sequestering Agent Level (inches)							52.3
Visual Inspection NDA	✓						
Visual Inspection TGA	✓						
Cleaned/Changed Bag Filter #1	–						
Cleaned/Changed Bag Filter #2	–						
Cleaned Feed/ Discharge Tanks	–						
Performed Monthly/ Quarterly Sampling	–						
Tested Sump Pump Operation	–						
Cleaned Sump and Drain	–						
Any Alarms?	No						No

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Week of 4/20 clear brush/logs from outside of fence at NDA

Rochester Fire Academy Weekly Log

Date	4/22	4/23	4/24	4/25	4/26	4/27	Tue 4/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015(gal)							
Daily Effluent Meter Reading (gal)	4550	4650	3800	3460	3450	3380	3170
Total Effluent since 1/1/2015 (gal)	428,171	432,753	436,524	439,951	443,384	446,695	449,852
Building Inlet Gauge (gpm)	42						
Lead Bag Filter Inlet/ Outlet (psi)	7.5/5						
Lag Bag Filter Inlet/Outlet (psi)	0/1						
Feed Tank Pump (5 to 20 psi)	6						
Air Stripper Pressure (psi)	15						
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		51.9					51.4
Visual Inspection NDA	✓	✓					✓
Visual Inspection TGA	✓	✓					✓
Cleaned/Changed Bag Filter #1	—	—					—
Cleaned/Changed Bag Filter #2	—	—					—
Cleaned Feed/ Discharge Tanks	—	—					—
Performed Monthly/ Quarterly Sampling	✓	—					—
Tested Sump Pump Operation	—	—					—
Cleaned Sump and Drain	—	—					—
Any Alarms?	No	No					No
Additional Tasks/ Notes:							
ON:	4.5	4.5					4.5
OFF:	4.0	4.0					4.0

4/22 Sample effluent

Rochester Fire Academy Weekly Log

Date	4/27	4/30					
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2340	3310					
Total Effluent since 1/1/2015 (gal)	452,157	455,390					
Building Inlet Gauge (gpm)	41 ①						
Lead Bag Filter Inlet/ Outlet (psi)	8/5						
Lag Bag Filter Inlet/Outlet (psi)	1/1						
Feed Tank Pump (5 to 20 psi)	7						
Air Stripper Pressure (psi)	16						
Pump 400 (psi)							
Pump 401 (psi)	21						
Sequestering Agent Level (inches)	51.2						
Visual Inspection NDA	✓						
Visual Inspection TGA	✓						
Cleaned/Changed Bag Filter #1	—						
Cleaned/Changed Bag Filter #2	—						
Cleaned Feed/ Discharge Tanks	—						
Performed Monthly/Quarterly Sampling	—						
Tested Sump Pump Operation	—						
Cleaned Sump and Drain	—						
Any Alarms?	NO						

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	5/1/15	5/2	5/3	5/4	5/5	5/6	5/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3100	2490	3020	2950	3330	3240	5200
Total Effluent since 1/1/2015 (gal)	458,~~44~~46	460,928	463,926	466,849	470,173	473,412	478,522
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)						50.5	
Visual Inspection NDA			✓			✓	
Visual Inspection TGA			✓			✓	
Cleaned/Changed Bag Filter #1			–			–	
Cleaned/Changed Bag Filter #2			–			–	
Cleaned Feed/ Discharge Tanks			–			–	
Performed Monthly/Quarterly Sampling			–			–	
Tested Sump Pump Operation			–			–	
Cleaned Sump and Drain			–			–	
Any Alarms?			NO			NO	
Additional Tasks/ Notes:							
ON:	4.5					4.5	3.5
OFF:	4.0					4.0	3.0

5/7 changed intake levels at GW pumpstation to 3.5/3.0

Rochester Fire Academy Weekly Log

Date	5/8	5/9	5/10	5/11	5/12	5/13	5/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	481,416	484,337	487,193	490,088	493230	499,101	
Daily Effluent Meter Reading (gal)	2910	2930	2870	2930	3150	5910	1490
Total Effluent since 1/1/2015 (gal)	481,416	484,337	487,193	490,088	493,230	499,101	500,577
Building Inlet Gauge (gpm)						41 ①	
Lead Bag Filter Inlet/ Outlet (psi)						10/4	
Lag Bag Filter Inlet/Outlet (psi)						2/1	
Feed Tank Pump (5 to 20 psi)						8	
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)					49.6		49.4
Visual Inspection NDA		✓		✓	✓	✓	✓
Visual Inspection TGA		✓		✓	✓	✓	✓
Cleaned/Changed Bag Filter #1		—		—	—	—	—
Cleaned/Changed Bag Filter #2		—		—	—	—	—
Cleaned Feed/ Discharge Tanks		—		—	—	—	—
Performed Monthly/Quarterly Sampling		—		—	—	—	—
Tested Sump Pump Operation		—		—	—	—	—
Cleaned Sump and Drain		—		—	—	—	—
Any Alarms?		No		NO	No	NO	no

Additional Tasks/ Notes:

ON:		3.5	3.5/~~4.5~~	2.5	Gw level 2.5
OFF:		3.0	3.9/~~4.0~~	2.0	

5/13 change intake to 2.5/2.0 ~11:30 AM

5/14 DAF on site to repair plumbing leak at GW pump station, remove Pump #2 to be replaced soon. Need parts to finish job. All pumps off until parts are installed.

Rochester Fire Academy Weekly Log

Date	5/15	5/16	5/17	5/18	5/19	5/20	5/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	0	0	0	0	0	0	0
Total Effluent since 1/1/2015 (gal)	500,577	500,577	500,577	500,577	500,577	500,577	500,577
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/ Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:

ON:			GW level 5.98		7.34	7.81
OFF:						

System off 5/15 - 5/29

Rochester Fire Academy Weekly Log

Date	5/22	5/23	5/24	5/25	5/26	5/27	5/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015(gal)							
Daily Effluent Meter Reading (gal)	0	0	0	0	0	480	0
Total Effluent since 1/1/2015 (gal)	500,577	500,577	500,577	500,577	500,577	501,034	501,034
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/ Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:

ON: 9.95 10.29

OFF:

System off 5/15 - 5/29

Rochester Fire Academy Weekly Log

Date	5/29	5/30	5/31				
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	6130	1660	2060				
Total Effluent since 1/1/2015 (gal)	507,111	508,759	510,800				
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA	✓						
Visual Inspection TGA	✓						
Cleaned/Changed Bag Filter #1	—						
Cleaned/Changed Bag Filter #2	—						
Cleaned Feed/ Discharge Tanks	—						
Performed Monthly/Quarterly Sampling	✓						
Tested Sump Pump Operation	—						
Cleaned Sump and Drain	—						
Any Alarms?	—						

Additional Tasks/ Notes:

ON:	10.77	9.5	9.5
OFF:		9.0	9.0

5/29 Restart Pump 1 in Auto Mode
Quarterly influent + effluent sampling

Rochester Fire Academy Weekly Log

June 2015

	M	T	W	Th	Fri		
Date	6/1/15	6/2	6/3	6/4	6/5	6/6	6/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	~~512,788~~	~~514,906~~					
Daily Effluent Meter Reading (gal)	2010	2140	6,720	2540	6420	3070	1970
Total Effluent since 1/1/2015 (gal)	512,788	514,906	520,584	523,115	529,465	532,525	534,482
Building Inlet Gauge (gpm)			48 ①				
Lead Bag Filter Inlet/ Outlet (psi)			8/5				
Lag Bag Filter Inlet/Outlet (psi)			2/1				
Feed Tank Pump (5 to 20 psi)			8				
Air Stripper Pressure (psi)			15				
Pump 400 (psi)			18				
Pump 401 (psi)							
			-	-			
Sequestering Agent Level (inches)			48.6	48.45			
Visual Inspection NDA			✓	✓			
Visual Inspection TGA			✓	✓			
Cleaned/Changed Bag Filter #1			—	✓	✓		
Cleaned/Changed Bag Filter #2			—	—			
Cleaned Feed/ Discharge Tanks			—	—			
Performed Monthly/Quarterly Sampling			—	—			
Tested Sump Pump Operation			—	—			
Cleaned Sump and Drain			—	—			
Any Alarms?			—	—			

Additional Tasks/ Notes:

ON:	9.5	9.5	8.5	8.5	7.5	7.5
OFF:	9.0	9.0	8.0 change @ 12:45 AM	8.0	7.0 change at 1 PM	7.0

6/5/15 changed Bag filter #1

Rochester Fire Academy Weekly Log

Date	6/8/15	6/9	6/10	6/11	6/12	6/13	6/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2370	3320	3500	13,200	4460	4440	3910
Total Effluent since 1/1/2015 (gal)	536,848	540,126	543,575	556,69	561,057	565,481	569,375
Building Inlet Gauge (gpm)	16 ①			49 ①			
Lead Bag Filter Inlet/ Outlet (psi)	2/2						
Lag Bag Filter Inlet/Outlet (psi)	0/0						
Feed Tank Pump (5 to 20 psi)	2						
Air Stripper Pressure (psi)	15						
Pump 400 (psi)							
Pump 401 (psi)	21						
Sequestering Agent Level (inches)							
Visual Inspection NDA	✓						
Visual Inspection TGA	✓						
Cleaned/Changed Bag Filter #1	—						
Cleaned/Changed Bag Filter #2	—						
Cleaned Feed/ Discharge Tanks	—						
Performed Monthly/Quarterly Sampling	—						
Tested Sump Pump Operation	—						
Cleaned Sump and Drain	—						
Any Alarms?	—						
Additional Tasks/ Notes:							
ON:	7.5			6.5			6.5
OFF:	7.0			6.0			6.0

M 6/8/15 Heavy rain at times 6/9/15 steady drizzle 6/10/15 Heavy Rain at times
6/11/15 DAY on site. Raise Pump #2 in GW Sump. Remove pebble from check valve

Rochester Fire Academy Weekly Log

	M		W		F		Sun
Date	6/15	6/16	6/17	6/18	6/19	6/20	6/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	4620	9300	4710	4000	6820	3430	3250
Total Effluent since 1/1/2015 (gal)	573,995	583,223	587,933	591,891	598,669	602,095	605,320
Building Inlet Gauge (gpm)	48 ①	65 ②			48 ①		
Lead Bag Filter Inlet/ Outlet (psi)	5/5	8/8			5/5		
Lag Bag Filter Inlet/Outlet (psi)	0/2	2/4			0/2		
Feed Tank Pump (5 to 20 psi)	5	10			10		
Air Stripper Pressure (psi)		13					
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)	46.9				46.5		
Visual Inspection NDA	✓	✓			✓		
Visual Inspection TGA	✓	✓			✓		
Cleaned/Changed Bag Filter #1	—	—			—		
Cleaned/Changed Bag Filter #2	—	—			—		
Cleaned Feed/ Discharge Tanks	—	—			—		
Performed Monthly/ Quarterly Sampling	—	—					
Tested Sump Pump Operation	—	—			—		
Cleaned Sump and Drain	—	—			—		
Any Alarms?	—	✓					

Additional Tasks/ Notes:

ON:	6.5	5.5	——	——	~~5.5~~ 4.5	——	4.5
OFF:	6.0	5.0	——	——	~~4.5~~ 4.0	——	4.0

6/16 10:30 change to 5.5'

6/19 Adjust Amp setting to ~52 A for Pump #2 (GW) at panel box

6/19 change GW on/off to 4.5/4.0

Rochester Fire Academy Weekly Log

Date	M 6/22/15	6/23	6/24	6/25	6/26	6/27	6/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015(gal)							
Daily Effluent Meter Reading (gal)	3200	3200	3130	2970	2920	2880	3440
Total Effluent since 1/1/2015 (gal)	608,491	611,681	614,795	617,744	620,656	623,512	626,911
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)			46.0		45.9		
Visual Inspection NDA	✓		✓		✓		
Visual Inspection TGA	✓		✓		✓		
Cleaned/Changed Bag Filter #1	–		–		–		
Cleaned/Changed Bag Filter #2	–		–		–		
Cleaned Feed/ Discharge Tanks	–		–		–		
Performed Monthly/ Quarterly Sampling	–		–		–		
Tested Sump Pump Operation	–		–		–		
Cleaned Sump and Drain	–		–		–		
Any Alarms?	–		–		–		

Additional Tasks/ Notes:

ON:	4.5	4.5	4.5
OFF:	4.0	4.0	4.0

Rochester Fire Academy Weekly Log

Date	6/29	6/30					
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2870	3190					
Total Effluent since 1/1/2015 (gal)	629,769	632,938					
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA	✓						
Visual Inspection TGA	✓						
Cleaned/Changed Bag Filter #1	–						
Cleaned/Changed Bag Filter #2	–						
Cleaned Feed/ Discharge Tanks	–						
Performed Monthly/Quarterly Sampling	–						
Tested Sump Pump Operation	–						
Cleaned Sump and Drain	–						
Any Alarms?	–						

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Rochester Fire Academy Weekly Log

July 2015

	W						T
Date	7/1/15	7/2	7/3	7/4	7/5	7/6	7/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	4020	3560	3360	3160	3170	2840	3120
Total Effluent since 1/1/2015 (gal)	636,960	640,502	643,842	646,983	650,143	652,958	656,048
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)	15						
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)	45.5						
Visual Inspection NDA	✓						
Visual Inspection TGA	✓						
Cleaned/Changed Bag Filter #1	–						
Cleaned/Changed Bag Filter #2	–						
Cleaned Feed/ Discharge Tanks	–						
Performed Monthly/Quarterly Sampling	–						
Tested Sump Pump Operation	–						
Cleaned Sump and Drain	–						
Any Alarms?	–						

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	7/8	7/9	7/10	7/11	7/12	7/13	7/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2850	3120	2550	2760	2750	2680	2730
Total Effluent since 1/1/2015 (gal)	658,874	661,982	664,532	667,292	670,033	672,709	675,416
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		44.9				44.5	
Visual Inspection NDA						✓	
Visual Inspection TGA						✓	
Cleaned/Changed Bag Filter #1						—	
Cleaned/Changed Bag Filter #2						—	
Cleaned Feed/ Discharge Tanks						—	
Performed Monthly/Quarterly Sampling						—	
Tested Sump Pump Operation						—	
Cleaned Sump and Drain						—	
Any Alarms?						—	
Additional Tasks/ Notes:							
ON:	4.5					4.5	
OFF:	4.0					4.0	

Rochester Fire Academy Weekly Log

Date	7/15	7/16	7/17	7/18	7/19	7/20	7/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2680	2400	2730	3090	3100	2790	2900
Total Effluent since 1/1/2015 (gal)	678,110	680,514	683,219	686,287	689,375	692,145	695,038
Building Inlet Gauge (gpm)		61 E	62 E				
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)		15					
Pump 400 (psi)							
Pump 401 (psi)		21					
Sequestering Agent Level (inches)		44.3					
Visual Inspection NDA		—	—				
Visual Inspection TGA		—	—				
Cleaned/Changed Bag Filter #1		—	—				
Cleaned/Changed Bag Filter #2		—	—				
Cleaned Feed/ Discharge Tanks		—	—				
Performed Monthly/ Quarterly Sampling		—	✓				
Tested Sump Pump Operation		—	—				
Cleaned Sump and Drain		—	—				
Any Alarms?		—	—				

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Rochester Fire Academy Weekly Log

						M	
Date	7/22	7/23	7/24	7/25	7/26	7/27	7/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015(gal)							
Daily Effluent Meter Reading (gal)	2820	2890	2140	3190	2590	2530	2610
Total Effluent since 1/1/2015 (gal)	697,839	700, 699	702,831	706,000	708,570	711,083	713,679
Building Inlet Gauge (gpm)							61 (3)
Lead Bag Filter Inlet/ Outlet (psi)							8/7
Lag Bag Filter Inlet/Outlet (psi)							2/3
Feed Tank Pump (5 to 20 psi)							9
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							43.4
Visual Inspection NDA						✓	✓
Visual Inspection TGA						✓	✓
Cleaned/Changed Bag Filter #1						–	–
Cleaned/Changed Bag Filter #2						–	–
Cleaned Feed/ Discharge Tanks						–	–
Performed Monthly/ Quarterly Sampling						–	–
Tested Sump Pump Operation						–	–
Cleaned Sump and Drain						–	–
Any Alarms?						–	–
Additional Tasks/ Notes:							
ON:						4.5	4.5
OFF:						4.0	4.0

Rochester Fire Academy Weekly Log

Date	7/29	7/30	7/31				
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2610	2770	2030				
Total Effluent since 1/1/2015 (gal)	716,265	719,027	721,037				
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:
ON:
OFF:

Rochester Fire Academy Weekly Log

M

Date	8/1/15	8/2	8/3	8/4	8/5	8/6	8/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	1140	C	6260	2840	2320	2720	2500
Total Effluent since 1/1/2015 (gal)	722,179	722,179	728,359	731,183	733,507	736,227	738,688
Building Inlet Gauge (gpm)			63				
Lead Bag Filter Inlet/ Outlet (psi)			7/7				
Lag Bag Filter Inlet/Outlet (psi)			2/3				
Feed Tank Pump (5 to 20 psi)			9				
Air Stripper Pressure (psi)			15				
Pump 400 (psi)							
Pump 401 (psi)			22				
Sequestering Agent Level (inches)			42.8				
Visual Inspection NDA			✓				
Visual Inspection TGA			✓				
Cleaned/Changed Bag Filter #1			–				
Cleaned/Changed Bag Filter #2			–				
Cleaned Feed/ Discharge Tanks			–				
Performed Monthly/Quarterly Sampling			–				
Tested Sump Pump Operation			–				
Cleaned Sump and Drain			–				
Any Alarms?							

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	8/8	8/9	8/10	8/11	8/12	8/13	8/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2480	2470	2700	2330	2740	2230	3070
Total Effluent since 1/1/2015 (gal)	741,168	743,611	746,290	748,600	751,309	753,533	756,537
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:
ON:
OFF:

Rochester Fire Academy Weekly Log

Date	8/15	8/16	8/17	8/18	8/19	8/20	8/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2560	2390	2690	2410	2620	1440	3430
Total Effluent since 1/1/2015 (gal)	759,088	761,480	~~766,353~~ 764,138	~~769,144~~ 766,553	769,144	770,589	773,983
Building Inlet Gauge (gpm)							60
Lead Bag Filter Inlet/ Outlet (psi)							8/6
Lag Bag Filter Inlet/Outlet (psi)							2/4
Feed Tank Pump (5 to 20 psi)							10
Air Stripper Pressure (psi)							15.5
Pump 400 (psi)							20
Pump 401 (psi)							
Sequestering Agent Level (inches)							41.5
Visual Inspection NDA							✓
Visual Inspection TGA							✓
Cleaned/Changed Bag Filter #1							—
Cleaned/Changed Bag Filter #2							—
Cleaned Feed/ Discharge Tanks							—
Performed Monthly/Quarterly Sampling							✓
Tested Sump Pump Operation							—
Cleaned Sump and Drain							—
Any Alarms?							

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Rochester Fire Academy Weekly Log

Date	8/22	8/23	8/24	8/25	8/26	8/27	8/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	0	0	886	3130	2960	2980	2400
Total Effluent since 1/1/2015 (gal)	773,983	773,983	782,763	785,871	788,797	791,786	794,192
Building Inlet Gauge (gpm)			47 ① N	60 ② E			
Lead Bag Filter Inlet/ Outlet (psi)			~~47/5~~ ①	8/6			
Lag Bag Filter Inlet/Outlet (psi)			0/1	2/3			
Feed Tank Pump (5 to 20 psi)			6	9			
Air Stripper Pressure (psi)			15				
Pump 400 (psi)			20				
Pump 401 (psi)							
Sequestering Agent Level (inches)			41.2				
Visual Inspection NDA			✓	✓			
Visual Inspection TGA			✓	✓			
Cleaned/Changed Bag Filter #1			—	—			
Cleaned/Changed Bag Filter #2			—	—			
Cleaned Feed/ Discharge Tanks			—	—			
Performed Monthly/Quarterly Sampling			—	—			
Tested Sump Pump Operation			—	—			
Cleaned Sump and Drain			—	—			
Any Alarms?				—			

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Rochester Fire Academy Weekly Log

Date	8/29	Sun 8/30	8/31				
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2650	2470	2610				
Total Effluent since 1/1/2015 (gal)	796,821	799,275	801,901				
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:	
ON:	4.5
OFF:	4.0

Rochester Fire Academy Weekly Log

Date	T 9/1/15	W 9/2	Th 9/3	9/4	9/5	9/6	M Labor Day 9/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	1460	4080	2480	2730	2500	2310	2480
Total Effluent since 1/1/2015 (gal)	803,329	807,389	809,867	812,567	815,028	817,321	819,775
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)			40.2				
Visual Inspection NDA			✓				
Visual Inspection TGA			✓				
Cleaned/Changed Bag Filter #1			–				
Cleaned/Changed Bag Filter #2			–				
Cleaned Feed/ Discharge Tanks			–				
Performed Monthly/Quarterly Sampling			–				
Tested Sump Pump Operation		✓	–				
Cleaned Sump and Drain			–				
Any Alarms?			–				

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

9/1/15 DAY on site to change A.S. discharge pump/piping layout. AS discharge pumps eliminated from system. AS sump now discharge directly to sewer via system discharge pumps. Piping was re-sorted so the discharge tank not needed. + discharge tank

Rochester Fire Academy Weekly Log

T Sat Rain Sun

Date	9/8	9/9	9/10	9/11	9/12	9/13	9/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2710	2520	2370	2540	2630	3340	2430
Total Effluent since 1/1/2015 (gal)	822,440	824,440	827,239	829,765	832,375	835,637	838,017
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		39.6					
Visual Inspection NDA	✓	✓					✓
Visual Inspection TGA	✓	✓					✓
Cleaned/Changed Bag Filter #1	—	—					—
Cleaned/Changed Bag Filter #2	—	—					—
Cleaned Feed/ Discharge Tanks	—	—					—
Performed Monthly/Quarterly Sampling	—	—					—
Tested Sump Pump Operation	—	—					—
Cleaned Sump and Drain	—	—					—
Any Alarms?	—	—					—

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

Rochester Fire Academy Weekly Log

Date	9/15	9/16	9/17	9/18	9/19	9/20	9/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	840,527	843,275	845,781	848,462	851,455	853,871	856,457
Daily Effluent Meter Reading (gal)	2520	2780	2510	2805	3040	2430	2620
Total Effluent since 1/1/2015 (gal)							
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							38.4
Visual Inspection NDA							✓
Visual Inspection TGA							✓
Cleaned/Changed Bag Filter #1							—
Cleaned/Changed Bag Filter #2							—
Cleaned Feed/ Discharge Tanks							—
Performed Monthly/Quarterly Sampling							—
Tested Sump Pump Operation							—
Cleaned Sump and Drain							—
Any Alarms?							—

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	9/22	9/23	9/24	9/25	9/26	9/27	9/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2830	256	2440	3070	2410	2510	2600
Total Effluent since 1/1/2015 (gal)	859,290	861,833	864,232	867,283	869,664	872,125	874,674
Building Inlet Gauge (gpm)		47 WO					47 WO
Lead Bag Filter Inlet/ Outlet (psi)		6/5					5/5
Lag Bag Filter Inlet/Outlet (psi)		0/1					0/1
Feed Tank Pump (5 to 20 psi)		5					5
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							37.8
Visual Inspection NDA		✓					✓
Visual Inspection TGA		✓					✓
Cleaned/Changed Bag Filter #1		—					—
Cleaned/Changed Bag Filter #2		—					—
Cleaned Feed/ Discharge Tanks		—					—
Performed Monthly/Quarterly Sampling		—					✓
Tested Sump Pump Operation		—					—
Cleaned Sump and Drain		—					—
Any Alarms?		—				—	—

Additional Tasks/ Notes:

ON:	4.5
OFF:	4.0

Rochester Fire Academy Weekly Log

Date	9/29	9/30					
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2600	3050					
Total Effluent since 1/1/2015 (gal)	877,231	880,260					
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:

ON: 4.5 —

OFF: 4.0 —

Rochester Fire Academy Weekly Log

Date	10/1/15	10/2	10/3	10/4	10/5	10/6	10/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3140	3310	3150	2470	3220	2660	2590
Total Effluent since 1/1/2015 (gal)	883,373	886,661	889,723	892,106	895,276	898,114	900,671
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches) Bottle 300					37.0		
Visual Inspection NDA					✓		
Visual Inspection TGA					✓		
Cleaned/Changed Bag Filter #1					—		
Cleaned/Changed Bag Filter #2					—		
Cleaned Feed/ Discharge Tanks					—		
Performed Monthly/Quarterly Sampling					—		
Tested Sump Pump Operation					✓		
Cleaned Sump and Drain					—		
Any Alarms?					—		

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	10/8	10/9	10/10	10/11	10/12	10/13	10/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2870	3050	2930	2600	2970	3090	2870
Total Effluent since 1/1/2015 (gal)	903,504	906,476	909,360	911,930	914,857	917,917	920,729
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

Rochester Fire Academy Weekly Log

Date	10/15	10/16	10/17	10/18	10/19	10/20	10/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3130	2520	2960	2990	3160	2550	3130
Total Effluent since 1/1/2015 (gal)	923,838	926,321	929,215	932,137	935,243	937,724	940,825
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)	35.9						
Visual Inspection NDA	✓				✓		
Visual Inspection TGA	✓				✓		
Cleaned/Changed Bag Filter #1	—				—		
Cleaned/Changed Bag Filter #2	—				—		
Cleaned Feed/ Discharge Tanks	—				—		
Performed Monthly/Quarterly Sampling	—				—		
Tested Sump Pump Operation	—				—		
Cleaned Sump and Drain	—				—		
Any Alarms?	—				✓		
Additional Tasks/ Notes:							
ON:	4.5				4.5		
OFF:	4.0				4.0		

Rochester Fire Academy Weekly Log

Date	10/22	10/23	10/24	10/25	10/26	10/27	10/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2440	3040	2980	2650	2970	2640	5490
Total Effluent since 1/1/2015 (gal)	943,213	946,169	949,089	951,712	954,634	957,216	962,646
Building Inlet Gauge (gpm)	57 (AE)				46	46 (LL)	
Lead Bag Filter Inlet/ Outlet (psi)	8/6				7/5	7/5	
Lag Bag Filter Inlet/Outlet (psi)	2/2				0/1	0/1	
Feed Tank Pump (5 to 20 psi)	9				5	5	
Air Stripper Pressure (psi)						16.5	
~~Pump 400 (psi)~~							
~~Pump 401 (psi)~~							
Sequestering Agent Level (inches)	35.1				34.1	34.7	
Visual Inspection NDA	✓				✓	✓	
Visual Inspection TGA	✓				✓	✓	
Cleaned/Changed Bag Filter #1	–				–	–	
Cleaned/Changed Bag Filter #2	–				–	–	
Cleaned Feed/ Discharge Tanks	–				–	–	
Performed Monthly/Quarterly Sampling	✓				–	–	
Tested Sump Pump Operation	–				–	–	
Cleaned Sump and Drain	–				–	–	
Any Alarms?	–				–	–	

Additional Tasks/ Notes:

ON:	4.5				4.5	4.5	
OFF:	4.0				4.0	4.0	

Rochester Fire Academy Weekly Log

Date	10/29	10/30	10/31				
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	6780	4550	3910				
Daily Effluent Meter Reading (gal)	469,347	973,794	977,394				
Total Effluent since 1/1/2015 (gal)							
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:
ON:
OFF:

Rochester Fire Academy Weekly Log

NOVEMBER 2015

Date	11/1/15	11/2	11/3	11/4	11/5	11/6	11/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3500	3610	3110	3080	3270	3050	2980
Total Effluent since 1/1/2015 (gal)	980,856	984,375	987,457	990,470	993,653	996,730	999,605
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA					✓		
Visual Inspection TGA					✓		
Cleaned/Changed Bag Filter #1					–		
Cleaned/Changed Bag Filter #2					–		
Cleaned Feed/ Discharge Tanks					–		
Performed Monthly/Quarterly Sampling					–		
Tested Sump Pump Operation					–		
Cleaned Sump and Drain					–		
Any Alarms?					–		

Additional Tasks/ Notes:

ON:	4.5
OFF:	4.0

11/3/15 Sample Monitoring Wells

Rochester Fire Academy Weekly Log

Date	11/8	11/9	11/10	11/11	11/12	11/13	11/14
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3210	2680	2620	3050	3110	3150	2620
Total Effluent since 1/1/2015 (gal)	1,002,793	1,005,601	1,008,131	1,011,132	1,014,155	1,017,081	1,019,652
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?			Y				

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

11/10/15 Discharge Pump 1 fail

Rochester Fire Academy Weekly Log

Date	11/15	11/16	11/17	11/18	11/19	11/20	11/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	297	3120	2960	2810	2770	3120	2590
Total Effluent since 1/1/2015 (gal)	1,022,574	1,025,640	1,028,577	1,031,375	1,034,071	1,037,074	1,039,648
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		33.7					
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:
ON:
OFF:

Rochester Fire Academy Weekly Log

Date	11/22	11/23	11/24	11/25	11/26	11/27	11/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	3140	2540	2780	2860	2610	2990	2620
Total Effluent since 1/1/2015 (gal)	1,042,746	1,045,281	1,048,059	1,050,883	1,053,456	1,056,352	1,058,928
Building Inlet Gauge (gpm)				55			
Lead Bag Filter Inlet/ Outlet (psi)				5/10			
Lag Bag Filter Inlet/Outlet (psi)				2/3			
Feed Tank Pump (5 to 20 psi)				9			
Air Stripper Pressure (psi)				17			
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)			33.3/62.0				
Visual Inspection NDA			✓				
Visual Inspection TGA			✓				
Cleaned/Changed Bag Filter #1			–				
Cleaned/Changed Bag Filter #2			–				
Cleaned Feed/ Discharge Tanks			–				
Performed Monthly/Quarterly Sampling (Quarterly circled)			✓ (circled)				
Tested Sump Pump Operation			–				
Cleaned Sump and Drain			–				
Any Alarms?			–				

Additional Tasks/ Notes:

ON: 45

OFF: 40

11/24 Disassembled / Cleaned / Reassembled Discharge Pump #1 (201)

Rochester Fire Academy Weekly Log

Date	11/29	4/30					
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	2530	2860					
Total Effluent since 1/1/2015 (gal)	1,061,425	1,065,811					
Building Inlet Gauge (gpm)		55 air					
Lead Bag Filter Inlet/ Outlet (psi)		9/5					
Lag Bag Filter Inlet/Outlet (psi)		3/2					
Feed Tank Pump (5 to 20 psi)		9					
Air Stripper Pressure (psi)		16					
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		61.5					
Visual Inspection NDA		✓					
Visual Inspection TGA		✓					
Cleaned/Changed Bag Filter #1		—					
Cleaned/Changed Bag Filter #2		—					
Cleaned Feed/ Discharge Tanks		—					
Performed Monthly/Quarterly Sampling		—					
Tested Sump Pump Operation		—					
Cleaned Sump and Drain		—					
Any Alarms?		✓					

Additional Tasks/ Notes:	
ON:	45
OFF:	40

Rochester Fire Academy Weekly Log

Date	12/1/15	12/2	12/3	12/4	12/5	12/6	12/7
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	2680	2785	3140	3440	2950	3090	2940
Daily Effluent Meter Reading (gal)	1,066,913	1,069,607	1,072,723	1,076,099	1,079,024	1,082,062	1,084,964
Total Effluent since 1/1/2015 (gal)							
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							yes

Additional Tasks/ Notes:

ON: 4.5

OFF: 4.0

12/7 Alarm A5 Blower #2, cleared

Rochester Fire Academy Weekly Log

Date	12/8	12/9	12/10	12/11 F	12/12 S	12/13 S	12/14 M
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	1,088,057	1,090,944	1,093,930	1,096,604	Same		
Daily Effluent Meter Reading (gal)	3210	2970	3020	2730	0	0	0
Total Effluent since 1/1/2015 (gal)							
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		60.4		60.2			
Visual Inspection NDA		✓		✓			
Visual Inspection TGA		✓		✓			
Cleaned/Changed Bag Filter #1		—		—			
Cleaned/Changed Bag Filter #2		—		—			
Cleaned Feed/ Discharge Tanks		—		—			
Performed Monthly/Quarterly Sampling		—		—			
Tested Sump Pump Operation		—		—			
Cleaned Sump and Drain		—		—			
Any Alarms?		—		—			

Additional Tasks/ Notes:

ON:	4.5	4.5
OFF:	4.0	4.0

12/14/15 Discovered that GW pump 1 was running but no flow was coming into plant. Shut system down until we could troubleshoot. ✓

Rochester Fire Academy Weekly Log

Date	T 12/15	W 12/16	Th 12/17	F 12/18	Sat 12/19	Sun 12/20	M 12/21
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	1,096,604	Same		1,109,261	1,113,246	1,113,246	1,118,324
Daily Effluent Meter Reading (gal)	0	0	0	12,760	4030	0	5170
Total Effluent since 1/1/2015 (gal)							
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							✓
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:

ON:	4.5
OFF:	4.0

12/15 DAY + DEQ use tripod assembly to retrieve pumps from GW trench. Disconnect fitting for discharge hose for pump #1 broke off hence no flow to plant.

12/18 Temp fix. Cap end of discharge hose #1 to enable operation of plant. Return Pump #2 to GW trench + resume operations

12/19-12/21 Plant operating OK until Blower fail alarm on 12/19. Troubleshoot on 12/21 - adjust pressure switch by turning screw all the way in counterclockwise (left) estimated 1/4 - 1/2 turn from original position.

12/21 Monthly effluent sample

Siphon

Rochester Fire Academy Weekly Log

Date	12/22/15	12/23	12/24	12/25	12/6	12/27	12/28
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)	~~1,[illegible]6,604~~						
Daily Effluent Meter Reading (gal)	4930	3180	3440	3310	2990	5150	4400
Total Effluent since 1/1/2015 (gal)	1,123,213	1,126,355	1,129,711	1,132,990	1,135,899	1,140,926	1,145,236
Building Inlet Gauge (gpm)							
Lead Bag Filter Inlet/ Outlet (psi)							
Lag Bag Filter Inlet/Outlet (psi)							
Feed Tank Pump (5 to 20 psi)							
Air Stripper Pressure (psi)							
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)							
Visual Inspection NDA							
Visual Inspection TGA							
Cleaned/Changed Bag Filter #1							
Cleaned/Changed Bag Filter #2							
Cleaned Feed/ Discharge Tanks							
Performed Monthly/Quarterly Sampling							
Tested Sump Pump Operation							
Cleaned Sump and Drain							
Any Alarms?							

Additional Tasks/ Notes:

ON:

OFF:

Rochester Fire Academy Weekly Log

Date	12/29	12/30	12/31				
Daily Influent Meter Reading (gal)							
Total Influent since 1/1/2015 (gal)							
Daily Effluent Meter Reading (gal)	5960	8350	4070				
Total Effluent since 1/1/2015 (gal)	1,151,087	1,159,32~~1~~	1,163,789				
Building Inlet Gauge (gpm)		52 (2 E)					
Lead Bag Filter Inlet/ Outlet (psi)		9/5					
Lag Bag Filter Inlet/Outlet (psi)		2/2					
Feed Tank Pump (5 to 20 psi)		9					
Air Stripper Pressure (psi)		16					
Pump 400 (psi)							
Pump 401 (psi)							
Sequestering Agent Level (inches)		57.8	57.6				
Visual Inspection NDA		✓	✓				
Visual Inspection TGA		✓	✓				
Cleaned/Changed Bag Filter #1		—	—				
Cleaned/Changed Bag Filter #2		—	—				
Cleaned Feed/ Discharge Tanks		—	—				
Performed Monthly/ Quarterly Sampling		—	—				
Tested Sump Pump Operation		—	—				
Cleaned Sump and Drain		—	—				
Any Alarms?		—	✓				
Additional Tasks/ Notes:							
ON:		4.5	4.5				
OFF:		4.0	4.0				

12/30 Complete plumbing repairs for Pump 1 at GW collection trench + reinstall. Running OK. Pump 1 is old-original pump. Pump 2 is new Liberty pump installed by DAY

APPENDIX E

IC/EC CERTIFICATION

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. 828015

Site Name Rochester Fire Academy

Site Address: 1190 Scottsville Road Zip Code: 14624
City/Town: Rochester
County: Monroe
Site Acreage: 11.0

Reporting Period: December 31, 2014 to December 31, 2015

	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

5-9-16
Date

SITE NO. 828015 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
135.180-0001-001.000	City of Rochester	Landuse Restriction Monitoring Plan O&M Plan

1998-03 approved OM&M plan to monitor pump and treat system and insure cap and fencing are maintained. Deed restriction filed March 1998 which required the City of Rochester (or successors and assigns) to maintain the remedial system.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
135.180-0001-001.000	Groundwater Treatment System Fencing/Access Control Cover System

Asphalt cover over Training Grounds Area
Cap over the North Disposal Area
Groundwater pump and treat system
Monitoring wells

Training Grounds Area
XXXXXXXXX

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
☒	☐

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
☒	☐

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

5-9-16
Date

IC CERTIFICATIONS
SITE NO. 828015

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 Mark Gregor (print name) at 30 Church Street, Room 300B, Rochester, NY 14614 (print business address),

am certifying as Manager, City of Rochester, Division of Environmental Quality (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

5-9-16
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.

Barton F. Kline Day Environmental, Inc., 1563 Lyell Ave, Rochester, NY 14606

I Barton F. Kline (print name) at Day Environmental, Inc., 1563 Lyell Ave, Rochester, NY 14606 (print business address),

City of Rochester, New York

am certifying as a Professional Engineer for the City of Rochester, New York (Owner or Remedial Party)

B. F. Kline

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

5/11/16

Date