2018 Periodic Review Report

Location:

Former Roblin Steel Site
320 South Roberts Road, Dunkirk, New York
NYSDEC Site No. B00173-9

Prepared for:

Chautauqua County Department of Public Facilities
454 North Work Street
Falconer, New York

LaBella Project No. 2160148

January 2019 (Revised December 19, 2019)

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1.0 EXECUTIVE SUMMARY

This Periodic Review Report (PRR) is a required element of the approved Site Management Plan (SMP) for the former Roblin Steel Site in Dunkirk, New York. The Site was remediated in accordance with State Assistance Contract (SAC) No. C302808, Site No. B00173-9, which was executed on December 12, 2005.

1.1 Site Summary

The former Roblin Steel Site (hereafter referred to as the "Site") occupies approximately 12 acres of an inactive industrial park in the City of Dunkirk, Chautauqua County, New York. Historically, the Site contained numerous buildings, the last of which was demolished as part of remedial activities conducted in 2010. The Site is located in an area zoned for industrial use. An environmental investigation conducted at the Site revealed that contamination associated with historical operations had impacted the Site, necessitating remedial activities. The remedial activities were completed pursuant to the Environmental Restoration Program component of Title 5 of the Clean Water/Clean Air Bond Act of 1996, which was administered by the New York State Department of Environmental Conservation (NYSDEC). Following completion of the remedial work described in the Remedial Action Work Plan (RAWP), some contamination was left in the subsurface of the Site, which is hereafter referred to as "remaining contamination." The remedial efforts also included development of a SMP to manage the remaining contamination at the Site in perpetuity or until extinguishment of the Environmental Easement that was placed on the Site, in accordance with Environmental Conservation Law (ECL) Article 71, Title 36.

1.2 Effectiveness of Remedial Program

Based on a recent inspection of the Site, the Site soil cover system is intact and functioning as designed on the Site. Additionally, recent groundwater sampling results indicate that total volatile organic compound (VOC) concentrations at the Site have generally decreased over time.

1.3 Non-Compliance

No areas of non-compliance regarding the major elements of the SMP were identified during the preparation of this PRR.

1.4 Recommendations

Overall, the remedial program is viewed to be effective in achieving the remedial objectives for the Site. No changes to the SMP or the frequency of PRR submissions are recommended at this time with the exception of the permanent removal of MW-01, MW-04, MW-12 and EX-MW12 from the groundwater monitoring program. Continued evaluation of Site wells MW-02R, MW-07R, MW-09R and EX-MW11R is warranted.

2.0 SITE OVERVIEW

The Site is located at 320 South Roberts Road in the City of Dunkirk, New York. Figure 1 shows the location of the Site and Figure 2 is the Site plan which depicts the location of the sampled wells. Progress Drive now transects the eastern portion of the Site in a northeast-southwest direction. As a result, a portion of the Site is located east of the new roadway and separated from the remainder of

the Site. The Site is located in an area zoned for industrial use. A mixture of commercial, industrial and residential properties comprise the land use in the Site's vicinity. The Site is bounded to the north by an active CSX rail yard; to the east by active Norfolk Southern railroad tracks; to the south by the Former Alumax extrusions property; and to the west by the Former Edgewood Warehouse property. Residential properties are located to the northwest and south of the Site beyond the adjoining properties. Lake Erie is situated approximately 4,000 feet to the northwest of the Site. Hyde Creek is located approximately 100 feet from the northeast corner of the Site.

2.1 Site Background

The Site occupies approximately 12 acres of an inactive industrial park. Historically, the Site contained a large complex of industrial buildings. The building last remaining building was demolished as part of the 2010 remedial activities. The adjoining properties located in the industrial park include the Former Alumax Extrusions property located to the south and the Former Edgewood Warehouse property located to the west. In 1910, all three of these properties were developed as part of a larger industrial complex operated by the American Locomotive Company. The Site was later used for steel reclamation; however, operations ceased in 1987. Following this closure, salvage operations dismantled and partially demolished a majority of the Site structures throughout the late 1980s and early 1990s. Since that time, the Site has been vacant.

Following acquisition of the Site by Chautauqua County in December 2001, the site was investigated and remediated pursuant to the SAC executed between the County and NYSDEC. The remediation of the site was completed in September 2010, and rendered the site suitable for commercial or industrial use. Details pertaining to the remedial investigation and remedial construction program completed at the Site are summarized in Section 2.2 below.

In May 2013, the construction of a new public roadway through a portion of the site was initiated. The soil cover system established as part of the previous remediation of the Site was disturbed in conjunction with the construction of the new roadway in the Summer/Fall 2014. Disturbance of the soil cover was completed in accordance with the provisions of the Excavation Work Plan (EWP) of the SMP. The cover system was restored by the end of 2014 in accordance with the Record of Decision (ROD) and the SMP upon completion of the new roadway.

2.2 Remedial Program Overview

As indicated above, a remedial investigation was conducted at the Site between 2002 and 2003. Such revealed that contamination associated with historical operations had impacted the Site, necessitating remedial activities. The NYSDEC issued a ROD in March 2005. The ROD identified seven impacted Media Groups (MGs) associated with the Site. The MGs included:

- Surface soil/fill debris piles;
- Subsurface soil/fill impacted with chlorinated VOCs;
- Subsurface soil/fill impacted with polyaromatic hydrocarbons and metals, and/or petroleum nuisance characteristics;
- Drainage features and contents;
- Building components;
- Concrete and surface soil impacted with polychlorinated biphenyls (PCBs); and,
- Groundwater impacted with VOCs.

The RAWP prepared in February 2006 described the specific remedial activities that would be implemented at the Site to complete the remediation in accordance with the ROD. The remediation program included two distinct types of activities; those that are related to the removal or treatment of contaminated material (Phase I) and those that are directly related to the redevelopment and reuse of the Site (Phase II). The Phase I components included:

- Excavation and off-site disposal of surface soil/fill that exceeded the Site-Specific Cleanup Levels (SSCLs);
- Excavation and off-site disposal of subsurface soil/fill that exceeded SSCLs;
- Cleaning and filling of Site drainage features;
- Removal and disposal of PCB-containing electrical equipment;
- Removal and disposal of miscellaneous Site debris;
- Decommissioning of monitoring wells that were not part of the long-term monitoring program; and,
- Enhanced natural attenuation of Site groundwater.

The Phase II activities included the following:

- Removal of asbestos-containing materials (ACMs);
- Demolition of the building;
- Removal and crushing of the concrete slabs and top 12 inches of the foundations followed by the placement and grading of the crushed concrete on the Site;
- Placement of a demarcation layer (orange fencing) on top of the original Site surface covered by 12 inches of clean NYSDEC Division of Environmental Remediation (DER)-10 approved soil across the entirety of the Site; and
- Establishment of vegetative cover

Following completion of the remedial work described in the RAWP, some contamination may have been left in the subsurface of the Site. The remedial efforts also included development of the SMP to manage remaining contamination at the Site in perpetuity or until extinguishment of the Environmental Easement in accordance with ECL Article 71, Title 36.

3.0 EFFECTIVENESS OF THE REMEDIAL PROGRAM

All remedial actions described in the RAWP were completed during Phase I and Phase II of the remedial program. Remedial goals were accomplished through the removal and off-site disposal of contaminated media exceeding the SSCLs; removal of PCB equipment; enhanced natural attenuation of the Site groundwater; removal of ACMs; demolition of the Site building; and the installation of the Site-wide cover system to prevent exposure to remaining contamination in the subsurface.

As indicated below in Section 4.1.2, the Site Soil Cover System was inspected on December 10, 2018. Based on this inspection, the cover system is intact and functioning effectively throughout the Site.

The results of the December 2018 groundwater sampling event revealed that total VOC concentrations appear to be generally decreasing when compared to results from historical sampling events.

4.0 INSTITUTIONAL/ENGINEERING CONTROL (IC/EC) PLAN COMPLIANCE REPORT

4.1 IC/EC Requirements and Compliance

4.1.1 IC Requirements-Site Restrictions

In accordance with the SMP, the Site has a series of Institutional Controls (ICs) in the form of Site restrictions. Adherence to these ICs is required by the Environmental Easement. The Environmental Easement is described on the Boundary Survey of the Former Roblin Steel Site, included within Appendix 1. Site restrictions that apply are as follows:

- The Site may only be used for commercial or industrial use provided that the long-term ICs/Engineering Controls (ECs) included in the SMP are employed;
- The Site may not be used for a higher level of use, such as unrestricted, residential or restricted-residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities at the Site that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of groundwater underlying the Site is restricted as a source of potable or process water, without necessary water quality treatment, as determined by the Chautauqua County Department of Health;
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site, and any potential impacts that are identified must be monitored and mitigated;
- The SMP will provide for the operation and maintenance of the components of the remedy;
- Vegetable gardens and farming on the Site are prohibited; and,
- The Site owner is required to provide an IC/EC certification, prepared and submitted by a professional engineer or environmental professional acceptable to the NYSEC annually or for a period to be approved by the NYSDEC, which will certify that the ICs and ECs put in place are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP.

4.1.2 Engineering Control-Soil Cover System

Exposure to the remaining contamination in soil/fill at the Site is prevented by a soil cover system that was previously placed over the Site. This cover system is comprised of a minimum of 12 inches of clean soil overlaying a demarcation layer (orange plastic mesh material) over the entire surface of the Site. The EWP, which appears in Appendix A of the SMP, outlines the procedures that are required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. The cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

On December 10, 2018, Ms. Andrew Benkelman, EIT of LaBella conducted the annual Site

inspection, which included traversing the Site on foot to observe the current conditions. The Cover Inspection Form is included herein as Appendix 2. Appendix 3 includes photographs taking during the Site inspection.

With the exception of the Progress Drive corridor that crosses the Site, the Site is generally vacant and undeveloped, with vegetated soil cover occurring at the ground surface. The soil cover at the time of the Site inspection was observed to be intact and functioning as intended. The floor and walls of the storm water ditches associated with Progress Drive were covered with a coarse, low-lying vegetation. No evidence of erosion or exposed synthetic erosion control fabric was observed within or adjacent to the ditches. Furthermore, the asphalt road surface was observed to be in very good condition.

4.1.3 Engineering Control-Sub-Slab Vapor Venting System

No sub-slab vapor venting system (SSVVS) was installed as part of the Site remedy. However, any potentially new structures constructed on the Site as part of Site redevelopment may be equipped with a SSVVS, if warranted. The design and sampling of the SSVVS will be performed in accordance with NYSDEC and New York State Department of Health (NYSDOH) guidance at the time the system is installed. The ultimate design of the SSVS will be dependent upon the size and configuration of any newly constructed buildings. Therefore, the specific components of the SSVS have not been determined.

4.2 IC/EC Certification

The IC/EC Certification Form was completed in its entirety as all ICs/ECs are in place for the Site per the SMP. Appendix 4 includes the NYSDEC "Site Management Periodic Review Report Notice-Institutional and Engineering Controls Certification Form."

5.0 MONITORING PLAN COMPLIANCE REPORT

5.1 Requirements

The Monitoring Plan is included in Section 3.0 of the SMP and describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected Site Media.

The Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards;
- Monitoring the cover system;
- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and,
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, the Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g. well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and,
- Annual inspection and periodic certification.

5.2 Groundwater Monitoring

The groundwater monitoring program is to be conducted on an annual basis for 30 years. Groundwater samples will be analyzed for VOCs appearing on the United States Environmental Protection Agency (USEPA) Target Compound List (TCL). Trends in contaminant levels in groundwater will be evaluated to determine if the remedy continues to be effective in achieving remedial goals.

5.2.1 Sampling Procedure

The eight groundwater monitoring wells were purged and sampled in general accordance with the procedures detailed in the November 2010 SMP. This included the five downgradient wells (MW-01, MW-02R, MW-04, MW-12 and EX-MW12) and the three wells located within areas of groundwater impacted with chlorinated VOCs (MW-09R, MW-07R and EX-MW11R) All monitoring well sampling activities were recorded on groundwater sampling logs, which are included as Appendix 5. Other observations (e.g. well integrity, etc.) were also noted on the well sampling logs. Prior to the initiation of groundwater sampling, groundwater levels were measured with an electronic water level indicator to determine the static water level below the ground surface elevation. The groundwater levels were used to determine the volume of standing water in the wells.

Well purging consisted of the evacuation of a minimum of three well volumes using NYSDEC-approved low-flow purging procedures via a Geotech Geopump II AC/DC Peristaltic Pump. After completion of development, the wells were allowed to recharge. The samples were collected within three hours of completion of well development using the low-flow method previously identified. Sample volumes were collected into clean sample bottles containing hydrochloric acid preservative provided by the laboratory. The groundwater samples were submitted for analysis of TCL VOCs via USEPA Method 8260.

5.2.2 Sample Preservation and Handling

Immediately after collection, all samples were placed in a cooler and chilled with ice. To ensure sample integrity, a Chain-of-Custody (COC) sample record was established and kept with the samples to document each person that handled the samples. The samples were transported to Test America Laboratories, Inc., a NYSDOH Environmental Laboratory Accreditation Program certified laboratory for analysis. The COC records established for the collected samples were maintained throughout the laboratory handling. Copies of the COC and complete analytical laboratory report are included in Appendix 6.

5.2.3 Quality Assurance/Quality Control Samples

In addition to field samples, QA/QC samples were collected to evaluate the effectiveness of the QA/QC procedures implemented during the field and laboratory activities associated with the project. The QA/QC samples included a blind field duplicate and a trip blank that were also analyzed for TCL VOCs. Well sampling at the Site and adjoining, former Alumax Extrusions Site were conducted in conjunction with one another on December 12, 2018, and the samples from both sites were submitted to the laboratory together in one batch and recorded on one COC. As such, the blind field duplicate collected from the former Roblin Steel Site (collected from MW-12) and trip blank associated with the samples from both sites were utilized to evaluate the effectiveness of the QA/QC procedures for the Site.

5.2.4 Analytical Results

The following section summarizes and discusses the analytical results generated during the aforementioned monitoring event. For discussion purposes, this data is compared with the Standards Criteria and Guidance Values applicable to groundwater: NYSDEC's June 1998 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations in the Technical and Operational Guidance Series (TOGS) 1.1.1.

Table 1 summarizes the groundwater pre- and post-remedial sampling results and compares the results to applicable water quality standards. Figure 2 depicts the locations of the monitoring wells and Figure 3 presents a groundwater contour map.

5.3 Comparisons with Remedial Objectives

As shown in Table 1, VOC concentrations were not detected in monitoring wells MW-01, MW-04, MW-12 and EX-MW12.

Five VOCs (Cis-1, 2-Dichloroethene, cyclohexane, methylcyclohexane, trichloroethene and vinyl chloride) were detected at concentrations above NYSDEC TOGS Standards in the sample collected from EX-MW-11R, but total VOC concentrations in this well have decreased since the February 2018 sampling event and are substantially lower than the initial concentration detected at this location during the October 2002 sampling event.

Three VOCs (Cis-1, 2-Dichloroethene, vinyl chloride and benzene) were detected at concentrations above NYSDEC TOGS Standards in the sample collected from MW-02R. Although total VOC concentrations in this well have slightly increased since the February 2018 sampling event, total VOC concentrations are substantially lower than the maximum concentration detected at this location during the August 2010 sampling event.

Although VOC concentrations were detected within MW-07R, no such concentrations were identified exceeding NYSDEC TOGS standards. In addition, total VOC concentrations in MW-07R have significantly decreased since the February 2018 sampling event and are at their lowest concentrations since sampling efforts began in October 2002. Two VOCs (Cis-1, 2-Dichloroethene and vinyl chloride) were detected at concentrations above NYSDEC TOGS Standards in the sample collected from MW-09R. However, total VOC concentrations in MW-09R are at their lowest concentrations since sampling efforts began in October 2002. These wells will continue to be evaluated during future sampling events for any indication of trends.

A comparison of the results from MW-12 with the blind field duplicate indicates that the data coincide. In addition, no VOC detections were identified within the trip blank analysis.

5.4 Monitoring Deficiencies

No monitoring deficiencies were noted during the completion of the PRR and annual sampling event.

5.5 Groundwater Monitoring Conclusions and Recommendations

No contraventions of NSYDEC TOGS Standards were detected in MW-01, MW-04, MW-12 and EX-MW12 during the 2015, 2016, 2017 and 2018 monitoring events. As a result, it is recommended that these wells be permanently removed from the monitoring program. VOC concentrations in MW-07R and MW-09R were detected at their lowest concentrations since sampling efforts began in October 2002, and VOC levels in EX-MW-11R have also decreased substantially over this time. These wells will continue to be evaluated during future sampling events for any indication of trends. Although total VOC concentrations in MW-02R have increased since the February 2018 sampling event, such are well below the maximum concentration detected at this locations. Based on this information, no changes to the SMP or the frequency of PRR submissions are recommended at this time with the exception of the permanent removal of MW-01, MW-04, MW-12 and EX-MW12 from the groundwater monitoring program.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The Site Soil Cover System was inspected on December 10, 2018 and was observed to be intact and functioning as designed throughout the Site.

Total VOC concentrations in a majority of the Site wells have decreased over time. Continued evaluation of Site wells MW-02R, MW-07R, MW-09R and EX-MW11R is warranted. No changes to the Monitoring Plan or the SMP are recommended with the exception of the permanent removal of MW-01, MW-04, MW-12 and EX-MW12 from the groundwater monitoring program.

7.0 LIMITATIONS

The conclusions presented in this report are based on information gathered in accordance with generally acceptable professional consulting principles and practices. All conclusions reflect observable conditions existing at the time of the Site inspection. Information provided by outside sources (individuals, agencies, laboratories, etc.) as cited herein, was used in the assessment of the Site. The accuracy of the conclusions drawn from this assessment is, therefore, dependent upon the accuracy of information provided by these sources. Furthermore, LaBella is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to the performance of services.

This report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based upon the facts currently available with the limits of the existing data, scope of services, budget and schedule. To the extent that more definitive conclusions are desired by the Client than are warranted by the current available facts, it is specifically Labella's' intent that the conclusions and

recommendations stated herein will be intended as guidance and not necessarily a firm course of action expect where explicitly stated as such. LaBella makes no warranties, expressed or implied including without limitation, warranties as to merchantability or fitness of a particular purpose. Furthermore, the information provided in this report is not be construed as legal advice.

This assessment and report have been completed and prepared on behalf of and for the exclusive use of Chautauqua County. Any reliance on this report by a third party is at such party's sole risk.

8.0 REFERENCES

DER10/Technical Guidance for Site Investigation and Remediation, NYSDEC, May 3, 2010

Environmental Easement for 320 South Roberts Road, Chautauqua County Clerk, June 2011

Environmental Remediation of the Former Roblin Steel Site, NYSDEC Site No. B00173-9, Final Engineering Report, TVGA Consultants, November 2010

Environmental Restoration Record of Decision, Former Roblin Steel Site, Site Number B-00173, NYSDEC Division of Environmental Remediation, March 2005

Excavation Work Plan, Former Roblin Steel Site, TVGA Consultants, November 2010

Master Erosion Control Plan, Former Roblin Steel Site, TVGA Consultants, November 2010

Remedial Action Work Plan, TVGA Consultants, February 2006

Site Investigation/Remedial Alternatives Report, Former Roblin Steel Site, TVGA Consultants, December 2004

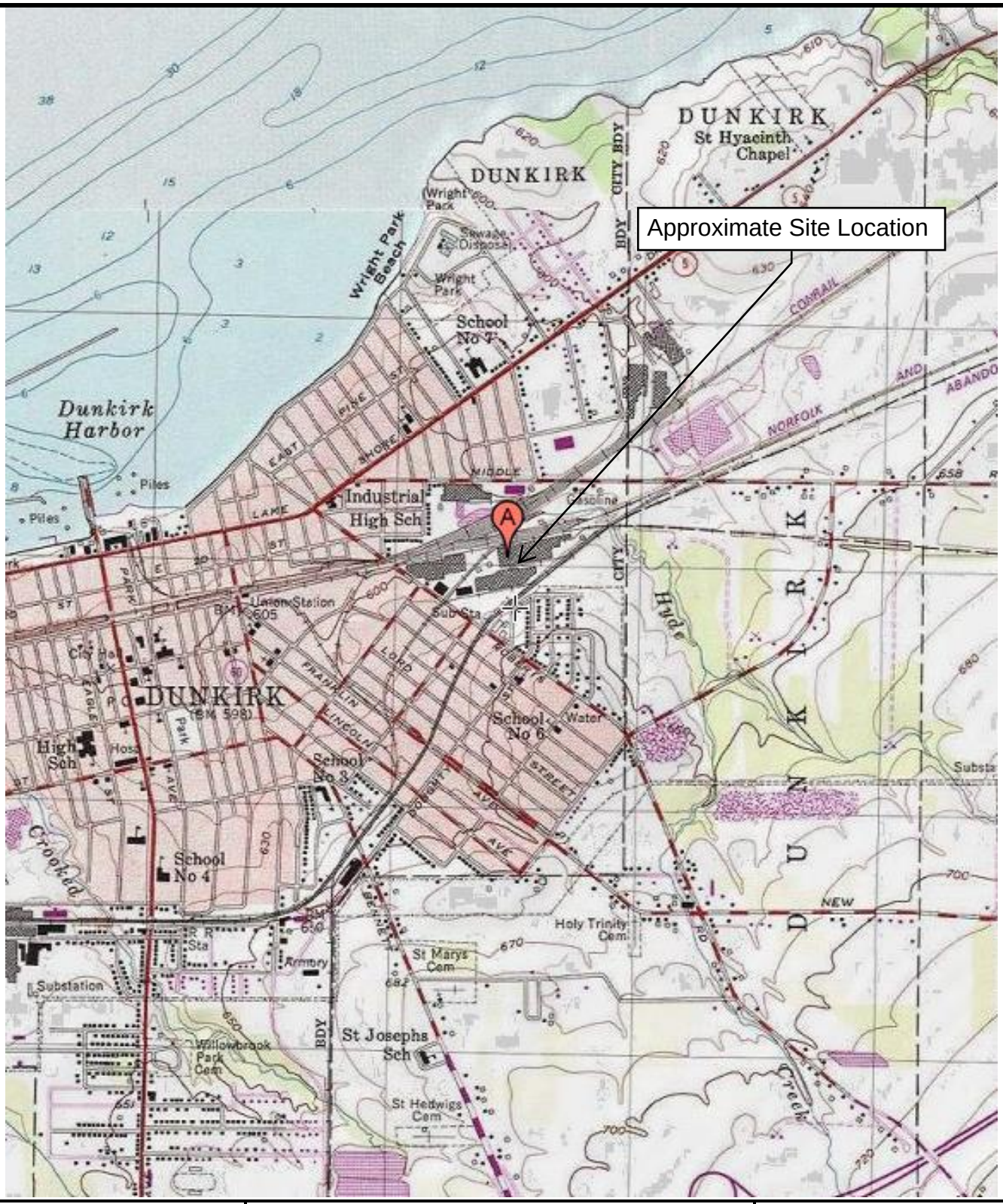
Site Management Plan, Former Roblin Steel Site, TVGA Consultants, November 2010

Periodic Review Report, Former Roblin Steel Site, LaBella Associates, D.P.C., December 2017

Correction Action Report, Former Roblin Steel Site, LaBella Associates, D.P.C., March 2017

Revised Corrective Action Work Plan, Former Roblin Steel Site, KHEOPS Architecture, Engineering and Survey, DPC, April 3, 2015

FIGURES



Not To Scale

FIGURE 1
SITE LOCATION MAP

Former Roblin Steel Site
320 South Roberts Road
Dunkirk, New York

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0 100 200
Feet

1 inch = 142 feet

INTENDED TO PRINT AS: 11" X 17"

PROJECT:

FORMER ROBLIN STEEL SITE

DRAWING NAME:

SITE PLAN

PROJECT #/DRAWING #/ DATE

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FIGURE 2

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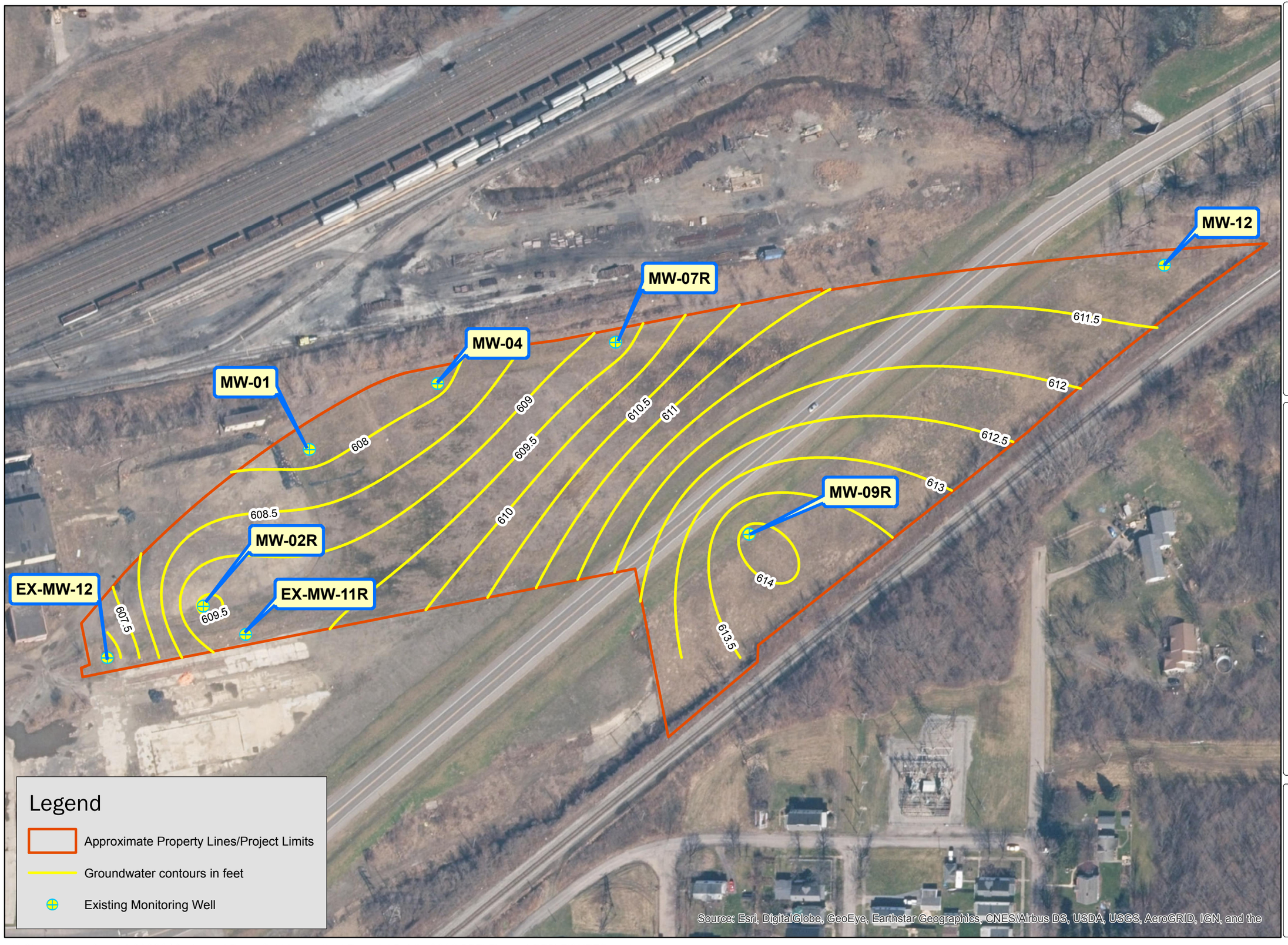

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PROJECT:

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DRAWING NAME:

GROUNDWATER ELEVATIONS

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FIGURE 3

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TABLE

Table 1
Former Roblin Steel Site
Summary of Analytical Results
Groundwater Samples

PARAMETER	REGULATORY VALUE	MW-01									MW-02R									MW-04									MW-07R									MW-09R									EX-MW-11R					
Collection Date		10/11/02	2/10/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18	10/11/02	2/10/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18	10/11/02	2/10/09	8/10/10	8/21/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18	10/11/02	5/4/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18	10/11/02	2/10/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18	10/11/02	2/10/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18
Volatile Organic Compounds (µg/L)																																																				
1,1-Dichloroethene	5																												15									3	2.02				2.3		1.2							4.6	11	5.8	
1,1-Dichloroethane	5						0.26																																													
cis-1,2-Dichloroethene	5						0.46				NA		21.3	10.1	6.27	18	11	13	20	NA					2.6	1.2			NA		904	128	584	17	5.9	190	3.2	NA	210	277	217	55.7	1,200	500	410	290	NA	354	5,320	1,950	5,400	990	1,000	1,500	960
trans-1,2-Dichloroethene	5										NA									NA									NA									NA	4.48	17.3				2.9		4.2			NA				3.3		4.4	
1,2-Dichloroethene (Total)	5										88		21.3																1,500		904							380	214	294								41,000	354	5,320						
1,2,4-Trimethylbenzene	5											10																											12.9																
2-Butanone	50											33.5	129																											305															
Acetone	50												21.7	12.3								43.8																		569															
Benzene	1	1									18	7.92	37.3	18.2	22.7	3.5	3.5	5.6	3.2	6									10	65	14			0.34				35	11.5	445	87.7	46.3	0.97		2.2							2.5		3.7	
Carbon Disulfide	60						5.6	0.19																																													
Chloroethane	5													6.2																																							
Cyclohexane	5													32.8	43.3	6.3	5	7.9	3.6														0.72							208	155	15		9.4						16	24	22	19
cis-1,3-Dichloropropene	0																													1,500																								
Ethylbenzene	5											9.81	18.9	16.9	22.6	1.9				2									4									12	5.66	69.6	33.7	17.3	0.23							2.4		1.6	
Isopropylbenzene	5													2.53	3.12	0.61																										0.28							0.68			
Methyl Cyclohexane	5						1							13.8	22.4	2.3	1.3	2	0.7											99				0.76						121	101	13		7.5						15	20	23	7.3
Methylene Chloride	5																																											4.8								12		
n-Propylbenzene	5											2.57																																									
Tetrachloroethene	5																													160				0.25									4.5										
Toluene	5										24	7.19	101							12	69	29.7							74	23.3	581																		1.7		0.81	
m,p-Xylene	5	NA									NA	7.62	73.2	2.45	9.81					NA									NA	67	33.3							NA	20.5	239							NA					0.73			
o-Xylene	5	NA									NA	2.61	37.2		2.10					NA									NA									NA	11.5	128			0.23				NA					4.9			
Total Xylenes	5	4									11	10.23	110.4							10									23	67	33.3							75	32	367													2.6		
Trichloroethene	5							0.53			32		3.31			0.25								1.91					56		49.2		55.9		2	3.7		450	135	585				230	39		150,000	168	4,630		4,510	36	91		10
Vinyl chloride	2										31		5.34	12.5	9.13	26	42	27	49						0.49			330	770	402	56.1	205	6.2	3.7	75	3.6	34	33		991	287	310		93	23	9,800	27	638	881	1,110	520	360	950	510
Total VOCs	-	5	0	0	0	0	7	0.72	0	0	204	91	580	128	141	59	63	56	77	18	0	0	44	0	3	3	0	0	1,950	2,797	2,370	184	845	25	12	194	6.8	1,063	716	3,877	1,658	662	1,549	735	567	313	200,800	903	15,908	2,831	11,020	1,598	1,518	2,514	1,506

PARAMETER	REGULATORY VALUE	MW-12									EX-MW-12								
Collection Date		10/11/02	2/10/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18	10/11/02	2/10/09	8/10/10	8/15/13	7/15/14	12/15/15	12/14/16	2/2/18	12/12/18
Volatile Organic Compounds (µg/L)																			
cis-1,2-Dichloroethene	5	NA					0.53				NA		7.6			0.73			
trans-1,2-Dichloroethene	5	NA									NA								
1,2-Dichloroethene (Total)	5	150									150		7.6						
2-Butanone	50												31.3						
2-Hexanone	50												5.23						
Acetone	50												73.8						
Benzene	1	1									1		24.0	1.9	2.14	0.47			
Ethylbenzene	5	1									1		18.5						
Toluene	5												48.7						
m,p-Xylene	5										NA		74.7						
o-Xylene	5										NA		40.4						
Total Xylenes	5												115.1						
Trichloroethene	5												8.96						
Vinyl chloride	2	200									200		27.2						
Total VOCs	-	352	0	0	0	0	0.53	0	0	0	352	0	483	1.9	2.14	1	0	0	0

Notes:
Regulatory values are derived from NYS Ambient Water Quality Standards TOGS 1.1.1 (Source of Drinking Water, groundwater).
(-) = No regulatory value is associated with this compound.
Shaded values represent exceedances of the regulatory value.
µg/L = micrograms per Liter (equivalent to parts per billion (ppbl).
Only compounds with one or more detections are shown.
Blank spaces indicate that the analyte was not detected.
"NA" = parameter was not analyzed

APPENDIX 1

Boundary Survey-Former Roblin Steel Site

SCHEDULE "A" DESCRIPTION

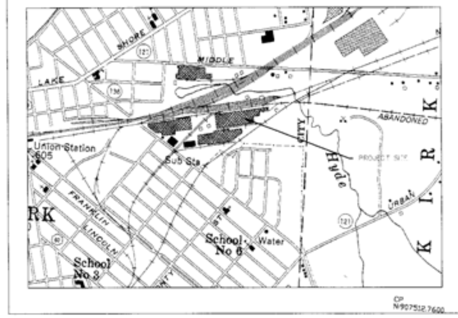
ALL BEARINGS IN THIS DESCRIPTION ARE REFERENCED TO A LOCAL SYSTEM AND DEEDED BEARINGS FROM A PRIOR SURVEY MADE BY MICHAEL J. RODGERS LAND SURVEYOR, PC, DATED NOVEMBER 28, 2001.

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE CITY OF DUNKIRK, COUNTY OF CHAUTAUQUA AND STATE OF NEW YORK AND FURTHER BOUNDED AND DESCRIBED AS FOLLOWS:

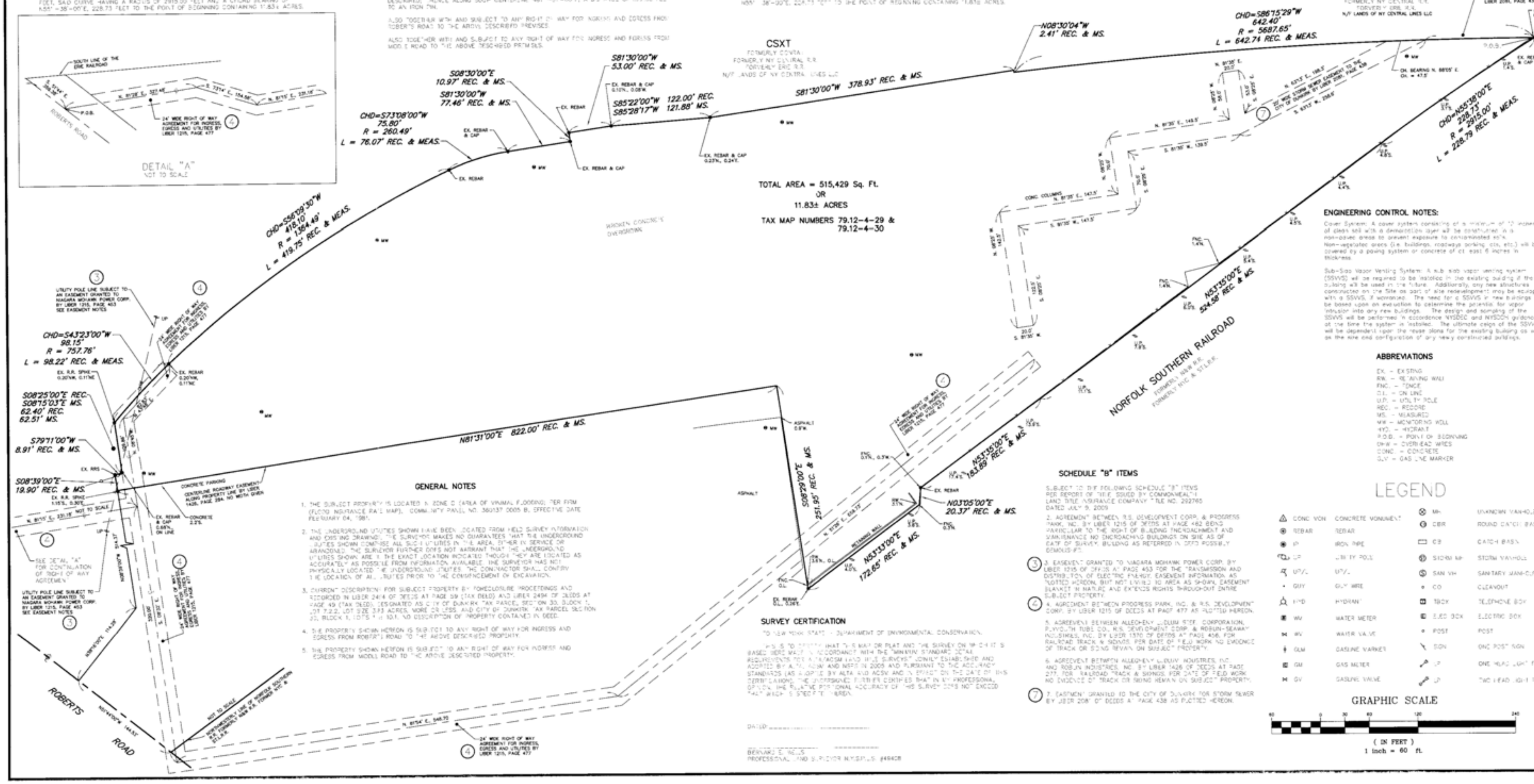
BEGINNING AT A SET REBAR WITH CAP AT THE INTERSECTION OF THE NORTHWESTERLY RIGHT OF WAY LINE OF NORFOLK SOUTHERN RAILROAD, FORMERLY N & W RAILROAD, FORMERLY NEW YORK, CHICAGO AND ST. LOUIS RAILROAD WITH THE SOUTHERLY RIGHT OF WAY LINE OF CSXT, FORMERLY CONRAIL, FORMERLY NEW YORK CENTRAL RAILROAD, FORMERLY ERIE RAILROAD, SAID LANDS REFERRED TO AS CSXT BEING LANDS CONVEYED BY CONSOLIDATED RAIL CORPORATION TO NEW YORK CENTRAL LINES, LLC BY QUIT CLAIM DEED DATED JUNE 1, 1999 AND RECORDED IN THE CHAUTAUQUA COUNTY CLERK'S OFFICE IN LIBER 2418 OF DEEDS AT PAGE 623; THENCE WESTERLY ALONG THE SOUTHERLY LINE OF SAID LINE ON A CURVE TO THE LEFT 642.74 FEET TO A POINT, SAID CURVE HAVING A RADIUS 5687.65 FEET AND A CHORD S86°-15'-29"W, 642.40 FEET; THENCE N08°-30'-04"W ALONG SAID SOUTHERLY LINE, 2.41 FEET TO A POINT; THENCE S81°-30'-00"W AND ALONG SAID SOUTHERLY LINE, 378.93 FEET TO A POINT; THENCE S85°-22'-00"W AND ALONG SAID SOUTHERLY LINE 121.88 FEET TO A POINT; THENCE S81°-30'-00"W ALONG SAID SOUTHERLY LINE 53.00' TO A POINT AT THE NORTHEASTERLY CORNER OF LANDS CONVEYED BY STANLEY A. STAR TO EDGEWOOD INVESTMENTS, INC. BY DEED DATED AUGUST 23, 1985 AND RECORDED IN THE CHAUTAUQUA COUNTY CLERK'S OFFICE AUGUST 26, 1985 IN LIBER 2063 OF DEEDS AT PAGE 488; THENCE S08°-30'-00"E ALONG THE SOUTHERLY LINE OF SAID EDGEWOOD INVESTMENTS, INC., 10.97 FEET TO A POINT; THENCE S81°-30'-00"W AND ALONG SAID SOUTHERLY LINE 77.46 FEET TO A POINT; THENCE CONTINUING WESTERLY AND ALONG THE SAID SOUTHERLY LINE ON A CURVE TO THE LEFT 76.07 FEET TO A POINT AT THE NORTHEASTERLY CORNER OF AFOREMENTIONED NEW YORK CENTRAL LINES, LLC, SAID CURVE HAVING A RADIUS OF 260.49 FEET AND A CHORD BEARING OF S73°-08'-00"W, 75.80 FEET; THENCE SOUTHWESTERLY AND ALONG THE SOUTHEASTERLY SAID LINE ON A CURVE TO THE LEFT, 419.75 FEET TO A POINT, SAID CURVE HAVING A RADIUS OF 1364.49 FEET AND A CHORD BEARING OF S56-09'-30"W, 418.10 FEET; THENCE CONTINUING SOUTHWESTERLY ALONG THE SOUTHEASTERLY SAID LINE ON A CURVE TO THE LEFT 98.22 FEET TO A POINT, SAID CURVE HAVING A RADIUS OF 757.76 FEET AND A CHORD BEARING OF S43°-23'-00"W, 98.15 FEET; THENCE S08°-25'-00"E, ALONG THE SAID EASTERLY LINE 62.51 FEET TO A POINT; THENCE S79°-11'-00"W, ALONG THE SAID SOUTHERLY LINE 8.91 FEET TO A POINT AT THE NORTHEASTERLY CORNER OF AFOREMENTIONED [illegible]

ENVIRONMENTAL EASEMENT AREA DESCRIPTION

[illegible]



VICINITY MAP
NOT TO SCALE



GENERAL NOTES

1. THE SUBJECT PROPERTY IS LOCATED IN ZONE C (AREA OF MINIMAL FLOODING) PER FIRM (FLOOD INSURANCE RATE MAP). COMMUNITY PANEL NO. 360137 0005 B, EFFECTIVE DATE FEBRUARY 04, 1981.
2. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED THOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION.
3. CURRENT DESCRIPTION FOR SUBJECT PROPERTY BY FORECLOSURE PROCEEDINGS AND RECORDED IN LIBER 2494 OF DEEDS AT PAGE 59 (TAX DEED) AND LIBER 2494 OF DEEDS AT PAGE 49 (TAX DEED), DESIGNATED AS CITY OF DUNKIRK TAX PARCEL SECTION 30, BLOCK 1, LOT 7.2.2, LOT SIZE 3.93 ACRES, MORE OR LESS, AND CITY OF DUNKIRK TAX PARCEL SECTION 30, BLOCK 1, LOTS 9 & 10.1. NO DESCRIPTION OF PROPERTY CONTAINED IN DEED.
4. THE PROPERTY SHOWN HEREON IS SUBJECT TO ANY RIGHT OF WAY FOR INGRESS AND EGRESS FROM ROBERTS ROAD TO THE ABOVE DESCRIBED PROPERTY.
5. THE PROPERTY SHOWN HEREON IS SUBJECT TO ANY RIGHT OF WAY FOR INGRESS AND EGRESS FROM MIDDLE ROAD TO THE ABOVE DESCRIBED PROPERTY.

SURVEY CERTIFICATION

TO NEW YORK STATE - DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS" JOINTLY ESTABLISHED AND ADOPTED BY ALTA, ACSM AND NSPS IN 2005 AND PURSUANT TO THE ACCURACY STANDARDS (AS ADOPTED BY ALTA AND ACSM AND IN EFFECT ON THE DATE OF THIS CERTIFICATION), THE UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

DATED: ______________

BERNARD E. WELLS
PROFESSIONAL LAND SURVEYOR N.Y.S.P.L.S. #49408

SCHEDULE "B" ITEMS

SUBJECT TO THE FOLLOWING SCHEDULE "B" ITEMS PER REPORT OF TITLE ISSUED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY TITLE NO. 292765 DATED JULY 9, 2009

2. AGREEMENT BETWEEN R.S. DEVELOPMENT CORP. & PROGRESS PARK, INC. BY LIBER 1215 OF DEEDS AT PAGE 462 BEING PARTICULAR TO THE RIGHT OF BUILDING ENCROACHMENT AND MAINTENANCE NO ENCROACHING BUILDINGS ON SITE AS OF DATE OF SURVEY. BUILDING AS REFERRED IN DEED POSSIBLY DEMOLISHED.

③ 3. EASEMENT GRANTED TO NIAGARA MOHAWK POWER CORP. BY LIBER 1215 OF DEEDS AT PAGE 453 FOR THE TRANSMISSION AND DISTRIBUTION OF ELECTRIC ENERGY. EASEMENT INFORMATION AS PLOTTED HEREON, BUT NOT LIMITED TO AREA AS SHOWN. EASEMENT BLANKET IN NATURE AND EXTENDS RIGHTS THROUGHOUT ENTIRE SUBJECT PROPERTY.

④ 4. AGREEMENT BETWEEN PROGRESS PARK, INC. & R.S. DEVELOPMENT CORP. BY LIBER 1215 OF DEEDS AT PAGE 477 AS PLOTTED HEREON.

5. AGREEMENT BETWEEN ALLEGHENY LUDLUM STEEL CORPORATION, PLYMOUTH TUBE CO., R.S. DEVELOPMENT CORP. & ROBLIN-SEAWAY INDUSTRIES, INC. BY LIBER 1370 OF DEEDS AT PAGE 456. FOR RAILROAD TRACK & SIDINGS. PER DATE OF FIELD WORK NO EVIDENCE OF TRACK OR SIDING REMAIN ON SUBJECT PROPERTY.

6. AGREEMENT BETWEEN ALLEGHENY LUDLUM INDUSTRIES, INC. AND ROBLIN INDUSTRIES, INC. BY LIBER 1426 OF DEEDS AT PAGE 277. FOR RAILROAD TRACK & SIDINGS. PER DATE OF FIELD WORK NO EVIDENCE OF TRACK OR SIDING REMAIN ON SUBJECT PROPERTY.

⑦ 7. EASEMENT GRANTED TO THE CITY OF DUNKIRK FOR STORM SEWER BY LIBER 2081 OF DEEDS AT PAGE 438 AS PLOTTED HEREON.

ENGINEERING CONTROL NOTES:

Cover System: A cover system consisting of a minimum of 12 inches of clean soil with a demarcation layer will be constructed in a non-paved areas to prevent exposure to contaminated soils. Non-vegetated areas (i.e. buildings, roadways parking lots, etc.) will be covered by a paving system or concrete of at least 6 inches in thickness.

Sub-Slab Vapor Venting System: A sub slab vapor venting system (SSVVS) will be required to be installed in the existing building if the building will be used in the future. Additionally, any new structures constructed on the Site as part of site redevelopment may be equipped with a SSVVS, if warranted. The need for a SSVVS in new buildings will be based upon an evaluation to determine the potential for vapor intrusion into any new buildings. The design and sampling of the SSVVS will be performed in accordance NYSDEC and NYSDOH guidance at the time the system is installed. The ultimate deign of the SSVVS will be dependent upon the reuse plans for the existing building as well as the size and configuration of any newly constructed buildings.

ABBREVIATIONS

EX. - EXISTING
RW. - RETAINING WALL
FNC. - FENCE
O.L. - ON LINE
U.P. - UTILITY POLE
REC. - RECORD
MS. - MEASURED
MW - MONITORING WELL
HYD. - HYDRANT
P.O.B. - POINT OF BEGINNING
OHW - OVERHEAD WIRES
CONC. - CONCRETE
GLM - GAS LINE MARKER

LEGEND

CONC MON	CONCRETE MONUMENT	MH	UNKNOWN MANHOLE
REBAR	REBAR	CBR	ROUND CATCH BASIN
IP	IRON PIPE	CB	CATCH BASIN
UP	UTILITY POLE	STORM MH	STORM MANHOLE
UP/L	UTILITY POLE W/ LIGHT	SAN MH	SANITARY MANHOLE
GUY	GUY WIRE	CO	CLEANOUT
HYD	HYDRANT	TBOX	TELEPHONE BOX
MW	WATER METER	ELEC BOX	ELECTRIC BOX
WV	WATER VALVE	POST	POST
GLM	GASLINE MARKER	SIGN	ONE POST SIGN
GM	GAS METER	LP	ONE HEAD LIGHT POLE
GV	GASLINE VALVE	LP	TWO HEAD LIGHT POLE

GRAPHIC SCALE
(IN FEET)
1 inch = 60 ft.

TVGA CONSULTANTS
1000 MAPLE ROAD
ELMA, NEW YORK 14059-9530
P. 716.655.8842
F. 716.655.0937
www.tvga.com

BOUNDARY SURVEY (ALTA)
FORMER ROBLIN STEEL SITE
CHAUTAUQUA COUNTY

CITY OF DUNKIRK | NEW YORK

MAP NUMBER: FIGURE 2

© COPYRIGHT 2009 TVGA CONSULTANTS ALL RIGHTS RESERVED. UNAUTHORIZED DUPLICATION IS A VIOLATION OF APPLICABLE LAWS.

NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY, DRAWING, DESIGN, SPECIFICATION, PLAN OR REPORT IS A VIOLATION OF SECTION 7209 PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

APPENDIX 2

Cover Inspection Form

COVER INSPECTION FORM
Former Roblin Steel Site

Property Name: Former Roblin Steel Site Inspection Date: 12/10/18

Property Address: 320 South Roberts Road

City: Dunkirk State: NY Zip Code: 14048

Property ID: (Tax Assessment Map)

Section: 79.12 Block: 4 Lot(s): 29 and 30

Total Acreage: 16.5 acres

Weather (during inspection): Temperature: 30° Conditions: OVERCAST

SIGNATURE:

The findings of this inspection were discussed with appropriate personnel, corrective actions were identified and implementation was mutually agreed upon:

Inspector: ANDREW BENKEMAN Date: 12/10/18

Next Scheduled Inspection Date: _____

SECURITY AND ACCESS

	Yes	No
1. Access controlled by perimeter fencing?	-----	X
Are there sections of the fence material damaged or missing?	-----	-----
Are the fence or gate post foundations structurally sound?	-----	-----
2. "No Trespass" signs posted in appropriate languages?	-----	X
Are the signs securely attached to the fencing or posts?	-----	-----
Are there sufficient signs; are the signs adequately spaced around the perimeter of the property?	-----	-----
3. Is there evidence of trespassing?	-----	X
Is there evidence of illegal dumping?	-----	X

COVER & VEGETATION

4. Final cover in acceptable condition?	X	-----
Is there evidence of sloughing, erosion, ponding or settlement?	-----	X
Is there evidence of unintended traffic; rutting?	X	-----
Is there evidence of distressed vegetation/turf?	-----	X

TIRE TRACKS ON WEST END OF SITE. NO SIGNIFICANT RUTTING. COVER IN ACCEPTABLE CONDITION.

	Yes	No
5. Final cover sufficiently covers soil/fill material?	X	
Are there cracks visible in the soil or pavement?		X
Is there evidence of erosion in the stormwater channels or swales?		X
Is there damage to the synthetic erosion control fabric in the channels or swales?		X

ACTIVITY ON SITE

6. Any activity on site that mechanically disturbed soil cover?		X

ADDITIONAL FACILITY INFORMATION

Development on or near the site? (Specify size and type: e.g., residential, 40 acres, well and septic)

WEST ADJACENT PROPERTY. FORMER EDGEWOOD WAREHOUSE, FORMER BUILDING DEMOLISHED, NEW BUILDING BEING CONSTRUCTED, FREEZER WAREHOUSE

COMMENTS

Item #

ATTACHMENTS

1. Site Sketch
2. Photographs
3. Laboratory Report (s)

APPENDIX 3

Photographs

Site from west end facing east

Site from north central portion facing southwest

Central portion of Site from south boundary facing north

North Site boundary from Progress Drive facing west

Ditch north of Progress Drive from north facing southwest

Progress Drive from northeast end facing southwest

Ditch north of Progress Drive from north facing southwest

Northeast portion of Site facing southwest

Eastern portion of Site from southeast portion facing northeast

South Site boundary facing west

Site from southwest portion facing east

Tire tracks on west portion of Site

APPENDIX 4

Site Management Periodic Review Report Notice-Institutional and Engineering Controls Certification Form

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Site Management Periodic Review Report Notice

Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **B00173**

Site Name Former Roblin Steel Site (Dunkirk)

Site Address: 320 South Roberts Road Zip Code: 14048
City/Town: Dunkirk
County: Chautauqua
Site Acreage: 11.830

Reporting Period: March 07, 2018 to December 15, 2018

	YES	NO
1. Is the information above correct?	X	
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?		X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X
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?		X

Box 2

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

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

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

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. B00173 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
79.12-4-29	Chautauqua Co.	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

The Site Management Plan includes:
- An Engineering and Institutional Controls Plan. Engineering controls include a one-foot thick soil cover system and provisions for evaluating the potential for soil vapor intrusion to any new buildings constructed and the installation of soil vapor mitigation systems if warranted. Institutional controls at the site will include groundwater use restrictions and use restrictions of the Site to restricted use (i.e. commercial/industrial purposes).
- An Excavation Work Plan to assure that future intrusive activities and soil/fill handling at the Site are completed in a safe and environmentally responsible manner.
- A Site Monitoring Plan that includes: provisions for groundwater monitoring; and,
- A Site-wide Inspection program to assure that the Institutional controls have not been altered and remain effective.

79.12-4-30	Chautauqua County	Ground Water Use Restriction Soil Management Plan Monitoring Plan Site Management Plan IC/EC Plan
		Landuse Restriction

The Site Management Plan includes:
- An Engineering and Institutional Controls Plan. Engineering controls include a one-foot thick soil cover system and provisions for evaluating the potential for soil vapor intrusion to any new buildings constructed and the installation of soil vapor mitigation systems if warranted. Institutional controls at the site will include groundwater use restrictions and use restrictions of the Site to restricted use (i.e. commercial/industrial purposes).
- An Excavation Work Plan to assure that future intrusive activities and soil/fill handling at the Site are completed in a safe and environmentally responsible manner.
- A Site Monitoring Plan that includes: provisions for groundwater monitoring; and,
- A Site-wide Inspection program to assure that the Institutional controls have not been altered and remain effective.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
79.12-4-29	Cover System Vapor Mitigation
79.12-4-30	Vapor Mitigation Cover System

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
X	☐

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

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

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

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

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

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

YES	NO
X	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. B00173

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 _____ at _____,
print name print business address

am certifying as _____(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 Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I DANIEL P. NOLL (print name) at LABELLA ASSOCIATES 300 STATE ST ROCHESTER NY (print business address),

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

STATE OF NEW YORK
DANIEL P. NOLL
No. 081996
LICENSED PROFESSIONAL ENGINEER

D. P. Noll

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

4/3/19

Date

APPENDIX 5

Groundwater Sampling Logs

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Well I.D. **MW-12**

Site Location: Roblin Steel Site, Dunkirk, NY

Job No. **2160148**

Sample Date: 12/12/2018

LaBella Representative: CMK

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	8:07	8:12	8:20	8:30	8:40		
Depth of well	23.94'						
Depth to water	7.00						
Well diameter	2"						
Well volume (gallons)	2.7						
Purging device	P.P.						
Containment device	Bucket						
Purge time		[illegible]					
Gallons purged		2.7	2.7	2.7			
Sample device							
Field Parameters							
Temperature	7°C	6.9	6.7	6.6	6.6		
pH measurement	6.71	6.70	6.64	6.67	6.68		
Conductivity (mS/cm)	1.513	1.522	1.617	1.824	1.628		
ORP/Eh (mV)	200.2	211.4	206.2	201.2	200.7		
Turbidity (NTUs)	20.2	31.6	38.4	39.7	42.6		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Well I.D. **MW-9R**

Site Location: Roblin Steel Site, Dunkirk, NY

Job No: **2160148**

Sample Date: 12/12/2018

LaBella Representative: CMK

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	9:00	9:08	9:20	9:30	9:42		
Depth of well	16.7'						
Depth to water	3.7						
Well diameter	2"						
Well volume (gallons)	2.08						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		2.08	2.08	2.08			
Sample device							
Field Parameters							
Temperature	6.9	6.9	7.1	7.2	6.9		
pH measurement	7.20	7.36	7.31	7.29	7.26		
Conductivity (mS/cm)	0.998	1.223	1.164	1.218	1.223		
ORP/Eh (mV)	105.3	107.4	108.2	106.6	107.4		
Turbidity (NTUs)	37.1	44.2	49.2	46.6	41.8		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Site Location: Robin Steel Site, Dunkirk, NY
Sample Date: 12/12/2018
LaBella Representative: CMK

Well I.D. MW-7R
Job No. **2160148**

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	10:00	10:07	10:14	10:22	10:30		
Depth of well	17.57'						
Depth to water	3						
Well diameter	2"						
Well volume (gallons)	2.3						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		2.3	2.3	2.3			
Sample device							
Field Parameters							
Temperature	6.5	6.7	6.1	5.8	6.0		
pH measurement	7.50	7.41	7.44	7.39	7.47		
Conductivity (mS/cm)	1.755	1.776	1.812	1.612	1.774		
ORP/Eh (mV)	90.7	91.6	91.8	90.4	89.7		
Turbidity (NTUs)	6.4	13.1	22.7	23.6	21.8		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Site Location: Roblin Steel Site, Dunkirk, NY
Sample Date: 12/12/2018
LaBella Representative: CMK

Well I.D. MW-4
Job No. **2160148**

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	10:45	10:55	11:08	11:17	11:30		
Depth of well	16.04'						
Depth to water	4'						
Well diameter	2"						
Well volume (gallons)	1.9						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		1.9	1.9	1.9			
Sample device							
Field Parameters							
Temperature	6.2	6.1	5.8	5.7	5.7		
pH measurement	7.09	7.12	7.14	7.20	7.18		
Conductivity (mS/cm)	1.213	1.117	1.346	1.399	1.612		
ORP/Eh (mV)	23.8	26.4	24.2	23.1	21.1		
Turbidity (NTUs)	14.4	19.1	22.6	34.1	27.1		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Site Location: Roth Steel Site, Dunkirk, NY
Sample Date: 12/12/2018
LaBella Representative: CMK

Well I.D. MW-1
Job No. **2160148**

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	11:40	11:46	11:55	12:02	12:10		
Depth of well	18.15'						
Depth to water	4						
Well diameter	2"						
Well volume (gallons)	2.3						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		2.3	2.3	2.3			
Sample device							
Field Parameters							
Temperature	6.7	6.3	6.1	5.8	6.1		
pH measurement	7.77	7.42	75.6	7.58	7.61		
Conductivity (mS/cm)	0.701	0.682	0.633	0.711	0.747		
ORP/Eh (mV)	165.3	151.4	152.6	157.8	155.5		
Turbidity (NTUs)	14.7	23.1	30.2	31.6	30.2		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Site Location: Roblin Steel Site, Dunkirk, NY
Sample Date: 12/12/2018
LaBella Representative: CMK

Well I.D. EX-MW12
Job No. **2160148**

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	1220	1224	1230	1237	1245		
Depth of well	23.1'						
Depth to water	6						
Well diameter	2"						
Well volume (gallons)	2.7						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		2.7	2.7	2.7			
Sample device							
Field Parameters							
Temperature	6.5	6.3	6.1	6.1	5.8		
pH measurement	7.46	7.41	7.33	7.12	7.41		
Conductivity (mS/cm)	1.057	1.006	1.041	1.121	1.009		
ORP/Eh (mV)	152.3	151.4	150.6	144.9	147.8		
Turbidity (NTUs)	2.71	13.6	20.1	22.2	22.0		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Site Location: Roblin Steel Site, Dunkirk, NY
Sample Date: 12/12/2018
LaBella Representative: CMK

Well I.D. MW-2R
Job No. **2160148**

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	13:00	13:15	13:27	13:40	13:52		
Depth of well	23.25'						
Depth to water	4						
Well diameter	2"						
Well volume (gallons)	3.1						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		3.1	3.1	3.1			
Sample device							
Field Parameters							
Temperature	6.8	6.7	6.4	6.3	6.2		
pH measurement	7.33	7.31	7.29	7.21	7.18		
Conductivity (mS/cm)	0.996	0.991	0.987	0.977	0.981		
ORP/Eh (mV)	110.6	117.4	131.6	124.9	131.2		
Turbidity (NTUs)	9.86	9.92	13.1	14.2	13.6		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

LABELLA ASSOCIATES, D.P.C.
Environmental Engineering Consultants

Site Location: Robin Steel Site, Dunkirk, NY
Sample Date: 12/12/2018
LaBella Representative: CMK

Well I.D. EX-MW11R
Job No. **2160148**

Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	14:05	14:12	14:20	14:28	14:35		
Depth of well	18.65'						
Depth to water	3.5						
Well diameter	2"						
Well volume (gallons)	2.4						
Purging device	P.P.						
Containment device	Bucket						
Purge time							
Gallons purged		2.4	2.4	2.4			
Sample device							
Field Parameters							
Temperature	6.0	6.1	5.8	5.5	5.6		
pH measurement	7.59	7.41	7.41	7.42	7.48		
Conductivity (mS/cm)	0.842	0.881	0.879	0.711	0.713		
ORP/Eh (mV)	78.3	81.1	82.3	89.6	84.2		
Turbidity (NTUs)	23.9	34.6	41.1	40.6	38.7		

WEATHER:

NOTES/FIELD OBSERVATIONS:

Well Volume Purge: 1 Well Volume = (Total Well Depth– Static Depth To Water) X Well Capacity
(only if applicable) = (ft.–ft.) X . gal/ft = 0.3056 gallons

Well Capacity (Gallons per Foot): **0.75"**=0.02 **1"**=0.04 **1.5"**=0.092 **2"**=0.16 **3"**=0.37
4"=0.65 **5"**=1.02 **6"**=1.47 **12"**=5.88

1. **Stabilization Criteria for range of variation of last three consecutive Readings**

pH: ± 0.2 units; **Temperature:** ± 0.5°C; **Specific Conductance:** ± 10%; **Turbidity:** ≤ 50 NTU

A minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the event that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has returned to its pre-purge level (or within a maximum of two hours), samples will be collected. If the water level is slow to recharge and does not reach its pre-purge level within two hours, then samples can be collected after sufficient water has recharged, and the degree of recharge indicated in field notes with time and depth to water noted.

APPENDIX 6

Laboratory Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-146686-1
Client Project/Site: Alumax & Roblin Periodic Review Reports

For:
LaBella Associates DPC
300 Pearl Street
Suite 130
Buffalo, New York 14202

Attn: Chris Kibler

Mary Schwartzmyer

Authorized for release by:
12/27/2018 12:36:40 PM
Mary Schwartzmyer, Project Manager I
mary.schwartzmyer@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

LINKS

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

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

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

Table of Contents

Definitions/Glossary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Job ID: 480-146686-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-146686-1

Receipt
The samples were received on 12/12/2018 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

Receipt Exceptions

The following samples was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): TRIP BLANK (480-146686-13)

GC/MS VOA
Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW12 (480-146686-4), MW07R (480-146686-6) and MW04 (480-146686-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW09R (480-146686-5), EX-MW11R (480-146686-11), (480-146686-A-11 MS) and (480-146686-A-11 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-450577 recovered above the upper control limit for Methylcyclohexane. The samples associated with this CCV were non-detect above the reporting limit (RL) for the affected analyte; therefore, the data have been reported. The following samples are impacted: AL-7 (480-146686-3), MW12 (480-146686-4), MW09R (480-146686-5), MW07R (480-146686-6), MW04 (480-146686-7), MW01 (480-146686-8), MW02R (480-146686-9), EX-MW12 (480-146686-10) and EX-MW11R (480-146686-11).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: AL-1 (480-146686-1), (480-146686-B-1 MS) and (480-146686-B-1 MSD). Elevated reporting limits (RLs) are provided.

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

Detection Summary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Client Sample ID: AL-1 — Lab Sample ID: 480-146686-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	14	J	20	8.2	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	1100	F1	20	16	ug/L	20		8260C	Total/NA
Cyclohexane	11	J	20	3.6	ug/L	20		8260C	Total/NA
Methylcyclohexane	6.3	J	20	3.2	ug/L	20		8260C	Total/NA
Vinyl chloride	540		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: AL-2 — Lab Sample ID: 480-146686-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.0		1.0	0.41	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	4.3		1.0	0.81	ug/L	1		8260C	Total/NA
Cyclohexane	3.6		1.0	0.18	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.34	J	1.0	0.16	ug/L	1		8260C	Total/NA

Client Sample ID: AL-7 — Lab Sample ID: 480-146686-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.2		1.0	0.81	ug/L	1		8260C	Total/NA
Cyclohexane	0.54	J	1.0	0.18	ug/L	1		8260C	Total/NA
Vinyl chloride	1.4		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: MW12 — Lab Sample ID: 480-146686-4

No Detections.

Client Sample ID: MW09R — Lab Sample ID: 480-146686-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	290		10	8.1	ug/L	10		8260C	Total/NA
Vinyl chloride	23		10	9.0	ug/L	10		8260C	Total/NA

Client Sample ID: MW07R — Lab Sample ID: 480-146686-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.2	J	4.0	3.2	ug/L	4		8260C	Total/NA
Vinyl chloride	3.6	J	4.0	3.6	ug/L	4		8260C	Total/NA

Client Sample ID: MW04 — Lab Sample ID: 480-146686-7

No Detections.

Client Sample ID: MW01 — Lab Sample ID: 480-146686-8

No Detections.

Client Sample ID: MW02R — Lab Sample ID: 480-146686-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.2		1.0	0.41	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	20		1.0	0.81	ug/L	1		8260C	Total/NA
Cyclohexane	3.6		1.0	0.18	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample ID: MW02R (Continued) — Lab Sample ID: 480-146686-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylcyclohexane	0.70	J	1.0	0.16	ug/L	1		8260C	Total/NA
Vinyl chloride	49		1.0	0.90	ug/L	1		8260C	Total/NA

Client Sample ID: EX-MW12 — Lab Sample ID: 480-146686-10

No Detections.

Client Sample ID: EX-MW11R — Lab Sample ID: 480-146686-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	960		20	16	ug/L	20		8260C	Total/NA
Cyclohexane	19	J	20	3.6	ug/L	20		8260C	Total/NA
Methylcyclohexane	7.3	J	20	3.2	ug/L	20		8260C	Total/NA
Trichloroethene	10	J	20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride	510		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: FIELD DUPLICATE — Lab Sample ID: 480-146686-12

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-146686-13

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AL-1

Date Collected: 12/12/18 16:05
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			12/13/18 10:43	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			12/13/18 10:43	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			12/13/18 10:43	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			12/13/18 10:43	20
1,1-Dichloroethane	ND		20	7.6	ug/L			12/13/18 10:43	20
1,1-Dichloroethene	ND		20	5.8	ug/L			12/13/18 10:43	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			12/13/18 10:43	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			12/13/18 10:43	20
1,2-Dichlorobenzene	ND		20	16	ug/L			12/13/18 10:43	20
1,2-Dichloroethane	ND		20	4.2	ug/L			12/13/18 10:43	20
1,2-Dichloropropane	ND		20	14	ug/L			12/13/18 10:43	20
1,3-Dichlorobenzene	ND		20	16	ug/L			12/13/18 10:43	20
1,4-Dichlorobenzene	ND		20	17	ug/L			12/13/18 10:43	20
2-Butanone (MEK)	ND		200	26	ug/L			12/13/18 10:43	20
2-Hexanone	ND		100	25	ug/L			12/13/18 10:43	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			12/13/18 10:43	20
Acetone	ND		200	60	ug/L			12/13/18 10:43	20
Benzene	**14**	**J**	20	8.2	ug/L			12/13/18 10:43	20
Bromodichloromethane	ND		20	7.8	ug/L			12/13/18 10:43	20
Bromoform	ND		20	5.2	ug/L			12/13/18 10:43	20
Bromomethane	ND		20	14	ug/L			12/13/18 10:43	20
Carbon disulfide	ND		20	3.8	ug/L			12/13/18 10:43	20
Carbon tetrachloride	ND		20	5.4	ug/L			12/13/18 10:43	20
Chlorobenzene	ND		20	15	ug/L			12/13/18 10:43	20
Dibromochloromethane	ND		20	6.4	ug/L			12/13/18 10:43	20
Chloroethane	ND		20	6.4	ug/L			12/13/18 10:43	20
Chloroform	ND		20	6.8	ug/L			12/13/18 10:43	20
Chloromethane	ND		20	7.0	ug/L			12/13/18 10:43	20
cis-1,2-Dichloroethene	**1100**	**F1**	20	16	ug/L			12/13/18 10:43	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			12/13/18 10:43	20
Cyclohexane	**11**	**J**	20	3.6	ug/L			12/13/18 10:43	20
Dichlorodifluoromethane	ND		20	14	ug/L			12/13/18 10:43	20
Ethylbenzene	ND		20	15	ug/L			12/13/18 10:43	20
1,2-Dibromoethane	ND		20	15	ug/L			12/13/18 10:43	20
Isopropylbenzene	ND		20	16	ug/L			12/13/18 10:43	20
Methyl acetate	ND		50	26	ug/L			12/13/18 10:43	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			12/13/18 10:43	20
Methylcyclohexane	**6.3**	**J**	20	3.2	ug/L			12/13/18 10:43	20
Methylene Chloride	ND		20	8.8	ug/L			12/13/18 10:43	20
Styrene	ND		20	15	ug/L			12/13/18 10:43	20
Tetrachloroethene	ND		20	7.2	ug/L			12/13/18 10:43	20
Toluene	ND		20	10	ug/L			12/13/18 10:43	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			12/13/18 10:43	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			12/13/18 10:43	20
Trichloroethene	ND		20	9.2	ug/L			12/13/18 10:43	20
Trichlorofluoromethane	ND		20	18	ug/L			12/13/18 10:43	20
Vinyl chloride	**540**		20	18	ug/L			12/13/18 10:43	20
Xylenes, Total	ND		40	13	ug/L			12/13/18 10:43	20

Client Sample ID: AL-1

Date Collected: 12/12/18 16:05
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/13/18 10:43*	*20*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*		*12/13/18 10:43*	*20*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*12/13/18 10:43*	*20*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*12/13/18 10:43*	*20*

Client Sample ID: AL-2

Date Collected: 12/12/18 15:23
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 11:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 11:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 11:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 11:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 11:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 11:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 11:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 11:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 11:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 11:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 11:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 11:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 11:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 11:10	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 11:10	1
Acetone	ND		10	3.0	ug/L			12/13/18 11:10	1
Benzene	**7.0**		1.0	0.41	ug/L			12/13/18 11:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 11:10	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 11:10	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 11:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 11:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 11:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 11:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 11:10	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 11:10	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 11:10	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 11:10	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.81	ug/L			12/13/18 11:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 11:10	1
Cyclohexane	**3.6**		1.0	0.18	ug/L			12/13/18 11:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 11:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 11:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 11:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 11:10	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 11:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 11:10	1
Methylcyclohexane	**0.34**	**J**	1.0	0.16	ug/L			12/13/18 11:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 11:10	1

Client Sample ID: AL-2

Date Collected: 12/12/18 15:23
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			12/13/18 11:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 11:10	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 11:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 11:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 11:10	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 11:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 11:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/13/18 11:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/13/18 11:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*12/13/18 11:10*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*12/13/18 11:10*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*12/13/18 11:10*	*1*

Client Sample ID: AL-7

Date Collected: 12/12/18 16:45
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 01:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 01:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 01:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 01:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 01:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 01:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 01:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 01:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 01:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 01:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 01:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 01:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 01:43	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 01:43	1
Acetone	ND		10	3.0	ug/L			12/13/18 01:43	1
Benzene	ND		1.0	0.41	ug/L			12/13/18 01:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 01:43	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 01:43	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 01:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 01:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 01:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 01:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 01:43	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 01:43	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 01:43	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 01:43	1

Client Sample ID: AL-7

Date Collected: 12/12/18 16:45
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**7.2**		1.0	0.81	ug/L			12/13/18 01:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 01:43	1
Cyclohexane	**0.54**	**J**	1.0	0.18	ug/L			12/13/18 01:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 01:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 01:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 01:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 01:43	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 01:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 01:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/13/18 01:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 01:43	1
Styrene	ND		1.0	0.73	ug/L			12/13/18 01:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 01:43	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 01:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 01:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 01:43	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 01:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 01:43	1
Vinyl chloride	**1.4**		1.0	0.90	ug/L			12/13/18 01:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/13/18 01:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*12/13/18 01:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*12/13/18 01:43*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*12/13/18 01:43*	*1*

Client Sample ID: MW12

Date Collected: 12/12/18 08:40
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			12/13/18 02:10	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			12/13/18 02:10	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			12/13/18 02:10	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			12/13/18 02:10	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			12/13/18 02:10	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			12/13/18 02:10	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			12/13/18 02:10	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			12/13/18 02:10	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			12/13/18 02:10	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			12/13/18 02:10	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			12/13/18 02:10	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			12/13/18 02:10	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			12/13/18 02:10	2
2-Butanone (MEK)	ND		20	2.6	ug/L			12/13/18 02:10	2
2-Hexanone	ND		10	2.5	ug/L			12/13/18 02:10	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			12/13/18 02:10	2
Acetone	ND		20	6.0	ug/L			12/13/18 02:10	2

Client Sample ID: MW12

Date Collected: 12/12/18 08:40
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	0.82	ug/L			12/13/18 02:10	2
Bromodichloromethane	ND		2.0	0.78	ug/L			12/13/18 02:10	2
Bromoform	ND		2.0	0.52	ug/L			12/13/18 02:10	2
Bromomethane	ND		2.0	1.4	ug/L			12/13/18 02:10	2
Carbon disulfide	ND		2.0	0.38	ug/L			12/13/18 02:10	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			12/13/18 02:10	2
Chlorobenzene	ND		2.0	1.5	ug/L			12/13/18 02:10	2
Dibromochloromethane	ND		2.0	0.64	ug/L			12/13/18 02:10	2
Chloroethane	ND		2.0	0.64	ug/L			12/13/18 02:10	2
Chloroform	ND		2.0	0.68	ug/L			12/13/18 02:10	2
Chloromethane	ND		2.0	0.70	ug/L			12/13/18 02:10	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			12/13/18 02:10	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			12/13/18 02:10	2
Cyclohexane	ND		2.0	0.36	ug/L			12/13/18 02:10	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			12/13/18 02:10	2
Ethylbenzene	ND		2.0	1.5	ug/L			12/13/18 02:10	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			12/13/18 02:10	2
Isopropylbenzene	ND		2.0	1.6	ug/L			12/13/18 02:10	2
Methyl acetate	ND		5.0	2.6	ug/L			12/13/18 02:10	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			12/13/18 02:10	2
Methylcyclohexane	ND		2.0	0.32	ug/L			12/13/18 02:10	2
Methylene Chloride	ND		2.0	0.88	ug/L			12/13/18 02:10	2
Styrene	ND		2.0	1.5	ug/L			12/13/18 02:10	2
Tetrachloroethene	ND		2.0	0.72	ug/L			12/13/18 02:10	2
Toluene	ND		2.0	1.0	ug/L			12/13/18 02:10	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			12/13/18 02:10	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			12/13/18 02:10	2
Trichloroethene	ND		2.0	0.92	ug/L			12/13/18 02:10	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			12/13/18 02:10	2
Vinyl chloride	ND		2.0	1.8	ug/L			12/13/18 02:10	2
Xylenes, Total	ND		4.0	1.3	ug/L			12/13/18 02:10	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/13/18 02:10*	*2*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*12/13/18 02:10*	*2*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*12/13/18 02:10*	*2*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*12/13/18 02:10*	*2*

Client Sample ID: MW09R

Date Collected: 12/12/18 09:42
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/13/18 02:37	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/13/18 02:37	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/13/18 02:37	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/13/18 02:37	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/13/18 02:37	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/13/18 02:37	10

Client Sample ID: MW09R
Date Collected: 12/12/18 09:42
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/13/18 02:37	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/13/18 02:37	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/13/18 02:37	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/13/18 02:37	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/13/18 02:37	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/13/18 02:37	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/13/18 02:37	10
2-Butanone (MEK)	ND		100	13	ug/L			12/13/18 02:37	10
2-Hexanone	ND		50	12	ug/L			12/13/18 02:37	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/13/18 02:37	10
Acetone	ND		100	30	ug/L			12/13/18 02:37	10
Benzene	ND		10	4.1	ug/L			12/13/18 02:37	10
Bromodichloromethane	ND		10	3.9	ug/L			12/13/18 02:37	10
Bromoform	ND		10	2.6	ug/L			12/13/18 02:37	10
Bromomethane	ND		10	6.9	ug/L			12/13/18 02:37	10
Carbon disulfide	ND		10	1.9	ug/L			12/13/18 02:37	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/13/18 02:37	10
Chlorobenzene	ND		10	7.5	ug/L			12/13/18 02:37	10
Dibromochloromethane	ND		10	3.2	ug/L			12/13/18 02:37	10
Chloroethane	ND		10	3.2	ug/L			12/13/18 02:37	10
Chloroform	ND		10	3.4	ug/L			12/13/18 02:37	10
Chloromethane	ND		10	3.5	ug/L			12/13/18 02:37	10
cis-1,2-Dichloroethene	**290**		10	8.1	ug/L			12/13/18 02:37	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/13/18 02:37	10
Cyclohexane	ND		10	1.8	ug/L			12/13/18 02:37	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/13/18 02:37	10
Ethylbenzene	ND		10	7.4	ug/L			12/13/18 02:37	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/13/18 02:37	10
Isopropylbenzene	ND		10	7.9	ug/L			12/13/18 02:37	10
Methyl acetate	ND		25	13	ug/L			12/13/18 02:37	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/13/18 02:37	10
Methylcyclohexane	ND		10	1.6	ug/L			12/13/18 02:37	10
Methylene Chloride	ND		10	4.4	ug/L			12/13/18 02:37	10
Styrene	ND		10	7.3	ug/L			12/13/18 02:37	10
Tetrachloroethene	ND		10	3.6	ug/L			12/13/18 02:37	10
Toluene	ND		10	5.1	ug/L			12/13/18 02:37	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/13/18 02:37	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/13/18 02:37	10
Trichloroethene	ND		10	4.6	ug/L			12/13/18 02:37	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/13/18 02:37	10
Vinyl chloride	**23**		10	9.0	ug/L			12/13/18 02:37	10
Xylenes, Total	ND		20	6.6	ug/L			12/13/18 02:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/13/18 02:37*	*10*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*12/13/18 02:37*	*10*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*12/13/18 02:37*	*10*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*12/13/18 02:37*	*10*

Client Sample ID: MW07R
Date Collected: 12/12/18 10:30
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			12/13/18 03:04	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			12/13/18 03:04	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			12/13/18 03:04	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			12/13/18 03:04	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			12/13/18 03:04	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			12/13/18 03:04	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			12/13/18 03:04	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			12/13/18 03:04	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			12/13/18 03:04	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			12/13/18 03:04	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			12/13/18 03:04	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			12/13/18 03:04	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			12/13/18 03:04	4
2-Butanone (MEK)	ND		40	5.3	ug/L			12/13/18 03:04	4
2-Hexanone	ND		20	5.0	ug/L			12/13/18 03:04	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			12/13/18 03:04	4
Acetone	ND		40	12	ug/L			12/13/18 03:04	4
Benzene	ND		4.0	1.6	ug/L			12/13/18 03:04	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/13/18 03:04	4
Bromoform	ND		4.0	1.0	ug/L			12/13/18 03:04	4
Bromomethane	ND		4.0	2.8	ug/L			12/13/18 03:04	4
Carbon disulfide	ND		4.0	0.76	ug/L			12/13/18 03:04	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			12/13/18 03:04	4
Chlorobenzene	ND		4.0	3.0	ug/L			12/13/18 03:04	4
Dibromochloromethane	ND		4.0	1.3	ug/L			12/13/18 03:04	4
Chloroethane	ND		4.0	1.3	ug/L			12/13/18 03:04	4
Chloroform	ND		4.0	1.4	ug/L			12/13/18 03:04	4
Chloromethane	ND		4.0	1.4	ug/L			12/13/18 03:04	4
cis-1,2-Dichloroethene	**3.2**	**J**	4.0	3.2	ug/L			12/13/18 03:04	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			12/13/18 03:04	4
Cyclohexane	ND		4.0	0.72	ug/L			12/13/18 03:04	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			12/13/18 03:04	4
Ethylbenzene	ND		4.0	3.0	ug/L			12/13/18 03:04	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			12/13/18 03:04	4
Isopropylbenzene	ND		4.0	3.2	ug/L			12/13/18 03:04	4
Methyl acetate	ND		10	5.2	ug/L			12/13/18 03:04	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			12/13/18 03:04	4
Methylcyclohexane	ND		4.0	0.64	ug/L			12/13/18 03:04	4
Methylene Chloride	ND		4.0	1.8	ug/L			12/13/18 03:04	4
Styrene	ND		4.0	2.9	ug/L			12/13/18 03:04	4
Tetrachloroethene	ND		4.0	1.4	ug/L			12/13/18 03:04	4
Toluene	ND		4.0	2.0	ug/L			12/13/18 03:04	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			12/13/18 03:04	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			12/13/18 03:04	4
Trichloroethene	ND		4.0	1.8	ug/L			12/13/18 03:04	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			12/13/18 03:04	4
Vinyl chloride	**3.6**	**J**	4.0	3.6	ug/L			12/13/18 03:04	4
Xylenes, Total	ND		8.0	2.6	ug/L			12/13/18 03:04	4

Client Sample ID: MW07R

Date Collected: 12/12/18 10:30
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/13/18 03:04*	*4*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*12/13/18 03:04*	*4*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*12/13/18 03:04*	*4*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*12/13/18 03:04*	*4*

Client Sample ID: MW04

Date Collected: 12/12/18 11:30
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			12/13/18 03:32	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			12/13/18 03:32	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			12/13/18 03:32	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			12/13/18 03:32	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			12/13/18 03:32	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			12/13/18 03:32	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			12/13/18 03:32	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			12/13/18 03:32	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			12/13/18 03:32	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			12/13/18 03:32	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			12/13/18 03:32	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			12/13/18 03:32	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			12/13/18 03:32	4
2-Butanone (MEK)	ND		40	5.3	ug/L			12/13/18 03:32	4
2-Hexanone	ND		20	5.0	ug/L			12/13/18 03:32	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			12/13/18 03:32	4
Acetone	ND		40	12	ug/L			12/13/18 03:32	4
Benzene	ND		4.0	1.6	ug/L			12/13/18 03:32	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/13/18 03:32	4
Bromoform	ND		4.0	1.0	ug/L			12/13/18 03:32	4
Bromomethane	ND		4.0	2.8	ug/L			12/13/18 03:32	4
Carbon disulfide	ND		4.0	0.76	ug/L			12/13/18 03:32	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			12/13/18 03:32	4
Chlorobenzene	ND		4.0	3.0	ug/L			12/13/18 03:32	4
Dibromochloromethane	ND		4.0	1.3	ug/L			12/13/18 03:32	4
Chloroethane	ND		4.0	1.3	ug/L			12/13/18 03:32	4
Chloroform	ND		4.0	1.4	ug/L			12/13/18 03:32	4
Chloromethane	ND		4.0	1.4	ug/L			12/13/18 03:32	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			12/13/18 03:32	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			12/13/18 03:32	4
Cyclohexane	ND		4.0	0.72	ug/L			12/13/18 03:32	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			12/13/18 03:32	4
Ethylbenzene	ND		4.0	3.0	ug/L			12/13/18 03:32	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			12/13/18 03:32	4
Isopropylbenzene	ND		4.0	3.2	ug/L			12/13/18 03:32	4
Methyl acetate	ND		10	5.2	ug/L			12/13/18 03:32	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			12/13/18 03:32	4
Methylcyclohexane	ND		4.0	0.64	ug/L			12/13/18 03:32	4
Methylene Chloride	ND		4.0	1.8	ug/L			12/13/18 03:32	4

Client Sample ID: MW04

Date Collected: 12/12/18 11:30
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		4.0	2.9	ug/L			12/13/18 03:32	4
Tetrachloroethene	ND		4.0	1.4	ug/L			12/13/18 03:32	4
Toluene	ND		4.0	2.0	ug/L			12/13/18 03:32	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			12/13/18 03:32	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			12/13/18 03:32	4
Trichloroethene	ND		4.0	1.8	ug/L			12/13/18 03:32	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			12/13/18 03:32	4
Vinyl chloride	ND		4.0	3.6	ug/L			12/13/18 03:32	4
Xylenes, Total	ND		8.0	2.6	ug/L			12/13/18 03:32	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/13/18 03:32*	*4*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*12/13/18 03:32*	*4*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*12/13/18 03:32*	*4*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*12/13/18 03:32*	*4*

Client Sample ID: MW01

Date Collected: 12/12/18 12:10
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 03:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 03:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 03:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 03:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 03:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 03:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 03:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 03:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 03:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 03:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 03:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 03:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 03:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 03:59	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 03:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 03:59	1
Acetone	ND		10	3.0	ug/L			12/13/18 03:59	1
Benzene	ND		1.0	0.41	ug/L			12/13/18 03:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 03:59	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 03:59	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 03:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 03:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 03:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 03:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 03:59	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 03:59	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 03:59	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 03:59	1

Client Sample ID: MW01

Date Collected: 12/12/18 12:10
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/13/18 03:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 03:59	1
Cyclohexane	ND		1.0	0.18	ug/L			12/13/18 03:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 03:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 03:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 03:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 03:59	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 03:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 03:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/13/18 03:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 03:59	1
Styrene	ND		1.0	0.73	ug/L			12/13/18 03:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 03:59	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 03:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 03:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 03:59	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 03:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 03:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/13/18 03:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/13/18 03:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*12/13/18 03:59*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*12/13/18 03:59*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*12/13/18 03:59*	*1*

Client Sample ID: MW02R

Date Collected: 12/12/18 13:52
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 04:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 04:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 04:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 04:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 04:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 04:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 04:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 04:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 04:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 04:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 04:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 04:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 04:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 04:27	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 04:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 04:27	1
Acetone	ND		10	3.0	ug/L			12/13/18 04:27	1

Client Sample ID: MW02R

Date Collected: 12/12/18 13:52
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3.2**		1.0	0.41	ug/L			12/13/18 04:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 04:27	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 04:27	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 04:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 04:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 04:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 04:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 04:27	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 04:27	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 04:27	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 04:27	1
cis-1,2-Dichloroethene	**20**		1.0	0.81	ug/L			12/13/18 04:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 04:27	1
Cyclohexane	**3.6**		1.0	0.18	ug/L			12/13/18 04:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 04:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 04:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 04:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 04:27	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 04:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 04:27	1
Methylcyclohexane	**0.70**	**J**	1.0	0.16	ug/L			12/13/18 04:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 04:27	1
Styrene	ND		1.0	0.73	ug/L			12/13/18 04:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 04:27	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 04:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 04:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 04:27	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 04:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 04:27	1
Vinyl chloride	**49**		1.0	0.90	ug/L			12/13/18 04:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/13/18 04:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*12/13/18 04:27*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*12/13/18 04:27*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*12/13/18 04:27*	*1*

Client Sample ID: EX-MW12

Date Collected: 12/12/18 12:45
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 04:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 04:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 04:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 04:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 04:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 04:54	1

Client Sample ID: EX-MW12
Date Collected: 12/12/18 12:45
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 04:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 04:54	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 04:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 04:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 04:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 04:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 04:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 04:54	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 04:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 04:54	1
Acetone	ND		10	3.0	ug/L			12/13/18 04:54	1
Benzene	ND		1.0	0.41	ug/L			12/13/18 04:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 04:54	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 04:54	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 04:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 04:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 04:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 04:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 04:54	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 04:54	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 04:54	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 04:54	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/13/18 04:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 04:54	1
Cyclohexane	ND		1.0	0.18	ug/L			12/13/18 04:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 04:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 04:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 04:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 04:54	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 04:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 04:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/13/18 04:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 04:54	1
Styrene	ND		1.0	0.73	ug/L			12/13/18 04:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 04:54	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 04:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 04:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 04:54	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 04:54	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 04:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/13/18 04:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/13/18 04:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*12/13/18 04:54*	*1*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*		*12/13/18 04:54*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*12/13/18 04:54*	*1*

Client Sample ID: EX-MW11R

Date Collected: 12/12/18 14:35
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			12/13/18 05:22	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			12/13/18 05:22	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			12/13/18 05:22	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			12/13/18 05:22	20
1,1-Dichloroethane	ND		20	7.6	ug/L			12/13/18 05:22	20
1,1-Dichloroethene	ND		20	5.8	ug/L			12/13/18 05:22	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			12/13/18 05:22	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			12/13/18 05:22	20
1,2-Dichlorobenzene	ND		20	16	ug/L			12/13/18 05:22	20
1,2-Dichloroethane	ND		20	4.2	ug/L			12/13/18 05:22	20
1,2-Dichloropropane	ND		20	14	ug/L			12/13/18 05:22	20
1,3-Dichlorobenzene	ND		20	16	ug/L			12/13/18 05:22	20
1,4-Dichlorobenzene	ND		20	17	ug/L			12/13/18 05:22	20
2-Butanone (MEK)	ND		200	26	ug/L			12/13/18 05:22	20
2-Hexanone	ND		100	25	ug/L			12/13/18 05:22	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			12/13/18 05:22	20
Acetone	ND		200	60	ug/L			12/13/18 05:22	20
Benzene	ND		20	8.2	ug/L			12/13/18 05:22	20
Bromodichloromethane	ND		20	7.8	ug/L			12/13/18 05:22	20
Bromoform	ND		20	5.2	ug/L			12/13/18 05:22	20
Bromomethane	ND		20	14	ug/L			12/13/18 05:22	20
Carbon disulfide	ND		20	3.8	ug/L			12/13/18 05:22	20
Carbon tetrachloride	ND		20	5.4	ug/L			12/13/18 05:22	20
Chlorobenzene	ND		20	15	ug/L			12/13/18 05:22	20
Dibromochloromethane	ND		20	6.4	ug/L			12/13/18 05:22	20
Chloroethane	ND		20	6.4	ug/L			12/13/18 05:22	20
Chloroform	ND		20	6.8	ug/L			12/13/18 05:22	20
Chloromethane	ND		20	7.0	ug/L			12/13/18 05:22	20
cis-1,2-Dichloroethene	**960**		20	16	ug/L			12/13/18 05:22	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			12/13/18 05:22	20
Cyclohexane	**19**	**J**	20	3.6	ug/L			12/13/18 05:22	20
Dichlorodifluoromethane	ND		20	14	ug/L			12/13/18 05:22	20
Ethylbenzene	ND		20	15	ug/L			12/13/18 05:22	20
1,2-Dibromoethane	ND		20	15	ug/L			12/13/18 05:22	20
Isopropylbenzene	ND		20	16	ug/L			12/13/18 05:22	20
Methyl acetate	ND		50	26	ug/L			12/13/18 05:22	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			12/13/18 05:22	20
Methylcyclohexane	**7.3**	**J**	20	3.2	ug/L			12/13/18 05:22	20
Methylene Chloride	ND		20	8.8	ug/L			12/13/18 05:22	20
Styrene	ND		20	15	ug/L			12/13/18 05:22	20
Tetrachloroethene	ND		20	7.2	ug/L			12/13/18 05:22	20
Toluene	ND		20	10	ug/L			12/13/18 05:22	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			12/13/18 05:22	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			12/13/18 05:22	20
Trichloroethene	**10**	**J**	20	9.2	ug/L			12/13/18 05:22	20
Trichlorofluoromethane	ND		20	18	ug/L			12/13/18 05:22	20
Vinyl chloride	**510**		20	18	ug/L			12/13/18 05:22	20
Xylenes, Total	ND		40	13	ug/L			12/13/18 05:22	20

Client Sample ID: EX-MW11R

Lab Sample ID: 480-146686-11

Date Collected: 12/12/18 14:35
Matrix: Water
Date Received: 12/12/18 16:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		80 - 120		12/13/18 05:22	20
1,2-Dichloroethane-d4 (Surr)	96		77 - 120		12/13/18 05:22	20
4-Bromofluorobenzene (Surr)	110		73 - 120		12/13/18 05:22	20
Dibromofluoromethane (Surr)	99		75 - 123		12/13/18 05:22	20

Client Sample ID: FIELD DUPLICATE

Lab Sample ID: 480-146686-12

Date Collected: 12/12/18 08:40
Matrix: Water
Date Received: 12/12/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 11:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 11:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 11:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 11:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 11:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 11:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 11:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 11:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 11:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 11:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 11:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 11:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 11:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 11:37	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 11:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 11:37	1
Acetone	ND		10	3.0	ug/L			12/13/18 11:37	1
Benzene	ND		1.0	0.41	ug/L			12/13/18 11:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 11:37	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 11:37	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 11:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 11:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 11:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 11:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 11:37	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 11:37	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 11:37	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 11:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/13/18 11:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 11:37	1
Cyclohexane	ND		1.0	0.18	ug/L			12/13/18 11:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 11:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 11:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 11:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 11:37	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 11:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 11:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/13/18 11:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 11:37	1

Client Sample ID: FIELD DUPLICATE

Lab Sample ID: 480-146686-12
Date Collected: 12/12/18 08:40
Matrix: Water
Date Received: 12/12/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			12/13/18 11:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 11:37	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 11:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 11:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 11:37	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 11:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 11:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/13/18 11:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/13/18 11:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*12/13/18 11:37*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*12/13/18 11:37*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*12/13/18 11:37*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-146686-13
Date Collected: 12/12/18 00:00
Matrix: Water
Date Received: 12/12/18 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 12:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 12:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 12:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 12:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 12:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 12:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 12:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 12:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 12:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 12:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 12:04	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 12:04	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 12:04	1
Acetone	ND		10	3.0	ug/L			12/13/18 12:04	1
Benzene	ND		1.0	0.41	ug/L			12/13/18 12:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 12:04	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 12:04	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 12:04	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 12:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 12:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 12:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 12:04	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 12:04	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 12:04	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 12:04	1

Client Sample ID: TRIP BLANK
Date Collected: 12/12/18 00:00
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/13/18 12:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 12:04	1
Cyclohexane	ND		1.0	0.18	ug/L			12/13/18 12:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 12:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 12:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 12:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 12:04	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 12:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 12:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/13/18 12:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 12:04	1
Styrene	ND		1.0	0.73	ug/L			12/13/18 12:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 12:04	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 12:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 12:04	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 12:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 12:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/13/18 12:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/13/18 12:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*12/13/18 12:04*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*12/13/18 12:04*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*12/13/18 12:04*	*1*

Surrogate Summary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-146686-1	AL-1	93	88	110	95
480-146686-1 MS	AL-1	90	88	106	90
480-146686-1 MSD	AL-1	91	90	109	95
480-146686-2	AL-2	94	90	108	98
480-146686-3	AL-7	93	98	101	102
480-146686-4	MW12	95	100	107	101
480-146686-5	MW09R	92	94	103	94
480-146686-6	MW07R	93	96	104	97
480-146686-7	MW04	92	96	107	95
480-146686-8	MW01	92	96	105	99
480-146686-9	MW02R	94	93	108	97
480-146686-10	EX-MW12	94	95	111	96
480-146686-11	EX-MW11R	94	96	110	99
480-146686-11 MS	EX-MW11R	97	93	109	99
480-146686-11 MSD	EX-MW11R	96	94	108	97
480-146686-12	FIELD DUPLICATE	92	93	107	97
480-146686-13	TRIP BLANK	92	94	106	96
LCS 480-450577/5	Lab Control Sample	98	96	106	97
LCS 480-450594/5	Lab Control Sample	98	91	109	95
MB 480-450577/7	Method Blank	93	95	104	96
MB 480-450594/7	Method Blank	88	92	104	93

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 480-450577/7
Matrix: Water
Analysis Batch: 450577

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/12/18 21:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/12/18 21:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/12/18 21:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/12/18 21:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/12/18 21:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/12/18 21:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/12/18 21:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/12/18 21:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/12/18 21:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/12/18 21:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/12/18 21:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/12/18 21:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/12/18 21:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/12/18 21:30	1
2-Hexanone	ND		5.0	1.2	ug/L			12/12/18 21:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/12/18 21:30	1
Acetone	ND		10	3.0	ug/L			12/12/18 21:30	1
Benzene	ND		1.0	0.41	ug/L			12/12/18 21:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/12/18 21:30	1
Bromoform	ND		1.0	0.26	ug/L			12/12/18 21:30	1
Bromomethane	ND		1.0	0.69	ug/L			12/12/18 21:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/12/18 21:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/12/18 21:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/12/18 21:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/12/18 21:30	1
Chloroethane	ND		1.0	0.32	ug/L			12/12/18 21:30	1
Chloroform	ND		1.0	0.34	ug/L			12/12/18 21:30	1
Chloromethane	ND		1.0	0.35	ug/L			12/12/18 21:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/12/18 21:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/12/18 21:30	1
Cyclohexane	ND		1.0	0.18	ug/L			12/12/18 21:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/12/18 21:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/12/18 21:30	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/12/18 21:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/12/18 21:30	1
Methyl acetate	ND		2.5	1.3	ug/L			12/12/18 21:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/12/18 21:30	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/12/18 21:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/12/18 21:30	1
Styrene	ND		1.0	0.73	ug/L			12/12/18 21:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/12/18 21:30	1
Toluene	ND		1.0	0.51	ug/L			12/12/18 21:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/12/18 21:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/12/18 21:30	1
Trichloroethene	ND		1.0	0.46	ug/L			12/12/18 21:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/12/18 21:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/12/18 21:30	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/12/18 21:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		80 - 120		12/12/18 21:30	1
1,2-Dichloroethane-d4 (Surr)	95		77 - 120		12/12/18 21:30	1
4-Bromofluorobenzene (Surr)	104		73 - 120		12/12/18 21:30	1
Dibromofluoromethane (Surr)	96		75 - 123		12/12/18 21:30	1

Lab Sample ID: LCS 480-450577/5
Matrix: Water
Analysis Batch: 450577

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.9		ug/L		108	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	76 - 120
1,1,2-Trichloroethane	25.0	25.4		ug/L		102	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.5		ug/L		106	61 - 148
1,1-Dichloroethane	25.0	26.1		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	26.4		ug/L		105	66 - 127
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.3		ug/L		97	56 - 134
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	24.9		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 120
2-Butanone (MEK)	125	130		ug/L		104	57 - 140
2-Hexanone	125	135		ug/L		108	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	71 - 125
Acetone	125	152		ug/L		121	56 - 142
Benzene	25.0	24.8		ug/L		99	71 - 124
Bromodichloromethane	25.0	25.6		ug/L		102	80 - 122
Bromoform	25.0	27.5		ug/L		110	61 - 132
Bromomethane	25.0	20.7		ug/L		83	55 - 144
Carbon disulfide	25.0	23.9		ug/L		96	59 - 134
Carbon tetrachloride	25.0	26.6		ug/L		106	72 - 134
Chlorobenzene	25.0	25.9		ug/L		104	80 - 120
Dibromochloromethane	25.0	27.7		ug/L		111	75 - 125
Chloroethane	25.0	24.7		ug/L		99	69 - 136
Chloroform	25.0	25.7		ug/L		103	73 - 127
Chloromethane	25.0	23.5		ug/L		94	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	24.8		ug/L		99	74 - 124
Cyclohexane	25.0	27.6		ug/L		110	59 - 135
Dichlorodifluoromethane	25.0	23.8		ug/L		95	59 - 135
Ethylbenzene	25.0	26.0		ug/L		104	77 - 123
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
Isopropylbenzene	25.0	25.8		ug/L		103	77 - 122
Methyl acetate	50.0	47.3		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	24.5		ug/L		98	77 - 120
Methylcyclohexane	25.0	28.5		ug/L		114	68 - 134
Methylene Chloride	25.0	23.7		ug/L		95	75 - 124
Styrene	25.0	26.1		ug/L		105	80 - 120
Tetrachloroethene	25.0	26.7		ug/L		107	74 - 122
Toluene	25.0	25.8		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	73 - 127

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

Lab Sample ID: LCS 480-450577/5
Matrix: Water
Analysis Batch: 450577

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			25.0	25.7		ug/L		103	80 - 120		
Trichloroethene			25.0	24.9		ug/L		100	74 - 123		
Trichlorofluoromethane			25.0	27.2		ug/L		109	62 - 150		
Vinyl chloride			25.0	25.2		ug/L		101	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Lab Sample ID: 480-146686-11 MS
Matrix: Water
Analysis Batch: 450577

Client Sample ID: EX-MW11R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane	ND		500	550		ug/L		110	73 - 126		
1,1,2,2-Tetrachloroethane	ND		500	464		ug/L		93	76 - 120		
1,1,2-Trichloroethane	ND		500	531		ug/L		106	76 - 122		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	545		ug/L		109	61 - 148		
1,1-Dichloroethane	ND		500	537		ug/L		107	77 - 120		
1,1-Dichloroethene	ND		500	549		ug/L		110	66 - 127		
1,2,4-Trichlorobenzene	ND		500	510		ug/L		102	79 - 122		
1,2-Dibromo-3-Chloropropane	ND		500	484		ug/L		97	56 - 134		
1,2-Dichlorobenzene	ND		500	536		ug/L		107	80 - 124		
1,2-Dichloroethane	ND		500	520		ug/L		104	75 - 120		
1,2-Dichloropropane	ND		500	517		ug/L		103	76 - 120		
1,3-Dichlorobenzene	ND		500	509		ug/L		102	77 - 120		
1,4-Dichlorobenzene	ND		500	512		ug/L		102	78 - 124		
2-Butanone (MEK)	ND		2500	2700		ug/L		108	57 - 140		
2-Hexanone	ND		2500	2620		ug/L		105	65 - 127		
4-Methyl-2-pentanone (MIBK)	ND		2500	2650		ug/L		106	71 - 125		
Acetone	ND		2500	2880		ug/L		115	56 - 142		
Benzene	ND		500	515		ug/L		103	71 - 124		
Bromodichloromethane	ND		500	539		ug/L		108	80 - 122		
Bromoform	ND		500	519		ug/L		104	61 - 132		
Bromomethane	ND		500	460		ug/L		92	55 - 144		
Carbon disulfide	ND		500	497		ug/L		99	59 - 134		
Carbon tetrachloride	ND		500	545		ug/L		109	72 - 134		
Chlorobenzene	ND		500	506		ug/L		101	80 - 120		
Dibromochloromethane	ND		500	533		ug/L		107	75 - 125		
Chloroethane	ND		500	560		ug/L		112	69 - 136		
Chloroform	ND		500	528		ug/L		106	73 - 127		
Chloromethane	ND		500	498		ug/L		100	68 - 124		
cis-1,2-Dichloroethene	960		500	1320		ug/L		74	74 - 124		
cis-1,3-Dichloropropene	ND		500	475		ug/L		95	74 - 124		
Cyclohexane	19	J	500	606		ug/L		117	59 - 135		

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

Lab Sample ID: 480-146686-11 MS
Matrix: Water
Analysis Batch: 450577

Client Sample ID: EX-MW11R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		500	549		ug/L		110	59 - 135
Ethylbenzene	ND		500	520		ug/L		104	77 - 123
1,2-Dibromoethane	ND		500	498		ug/L		100	77 - 120
Isopropylbenzene	ND		500	516		ug/L		103	77 - 122
Methyl acetate	ND		1000	978		ug/L		98	74 - 133
Methyl tert-butyl ether	ND		500	496		ug/L		99	77 - 120
Methylcyclohexane	7.3	J	500	611		ug/L		121	68 - 134
Methylene Chloride	ND		500	482		ug/L		96	75 - 124
Styrene	ND		500	515		ug/L		103	80 - 120
Tetrachloroethene	ND		500	555		ug/L		111	74 - 122
Toluene	ND		500	503		ug/L		101	80 - 122
trans-1,2-Dichloroethene	ND		500	531		ug/L		106	73 - 127
trans-1,3-Dichloropropene	ND		500	476		ug/L		95	80 - 120
Trichloroethene	10	J	500	516		ug/L		101	74 - 123
Trichlorofluoromethane	ND		500	599		ug/L		120	62 - 150
Vinyl chloride	510		500	886		ug/L		75	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: 480-146686-11 MSD
Matrix: Water
Analysis Batch: 450577

Client Sample ID: EX-MW11R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		500	567		ug/L		113	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		500	494		ug/L		99	76 - 120	6	15
1,1,2-Trichloroethane	ND		500	510		ug/L		102	76 - 122	4	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	578		ug/L		116	61 - 148	6	20
1,1-Dichloroethane	ND		500	546		ug/L		109	77 - 120	2	20
1,1-Dichloroethene	ND		500	573		ug/L		115	66 - 127	4	16
1,2,4-Trichlorobenzene	ND		500	506		ug/L		101	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		500	505		ug/L		101	56 - 134	4	15
1,2-Dichlorobenzene	ND		500	537		ug/L		107	80 - 124	0	20
1,2-Dichloroethane	ND		500	512		ug/L		102	75 - 120	1	20
1,2-Dichloropropane	ND		500	535		ug/L		107	76 - 120	3	20
1,3-Dichlorobenzene	ND		500	531		ug/L		106	77 - 120	4	20
1,4-Dichlorobenzene	ND		500	532		ug/L		106	78 - 124	4	20
2-Butanone (MEK)	ND		2500	2640		ug/L		105	57 - 140	2	20
2-Hexanone	ND		2500	2590		ug/L		104	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2560		ug/L		102	71 - 125	4	35
Acetone	ND		2500	2760		ug/L		110	56 - 142	4	15
Benzene	ND		500	531		ug/L		106	71 - 124	3	13
Bromodichloromethane	ND		500	522		ug/L		104	80 - 122	3	15

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

Lab Sample ID: 480-146686-11 MSD
Matrix: Water
Analysis Batch: 450577

Client Sample ID: EX-MW11R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		500	505		ug/L		101	61 - 132	3	15
Bromomethane	ND		500	460		ug/L		92	55 - 144	0	15
Carbon disulfide	ND		500	500		ug/L		100	59 - 134	1	15
Carbon tetrachloride	ND		500	556		ug/L		111	72 - 134	2	15
Chlorobenzene	ND		500	514		ug/L		103	80 - 120	2	25
Dibromochloromethane	ND		500	535		ug/L		107	75 - 125	0	15
Chloroethane	ND		500	583		ug/L		117	69 - 136	4	15
Chloroform	ND		500	547		ug/L		109	73 - 127	4	20
Chloromethane	ND		500	506		ug/L		101	68 - 124	1	15
cis-1,2-Dichloroethene	960		500	1340		ug/L		77	74 - 124	1	15
cis-1,3-Dichloropropene	ND		500	496		ug/L		99	74 - 124	4	15
Cyclohexane	19	J	500	635		ug/L		123	59 - 135	5	20
Dichlorodifluoromethane	ND		500	565		ug/L		113	59 - 135	3	20
Ethylbenzene	ND		500	533		ug/L		107	77 - 123	2	15
1,2-Dibromoethane	ND		500	503		ug/L		101	77 - 120	1	15
Isopropylbenzene	ND		500	558		ug/L		112	77 - 122	8	20
Methyl acetate	ND		1000	961		ug/L		96	74 - 133	2	20
Methyl tert-butyl ether	ND		500	505		ug/L		101	77 - 120	2	37
Methylcyclohexane	7.3	J	500	608		ug/L		120	68 - 134	1	20
Methylene Chloride	ND		500	496		ug/L		99	75 - 124	3	15
Styrene	ND		500	528		ug/L		106	80 - 120	2	20
Tetrachloroethene	ND		500	575		ug/L		115	74 - 122	4	20
Toluene	ND		500	519		ug/L		104	80 - 122	3	15
trans-1,2-Dichloroethene	ND		500	543		ug/L		109	73 - 127	2	20
trans-1,3-Dichloropropene	ND		500	485		ug/L		97	80 - 120	2	15
Trichloroethene	10	J	500	547		ug/L		107	74 - 123	6	16
Trichlorofluoromethane	ND		500	641		ug/L		128	62 - 150	7	20
Vinyl chloride	510		500	935		ug/L		85	65 - 133	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Lab Sample ID: MB 480-450594/7
Matrix: Water
Analysis Batch: 450594

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/13/18 09:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/13/18 09:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/13/18 09:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/13/18 09:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/13/18 09:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/13/18 09:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/13/18 09:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/13/18 09:40	1

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

Lab Sample ID: MB 480-450594/7
Matrix: Water
Analysis Batch: 450594

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/13/18 09:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/13/18 09:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/13/18 09:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/13/18 09:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/13/18 09:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/13/18 09:40	1
2-Hexanone	ND		5.0	1.2	ug/L			12/13/18 09:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/13/18 09:40	1
Acetone	ND		10	3.0	ug/L			12/13/18 09:40	1
Benzene	ND		1.0	0.41	ug/L			12/13/18 09:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/13/18 09:40	1
Bromoform	ND		1.0	0.26	ug/L			12/13/18 09:40	1
Bromomethane	ND		1.0	0.69	ug/L			12/13/18 09:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/13/18 09:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/13/18 09:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/13/18 09:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/13/18 09:40	1
Chloroethane	ND		1.0	0.32	ug/L			12/13/18 09:40	1
Chloroform	ND		1.0	0.34	ug/L			12/13/18 09:40	1
Chloromethane	ND		1.0	0.35	ug/L			12/13/18 09:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/13/18 09:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/13/18 09:40	1
Cyclohexane	ND		1.0	0.18	ug/L			12/13/18 09:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/13/18 09:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/13/18 09:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/13/18 09:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/13/18 09:40	1
Methyl acetate	ND		2.5	1.3	ug/L			12/13/18 09:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/13/18 09:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/13/18 09:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/13/18 09:40	1
Styrene	ND		1.0	0.73	ug/L			12/13/18 09:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/13/18 09:40	1
Toluene	ND		1.0	0.51	ug/L			12/13/18 09:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/13/18 09:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/13/18 09:40	1
Trichloroethene	ND		1.0	0.46	ug/L			12/13/18 09:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/13/18 09:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/13/18 09:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/13/18 09:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*12/13/18 09:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*12/13/18 09:40*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*12/13/18 09:40*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*12/13/18 09:40*	*1*

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

Lab Sample ID: LCS 480-450594/5
Matrix: Water
Analysis Batch: 450594

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	24.6		ug/L		98	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.4		ug/L		98	61 - 148
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	25.0		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		104	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.4		ug/L		102	56 - 134
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	25.3		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	25.5		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 120
2-Butanone (MEK)	125	140		ug/L		112	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	71 - 125
Acetone	125	177		ug/L		142	56 - 142
Benzene	25.0	24.5		ug/L		98	71 - 124
Bromodichloromethane	25.0	25.4		ug/L		102	80 - 122
Bromoform	25.0	25.3		ug/L		101	61 - 132
Bromomethane	25.0	19.0		ug/L		76	55 - 144
Carbon disulfide	25.0	22.7		ug/L		91	59 - 134
Carbon tetrachloride	25.0	24.4		ug/L		98	72 - 134
Chlorobenzene	25.0	24.4		ug/L		98	80 - 120
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Chloroethane	25.0	23.6		ug/L		94	69 - 136
Chloroform	25.0	25.5		ug/L		102	73 - 127
Chloromethane	25.0	21.5		ug/L		86	68 - 124
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	24.9		ug/L		100	74 - 124
Cyclohexane	25.0	25.6		ug/L		102	59 - 135
Dichlorodifluoromethane	25.0	21.1		ug/L		85	59 - 135
Ethylbenzene	25.0	25.1		ug/L		100	77 - 123
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120
Isopropylbenzene	25.0	25.9		ug/L		104	77 - 122
Methyl acetate	50.0	49.7		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.1		ug/L		97	77 - 120
Methylcyclohexane	25.0	26.5		ug/L		106	68 - 134
Methylene Chloride	25.0	23.2		ug/L		93	75 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
Tetrachloroethene	25.0	25.4		ug/L		102	74 - 122
Toluene	25.0	23.8		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	23.8		ug/L		95	80 - 120
Trichloroethene	25.0	24.5		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	25.1		ug/L		100	62 - 150
Vinyl chloride	25.0	23.0		ug/L		92	65 - 133

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

Lab Sample ID: LCS 480-450594/5
Matrix: Water
Analysis Batch: 450594

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*

Lab Sample ID: 480-146686-1 MS
Matrix: Water
Analysis Batch: 450594

Client Sample ID: AL-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		500	525		ug/L		105	73 - 126
1,1,2,2-Tetrachloroethane	ND		500	503		ug/L		101	76 - 120
1,1,2-Trichloroethane	ND		500	507		ug/L		101	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	528		ug/L		106	61 - 148
1,1-Dichloroethane	ND		500	525		ug/L		105	77 - 120
1,1-Dichloroethene	ND		500	548		ug/L		110	66 - 127
1,2,4-Trichlorobenzene	ND		500	490		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	ND		500	490		ug/L		98	56 - 134
1,2-Dichlorobenzene	ND		500	515		ug/L		103	80 - 124
1,2-Dichloroethane	ND		500	537		ug/L		107	75 - 120
1,2-Dichloropropane	ND		500	524		ug/L		105	76 - 120
1,3-Dichlorobenzene	ND		500	501		ug/L		100	77 - 120
1,4-Dichlorobenzene	ND		500	498		ug/L		100	78 - 124
2-Butanone (MEK)	ND		2500	2770		ug/L		111	57 - 140
2-Hexanone	ND		2500	2680		ug/L		107	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		2500	2550		ug/L		102	71 - 125
Acetone	ND		2500	2930		ug/L		117	56 - 142
Benzene	14	J	500	521		ug/L		101	71 - 124
Bromodichloromethane	ND		500	543		ug/L		109	80 - 122
Bromoform	ND		500	546		ug/L		109	61 - 132
Bromomethane	ND		500	396		ug/L		79	55 - 144
Carbon disulfide	ND		500	479		ug/L		96	59 - 134
Carbon tetrachloride	ND		500	549		ug/L		110	72 - 134
Chlorobenzene	ND		500	499		ug/L		100	80 - 120
Dibromochloromethane	ND		500	535		ug/L		107	75 - 125
Chloroethane	ND		500	474		ug/L		95	69 - 136
Chloroform	ND		500	530		ug/L		106	73 - 127
Chloromethane	ND		500	434		ug/L		87	68 - 124
cis-1,2-Dichloroethene	1100	F1	500	1400	F1	ug/L		69	74 - 124
cis-1,3-Dichloropropene	ND		500	487		ug/L		97	74 - 124
Cyclohexane	11	J	500	559		ug/L		110	59 - 135
Dichlorodifluoromethane	ND		500	438		ug/L		88	59 - 135
Ethylbenzene	ND		500	496		ug/L		99	77 - 123
1,2-Dibromoethane	ND		500	501		ug/L		100	77 - 120
Isopropylbenzene	ND		500	496		ug/L		99	77 - 122
Methyl acetate	ND		1000	1030		ug/L		103	74 - 133
Methyl tert-butyl ether	ND		500	495		ug/L		99	77 - 120

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

Lab Sample ID: 480-146686-1 MS
Matrix: Water
Analysis Batch: 450594

Client Sample ID: AL-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylcyclohexane	6.3	J	500	527		ug/L		104	68 - 134
Methylene Chloride	ND		500	484		ug/L		97	75 - 124
Styrene	ND		500	500		ug/L		100	80 - 120
Tetrachloroethene	ND		500	538		ug/L		108	74 - 122
Toluene	ND		500	490		ug/L		98	80 - 122
trans-1,2-Dichloroethene	ND		500	524		ug/L		105	73 - 127
trans-1,3-Dichloropropene	ND		500	489		ug/L		98	80 - 120
Trichloroethene	ND		500	512		ug/L		102	74 - 123
Trichlorofluoromethane	ND		500	509		ug/L		102	62 - 150
Vinyl chloride	540		500	906		ug/L		72	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*90*		*75 - 123*

Lab Sample ID: 480-146686-1 MSD
Matrix: Water
Analysis Batch: 450594

Client Sample ID: AL-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		500	525		ug/L		105	73 - 126	0	15
1,1,2,2-Tetrachloroethane	ND		500	494		ug/L		99	76 - 120	2	15
1,1,2-Trichloroethane	ND		500	535		ug/L		107	76 - 122	5	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	513		ug/L		103	61 - 148	3	20
1,1-Dichloroethane	ND		500	544		ug/L		109	77 - 120	4	20
1,1-Dichloroethene	ND		500	542		ug/L		108	66 - 127	1	16
1,2,4-Trichlorobenzene	ND		500	494		ug/L		99	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		500	528		ug/L		106	56 - 134	7	15
1,2-Dichlorobenzene	ND		500	514		ug/L		103	80 - 124	0	20
1,2-Dichloroethane	ND		500	534		ug/L		107	75 - 120	1	20
1,2-Dichloropropane	ND		500	529		ug/L		106	76 - 120	1	20
1,3-Dichlorobenzene	ND		500	492		ug/L		98	77 - 120	2	20
1,4-Dichlorobenzene	ND		500	505		ug/L		101	78 - 124	1	20
2-Butanone (MEK)	ND		2500	2820		ug/L		113	57 - 140	2	20
2-Hexanone	ND		2500	2750		ug/L		110	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2700		ug/L		108	71 - 125	6	35
Acetone	ND		2500	2970		ug/L		119	56 - 142	1	15
Benzene	14	J	500	537		ug/L		105	71 - 124	3	13
Bromodichloromethane	ND		500	549		ug/L		110	80 - 122	1	15
Bromoform	ND		500	555		ug/L		111	61 - 132	2	15
Bromomethane	ND		500	419		ug/L		84	55 - 144	6	15
Carbon disulfide	ND		500	477		ug/L		95	59 - 134	1	15
Carbon tetrachloride	ND		500	530		ug/L		106	72 - 134	4	15
Chlorobenzene	ND		500	510		ug/L		102	80 - 120	2	25
Dibromochloromethane	ND		500	571		ug/L		114	75 - 125	7	15

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

Lab Sample ID: 480-146686-1 MSD
Matrix: Water
Analysis Batch: 450594

Client Sample ID: AL-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	ND		500	499		ug/L		100	69 - 136	5	15
Chloroform	ND		500	549		ug/L		110	73 - 127	3	20
Chloromethane	ND		500	465		ug/L		93	68 - 124	7	15
cis-1,2-Dichloroethene	1100	F1	500	1430		ug/L		75	74 - 124	2	15
cis-1,3-Dichloropropene	ND		500	495		ug/L		99	74 - 124	2	15
Cyclohexane	11	J	500	553		ug/L		108	59 - 135	1	20
Dichlorodifluoromethane	ND		500	428		ug/L		86	59 - 135	2	20
Ethylbenzene	ND		500	497		ug/L		99	77 - 123	0	15
1,2-Dibromoethane	ND		500	508		ug/L		102	77 - 120	1	15
Isopropylbenzene	ND		500	503		ug/L		101	77 - 122	2	20
Methyl acetate	ND		1000	1090		ug/L		109	74 - 133	6	20
Methyl tert-butyl ether	ND		500	517		ug/L		103	77 - 120	4	37
Methylcyclohexane	6.3	J	500	539		ug/L		106	68 - 134	2	20
Methylene Chloride	ND		500	502		ug/L		100	75 - 124	4	15
Styrene	ND		500	515		ug/L		103	80 - 120	3	20
Tetrachloroethene	ND		500	513		ug/L		103	74 - 122	5	20
Toluene	ND		500	515		ug/L		103	80 - 122	5	15
trans-1,2-Dichloroethene	ND		500	520		ug/L		104	73 - 127	1	20
trans-1,3-Dichloropropene	ND		500	491		ug/L		98	80 - 120	0	15
Trichloroethene	ND		500	519		ug/L		104	74 - 123	1	16
Trichlorofluoromethane	ND		500	521		ug/L		104	62 - 150	2	20
Vinyl chloride	540		500	912		ug/L		74	65 - 133	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*91*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*

QC Association Summary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

GC/MS VOA

Analysis Batch: 450577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146686-3	AL-7	Total/NA	Water	8260C	
480-146686-4	MW12	Total/NA	Water	8260C	
480-146686-5	MW09R	Total/NA	Water	8260C	
480-146686-6	MW07R	Total/NA	Water	8260C	
480-146686-7	MW04	Total/NA	Water	8260C	
480-146686-8	MW01	Total/NA	Water	8260C	
480-146686-9	MW02R	Total/NA	Water	8260C	
480-146686-10	EX-MW12	Total/NA	Water	8260C	
480-146686-11	EX-MW11R	Total/NA	Water	8260C	
MB 480-450577/7	Method Blank	Total/NA	Water	8260C	
LCS 480-450577/5	Lab Control Sample	Total/NA	Water	8260C	
480-146686-11 MS	EX-MW11R	Total/NA	Water	8260C	
480-146686-11 MSD	EX-MW11R	Total/NA	Water	8260C	

Analysis Batch: 450594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146686-1	AL-1	Total/NA	Water	8260C	
480-146686-2	AL-2	Total/NA	Water	8260C	
480-146686-12	FIELD DUPLICATE	Total/NA	Water	8260C	
480-146686-13	TRIP BLANK	Total/NA	Water	8260C	
MB 480-450594/7	Method Blank	Total/NA	Water	8260C	
LCS 480-450594/5	Lab Control Sample	Total/NA	Water	8260C	
480-146686-1 MS	AL-1	Total/NA	Water	8260C	
480-146686-1 MSD	AL-1	Total/NA	Water	8260C	

Lab Chronicle

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Client Sample ID: AL-1
Lab Sample ID: 480-146686-1
Date Collected: 12/12/18 16:05
Matrix: Water
Date Received: 12/12/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	450594	12/13/18 10:43	RLB	TAL BUF

Client Sample ID: AL-2
Lab Sample ID: 480-146686-2
Date Collected: 12/12/18 15:23
Matrix: Water
Date Received: 12/12/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450594	12/13/18 11:10	RLB	TAL BUF

Client Sample ID: AL-7
Lab Sample ID: 480-146686-3
Date Collected: 12/12/18 16:45
Matrix: Water
Date Received: 12/12/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450577	12/13/18 01:43	AMM	TAL BUF

Client Sample ID: MW12
Lab Sample ID: 480-146686-4
Date Collected: 12/12/18 08:40
Matrix: Water
Date Received: 12/12/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	450577	12/13/18 02:10	AMM	TAL BUF

Client Sample ID: MW09R
Lab Sample ID: 480-146686-5
Date Collected: 12/12/18 09:42
Matrix: Water
Date Received: 12/12/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	450577	12/13/18 02:37	AMM	TAL BUF

Client Sample ID: MW07R
Lab Sample ID: 480-146686-6
Date Collected: 12/12/18 10:30
Matrix: Water
Date Received: 12/12/18 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	450577	12/13/18 03:04	AMM	TAL BUF

Lab Chronicle

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Client Sample ID: MW04
Date Collected: 12/12/18 11:30
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	450577	12/13/18 03:32	AMM	TAL BUF

Client Sample ID: MW01
Date Collected: 12/12/18 12:10
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450577	12/13/18 03:59	AMM	TAL BUF

Client Sample ID: MW02R
Date Collected: 12/12/18 13:52
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450577	12/13/18 04:27	AMM	TAL BUF

Client Sample ID: EX-MW12
Date Collected: 12/12/18 12:45
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450577	12/13/18 04:54	AMM	TAL BUF

Client Sample ID: EX-MW11R
Date Collected: 12/12/18 14:35
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	450577	12/13/18 05:22	AMM	TAL BUF

Client Sample ID: FIELD DUPLICATE
Date Collected: 12/12/18 08:40
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450594	12/13/18 11:37	RLB	TAL BUF

Lab Chronicle

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Client Sample ID: TRIP BLANK
Date Collected: 12/12/18 00:00
Date Received: 12/12/18 16:45

Lab Sample ID: 480-146686-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	450594	12/13/18 12:04	RLB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

Method Summary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: LaBella Associates DPC
Project/Site: Alumax & Roblin Periodic Review Reports

TestAmerica Job ID: 480-146686-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-146686-1	AL-1	Water	12/12/18 16:05	12/12/18 16:45
480-146686-2	AL-2	Water	12/12/18 15:23	12/12/18 16:45
480-146686-3	AL-7	Water	12/12/18 16:45	12/12/18 16:45
480-146686-4	MW12	Water	12/12/18 08:40	12/12/18 16:45
480-146686-5	MW09R	Water	12/12/18 09:42	12/12/18 16:45
480-146686-6	MW07R	Water	12/12/18 10:30	12/12/18 16:45
480-146686-7	MW04	Water	12/12/18 11:30	12/12/18 16:45
480-146686-8	MW01	Water	12/12/18 12:10	12/12/18 16:45
480-146686-9	MW02R	Water	12/12/18 13:52	12/12/18 16:45
480-146686-10	EX-MW12	Water	12/12/18 12:45	12/12/18 16:45
480-146686-11	EX-MW11R	Water	12/12/18 14:35	12/12/18 16:45
480-146686-12	FIELD DUPLICATE	Water	12/12/18 08:40	12/12/18 16:45
480-146686-13	TRIP BLANK	Water	12/12/18 00:00	12/12/18 16:45

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 303849

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Rob Napieralski	Site Contact: Chris Kibler	Date: 12-12-18	COC No: 480-122433-28077
Company Name: LaBella	Tel/Fax: 716-551-6281	Lab Contact: Melissa Deyo	Carrier:	1 of 1 COCs
Address: 300 Pearl St. Suite 130	Analysis Turnaround Time			Sampler: Chris Kibler
City/State/Zip: Buffalo, NY, 14202	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 716-551-6281	TAT if different from Below			Walk-in Client:
Fax: 716-551-6282	☐ 2 weeks Stan.			Lab Sampling:
Project Name: Roblin & Alumax Ext. Sites	☐ 1 week Turn			Job / SDG No.:
Site: Dunkirk, NY	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL VOC's 8260C
AL-1	12-12-18	16:05	G	GW	3			X
AL-2	12-12-18	15:23	G	GW	3			X
AL-7	12-12-18	16:45	G	GW	3			X
MW12	12-12-18	840	G	GW	3			X
MW09R	12-12-18	9:42	G	GW	3			X
MW07R	12-12-18	1030	G	GW	3			X
MW04	12-12-18	11:30	G	GW	3			X
MW01	12-12-18	12:10	G	GW	3			X
MW02R (CK 13:52)	12-12-18	~~1340~~	G	GW	3			X
EX-MW12	12-12-18	1245	G	GW	3			X
EX-MW11R	12-12-18	1435	G	GW	3			X
Field Duplicate	12-12-18	840	G	GW	3			X
								2

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Analyze field duplicate + Trip blank for TCL VOC's

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.0 Corr'd: _____ | Therm ID No.: #6

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	LaBella	12-12-18/1645			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TA	12/12/18 1645

Login Sample Receipt Checklist

Client: LaBella Associates DPC

Job Number: 480-146686-1

Login Number: 146686
List Number: 1
Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	LABELLA
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	