

### 2019 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. 2200014

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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 a former 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." 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. However, during the annual site inspection, it was discovered that one of the monitoring wells (MW-O1) had been significantly damaged and can no longer function as a groundwater sampling point. This is further discussed in Section 5 of this report.

#### 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 proper decommissioning of MW-01 and the permanent removal of MW-01, MW-04, MW-12 and EX-MW12 from the groundwater monitoring program. Continued monitoring and 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 that depicts the Site configuration and location of

the groundwater monitoring well network. Progress Drive 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 a recently constructed freezer warehouse facility. 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 a former industrial park. Historically, the Site contained a large complex of industrial buildings. The last remaining building was demolished as part of the 2010 remedial activities. The adjoining properties located in the former industrial park include the Former Alumax Extrusions property located to the south and the recently redeveloped 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 of 2014. Disturbance of the soil cover was completed in accordance with the provisions of the Excavation Work Plan (EWP) contained in 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 were related to the removal or treatment of contaminated material (Phase I) and those that were 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 detailed below in Section 4.1.2, the Site Soil Cover System was inspected on December 5, 2019. Based on this inspection, the cover system is intact and functioning effectively throughout the Site.

The results of the December 2019 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 5, 2019, Mr. Chris Kibler of LaBella Associates, D.P.C. (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 taken 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 potential 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 SSVVS 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: (1) the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site; (2) the soil cover system; and (3) 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 are analyzed for VOCs appearing on the United States Environmental Protection Agency (USEPA) Target Compound List (TCL). Trends in contaminant levels in groundwater are evaluated to determine if the remedy continues to be effective in achieving remedial goals.

The groundwater monitoring network prescribed in the SMP consists of eight monitoring wells. During the annual site inspection and monitoring event conducted on December 5, 2019, one of the eight groundwater monitoring wells (MW-01) was discovered to be damaged. The protective casing and riser of MW-01 were observed to be significantly bent toward the ground surface and LaBella was unable to pass tubing downward into the well for purging and sample collection.

#### 5.2.1 Sampling Procedure

Seven of the eight groundwater monitoring wells were purged and sampled in general accordance with the procedures detailed in the November 2010 SMP. This included four out of the five downgradient wells (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). Downgradient well MW-01 could not be sampled due to the damaged riser described above. 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 NYSDECapproved low-flow purging procedures via a Geotech Geopump II Pump. After completion of development, the wells were allowed to recharge. The samples were collected within three hours of completion of well purging 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 5, 2019, 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 while Figure 3 depicts apparent groundwater flow direction at the Site.

#### 5.3 Comparisons with Remedial Objectives

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

Four VOCs were detected at concentrations above NYSDEC TOGS Standards in the sample collected from EX-MW-11R. Total VOC concentrations in this well have decreased since the December 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. Total VOC concentrations in this well have slightly decreased since the December 2018 sampling event and are substantially lower than the maximum concentration detected at this location during the August 2010 sampling event.

Two VOCs (Cis-1, 2-Dichloroethene and vinyl chloride) were detected within MW-07R at concentrations above NYSDEC TOGS Standards. Total VOC concentrations in this well have slightly increased since the December 2018 sampling event. However, such are substantially lower than the maximum concentration detected at this location during the May 2009 sampling event.

Five VOCs 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.

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

As indicated above, damage to downgradient well MW-01 prevented LaBella from collecting a groundwater sample from this well during the 2019 annual monitoring event. However, the lack of monitoring data from this location is not considered to be significant given that no contraventions of the water quality standards have been detected in this well since monitoring began in 2002.

#### 5.5 Groundwater Monitoring Conclusions and Recommendations

Total VOC concentrations in MW-09R were detected at their lowest levels since sampling efforts began in October 2002 and have decreased slightly in EX-MW-11R and MW-02R since the December 2018 sampling event. Although total VOC concentrations in MW-07R have increased slightly since the December 2018 sampling event, such are well below the maximum concentration detected at this location. The continued monitoring of contaminant levels at these well locations is recommended.

Meanwhile, no VOCs have been detected in MW-04, MW-12 or EX-MW-12 during the last three annual monitoring events, and no contraventions of NYSDEC TOGS standards have been detected in these wells during the last five annual monitoring events dating back to 2015. As a result, it is recommended that these wells be permanently removed from the monitoring program.

It is also recommended that MW-01 be properly decommissioned due to its damaged condition and permanently removed from the monitoring program considering the absence of contraventions of the water quality standards in this well since monitoring began in 2002.

In consideration of the information above, 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 5, 2019 and was observed to be intact and functioning as designed throughout the Site.

Total VOC concentrations in the 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 proper decommissioning of MW-01 and the permanent removal of MW-01, MW-04, MW-12 and EX-MW12 from the groundwater monitoring program.

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

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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

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

Periodic Review Report, Former Roblin Steel Site, LaBella Associates, D.P.C., January 2019

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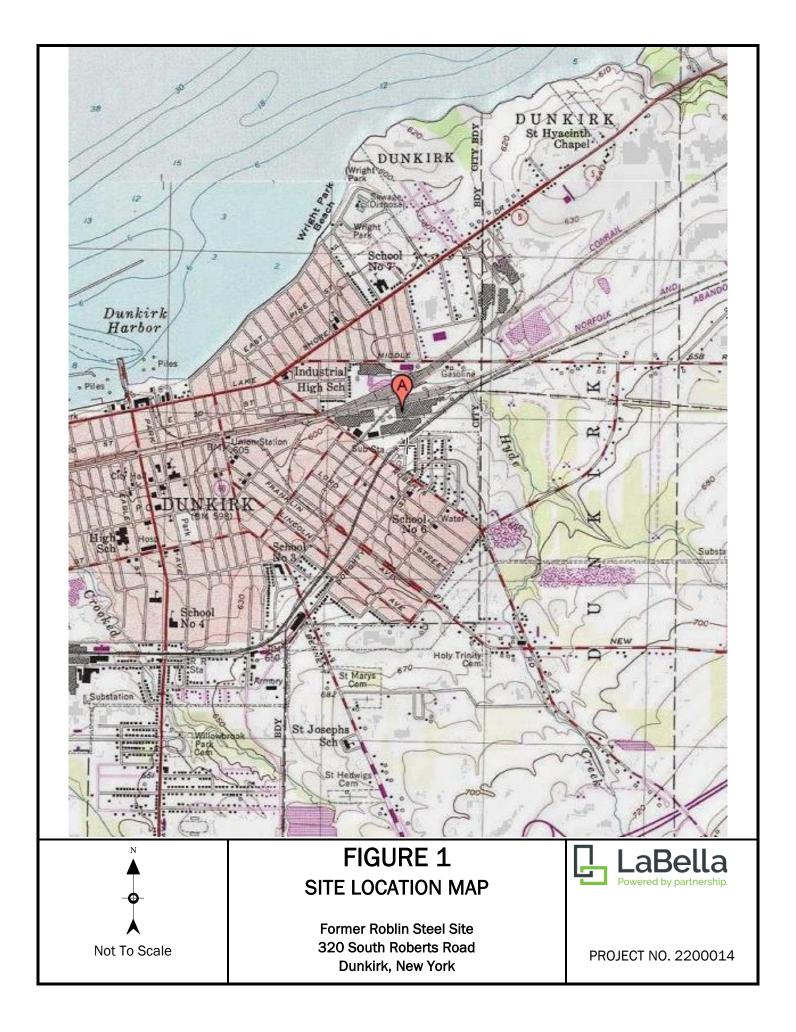
### **FIGURES**



I:\Chautauqua County\2200014 - Dunkirk Brownfield Monitoring\Reports\Event\_December 2019\Roblin December 2019\FIGURE 2 Roblin GW.mxd



I:\Chautauqua County\2200014 - Dunkirk Brownfield Monitoring\Reports\Event\_December 2019\Roblin December 2019\FIGURE3.mxd





# TABLE

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

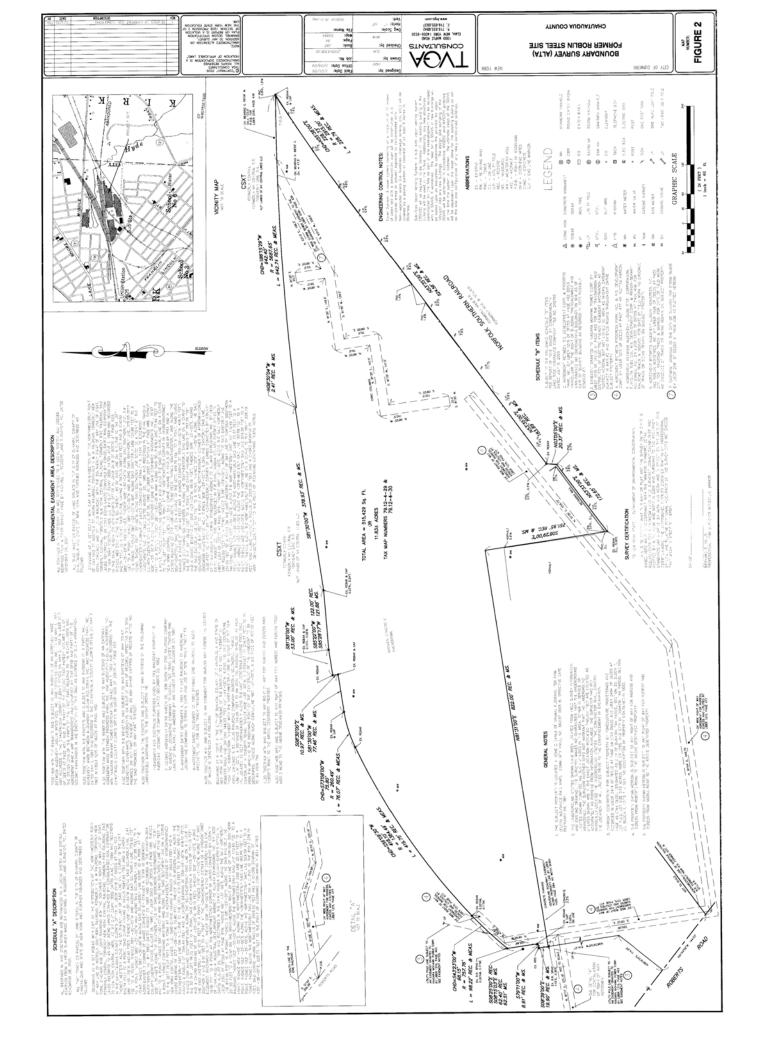
	REGULATOR																													
PARAMETER	Y VALUE		MW-01					MW-02R					MW-04					-07R						MW-09R				EX-MW-11R		
Collection Date	10/11	/02 2/10/09	8/10/10 8/15/13 7/15/14 12/15	/15 12/14/16	2/2/18 12/12/18 12/5/19 10/1	11/02 2/10/09 8/10/10	8/15/13	7/15/14 12/15/15 12/14/16 2/2/18	12/12/18 1	2/5/19 10	0/11/02 2/10/09 8/10/10 8/21/13	7/15/14	4 12/15/1	5 12/14/16 2/2/18 12/12/18 12/5/19	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	12/5/19	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 12/5/19	10/11/02 2/10/09 8/10/10 8/15/13	7/15/14 12/15	/15 12/14/1	5 2/2/18 12/12/18 12/5/19
Volatile Organic Compo	unds (µg/L)																													
1,1-Dichloroethene	5														15						3	2.02		2.3	1.2			4.	11	5.8
1,1-Dichloroethane	5			6																										
cis-1,2-Dichloroethene	5		0.4	6			10.1	6.27 18 11 13	20		NA		2.6	1.2	NA	904 128	584	17 5.9	190 3.2	16	NA	210 277			500 410 290	180	NA 354 5,320 1,950			
trans-1,2-Dichloroethene	5					NA 21.3					NA				NA 1.500	904					NA	4.48 17.3		2.9	4.2		NA 41,000 354 5,320	3.	1	4.4
1,2-Dichloroethene (Total 1,2,4-Trimethylbenzene	5				6	88 21.3									1,500	904						214 294 12.9					41,000 354 5,320			
	5			_		33.5 129			-								_					12.9				_				
2-Butanone Acetone	50						12.3		-		43.8											569								
Benzene	1 1							22.7 3.5 3.5 5.6	3.2	12					10	65 14		0.34			35		87.7 46.3	0.97	2.2	3.5		2.		3.7
Carbon Disulfide	60		5.6	6 0.19		10 7.52 37.5	10.2	22.7 5.5 5.5 5.6	J.4	1	•				10	05 14		0.54				11.5 445	07.7 40.3	0.51	<b>b.b</b>	3.5				3.7
Chloroethane	5	- 4		0.15			6.2																							
Cyclohexane	5	s.			s.			43.3 6.3 5 7.9	3.6	3.4								0.72					208 155	15	9.4	9.3		16	24	22 19 22
cis-1,3-Dichloropropene	0	≥														1,500														
Ethylbenzene	5	_ ≤			≦	9.81 18.9					2				4						12	5.66 69.6	33.7 17.3					2.		1.6
Isopropylbenzene	5	P						3.12 0.61																0.28				0.6	8	
Methyl Cyclohexane	5	E	1		<u> </u>		13.8	22.4 2.3 1.3 2	0.7	0.99						99		0.76					121 101	13		7.3		15	20	23 7.3 11
Methylene Chloride	5	0																							4.8				12	
n-Propylbenzene	5					2.57										1.0.0							_							
Tetrachloroethene	5					24 7.19 101										160 69 29.7		0.25				23.3 581		4.5				1		0.81
Toluene m,p-Xylene						24 7.19 101 NA 7.62 73.2	2.45	0.81	-		NA					67 33.3						20.5 239					NA	0.7		0.81
o-Xvlene	5 NA 5 NA	<u>`</u>				NA 2.61 37.2	2.43	2.10			NA				NA	07 33.3					NA	11.5 128		0.23			NA	4.		
Total Xylenes	5 4					11 10.23 110.4		2.10			10					67 33.3						32 367		0.2.5			100	-1.		2.6
Trichloroethene	5			0.53	3	32 3.31		0.25						1.91	56	49.2	55.9	2	3.7			135 585			230 39		150.000 168 4.630	4.510 36	91	10
Vinyl chloride	2				3	31 5.34	12.5	9.13 26 42 27	49	37			0.49		330	770 402 56.1	205	6.2 3.7	75 3.6	19	34	33	991 287	310	93 23	110	9,800 27 638 881	1,110 52	360	950 510 330
Total VOCs	· 5	0	0 0 0 7	0.72	0 0 0 2	204 91 580	128	141 59 63 56	77	64	18 0 0 44	0	3	3 0 0 0	1,950	2,797 2,370 184	845	25 12	194 6.8	35	1,063	716 3,877	1,658 662	1,549	735 567 313	310	200,800 903 15,908 2,831	11,020 1,5	8 1,518	2,514 1,506 1,313
	REGULATOR																													
PARAMETER Collection Date	Y VALUE		MW-12	05 12 04 05	2/2/10 12/2/10 12/5/10 10/2		0/15/13	EX-MW-12 7/15/14 12/15/15 12/14/16 2/2/18	12/12/10 1	2/5/20																				
Volatile Organic Compo	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 12/3/19 10/1	11/02 2/10/09 8/10/10	0/15/15	7/15/14 12/15/15 12/14/16 2/2/18	12/12/16 1	2/5/19																				
cis-1,2-Dichloroethene	5 NA		0.5	3		NA 7.6		0.73																						
trans-1,2-Dichloroethene			0.3.	3		NA 7.6		0.73																						
1,2-Dichloroethene (Total	5 150					150 7.6																								
2-Butanone	50	z				31.3																								
2-Hexanone	50	9				5.23																								
Acetone	50					73.8																								
Benzene	1 1	- SA						2.14 0.47																						
Ethylbenzene	5 1	Ś				1 18.5																								
Toluene	5	P				48.7			1																					
m,p-Xylene	5	<u>_</u>				NA 74.7			+																					
o-Xylene Total Xulener	5			_	N	NA 40.4	-																							
Total Xylenes Trichloroethene	5					8.96			+ +																					
Vinvl chloride	2 200	0			2	200 27.2																								
Total VOCs		2 0	0 0 0 0.5	3 0	0 0 0 3			2.14 1 0 0	0	0																				
Notes:	55.					405				-																				
	om NYS Ambient Water Ou	uality Standards TC	IGS 1.1.1 (Source of Drinking Water, groundwater).																											
(·) = No regulatory value is asso																														
Shaded values represent exceed	inces of the regulatory vali	lue.																												
µg/L = micrograms per Liter (eq		n (ppb)).																												

pg) = miclograms per take requiratent to parts per billion 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





# **APPENDIX 2**

**Cover Inspection Form** 

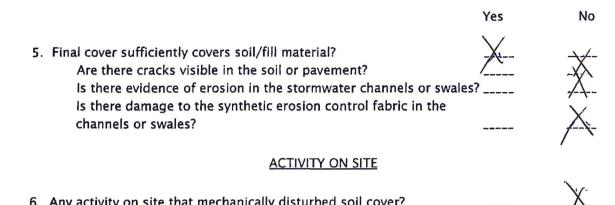
### COVER INSPECTION FORM Former Roblin Steel Site

<sup>تىر</sup> بە

			Inspection Date: 2-5-20P
Property Name: Former Roblin Steel Site			Inspection Date:
Property Address: 320 South Roberts Road			/
<u>City</u> : Dunkirk 1 4048	State:	NY	Zip Code:
Property ID: (Tax Assessment Map)			
<u>Section</u> : 79.12 <u>Block</u> : 4	Lot(s):	29 and	30
Total Acreage: 16.5 acres			
Weather (during inspection): Temperature: 32	Conditions	. Cla	icky, whaty
SIGNATURE (MTA'			
The findings of this inspection were discussed wir were identified and implementation was mutually ac	greed upor	1:	
Inspector: Chis, Kiber LaBella, As	SQCiate	s,DPC	Date: 12-3-20M
Next Scheduled Inspection Date:		,	

#### SECURITY AND ACCESS

		Yes	Ng
1	Access controlled by perimeter fencing?		$\underline{\lambda}$
	Are there sections of the fence material damaged or missing?		7
	Are the fence or gate post foundations structurally sound?		
			$\checkmark$
2.	"No Trespass" signs posted in appropriate languages?		A.
	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?		
			$\sim$
3.	Is there evidence of trespassing?		A
	Is there evidence of illegal dumping?		A
			/ `
	COVER & VEGETATION		
		$\sim$	
4.	Final cover in acceptable condition?	X	1.1
	Is there evidence of sloughing, erosion, ponding or settlement?	77-	īX.
	Is there evidence of unintended traffic; rutting?		X
	Is there evidence of distressed vegetation/turf?		X
			/~-



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

#### ADDITIONAL FACILITY INFORMATION

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

		COMMENTS
lter	<u>n #</u>	
	in the second	
-		
		ATTACHMENTS
1.	Site Sketch	$\mathbf{X}$
2.	Photographs	
3.	Laboratory Report (s)	

N:\2005.0308.00-Roblin Remedial Design and Oversight\Engineering\10Dellverables\Final Engineering Report\Site Management Plan\Attachments for 2010 SMP\Attachment E-1 Cover Insp.Form.doc



### **APPENDIX 3**

Photographs







**2019 Periodic Review Report** Former Roblin Steel Site 320 S. Roberts Road, Dunkirk, New York





**2019 Periodic Review Report** Former Roblin Steel Site 320 S. Roberts Road, Dunkirk, New York





### **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 No. B00173		Site Details		Box 1	
Site Name Former Rol	olin Steel Site ( D	unkirk )			
Site Address: 320 South City/Town: Dunkirk County: Chautauqua Site Acreage: 11.8	ו Roberts Road	Zip Code: 14048			
Reporting Period: Dece	mber 15, 2018 to I	December 15, 2019		÷	
				YES	NO
1. Is the information ab	ove correct?				
If NO, include handw	vritten above or on	a separate sheet.			
2. Has some or all of th tax map amendment		en sold, subdivided, mer ting Period?	ged, or undergone a		$\checkmark$
3. Has there been any (see 6NYCRR 375-1		he site during this Repor	ting Period		
4. Have any federal, sta for or at the property			charge) been issued		
		thru 4, include docume ously submitted with thi			,
5. Is the site currently u	Indergoing develo	pment?		٥	
				Box 2	
	2			YES	NO
6. Is the current site us Commercial and Ind		he use(s) listed below?		<u>I</u>	
7. Are all ICs/ECs in pla	ace and functioning	g as designed?		$\checkmark$	
		JESTION 6 OR 7 IS NO, s REST OF THIS FORM. O		เทศ	
A Corrective Measures \	Nork Plan must be	e submitted along with th	his form to address t	nese iss	ues.
Signature of Owner, Rem	edial Party or Desig	nated Representative	Date		

	3	Box
Description (	of Institutional Controls	
Parcel	Owner	Institutional Control
79.12-4-29	Chautauqua Co.	Ground Water Use Restrict
		Landuse Restriction Monitoring Plan Site Management Plan
The Site Managem	nent Plan includes:	IC/EC Plan
- An Engineering a system and provision and the installation groundwater use re	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to	r intrusion to any new buildings construct d. Institutional controls at the site will inclu
completed in a safe	lork Plan to assure that future intrusive active and environmentally responsible manner.	
	Plan that includes: provisions for groundwa ection program to assure that the Institution	
79.12-4-30	Chautauqua County	
		Ground Water Use Restricti Soil Management Plan Monitoring Plan
		Site Management Plan IC/EC Plan
	2	
		Landuse Restriction
system and provision and the installation	ent Plan includes: and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu
<ul> <li>An Engineering a system and provision and the installation groundwater use re- purposes).</li> <li>An Excavation W completed in a safet - A Site Monitoring</li> </ul>	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active and environmentally responsible manner. Plan that includes: provisions for groundwa	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and,
<ul> <li>An Engineering a system and provision and the installation groundwater use re- purposes).</li> <li>An Excavation W completed in a safet - A Site Monitoring</li> </ul>	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active and environmentally responsible manner.	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and,
<ul> <li>An Engineering a system and provision and the installation groundwater use re- purposes).</li> <li>An Excavation W completed in a safet - A Site Monitoring - A Site-wide Inspect</li> </ul>	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active and environmentally responsible manner. Plan that includes: provisions for groundwa	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and,
<ul> <li>An Engineering a system and provision and the installation groundwater use re- purposes).</li> <li>An Excavation W completed in a safet - A Site Monitoring - A Site-wide Inspective.</li> </ul>	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active and environmentally responsible manner. Plan that includes: provisions for groundwa	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and, al controls have not been altered and rem
<ul> <li>An Engineering a system and provision and the installation groundwater use re- purposes).</li> <li>An Excavation W completed in a safet - A Site Monitoring - A Site-wide Inspective.</li> </ul>	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active e and environmentally responsible manner. Plan that includes: provisions for groundwa ection program to assure that the Institutional	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and, al controls have not been altered and rem
<ul> <li>An Engineering a system and provision and the installation groundwater use repurposes).</li> <li>An Excavation W completed in a safe - A Site Monitoring - A Site-wide Inspective.</li> </ul> Description of Parcel	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warrante estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active and environmentally responsible manner. Plan that includes: provisions for groundwa ection program to assure that the Institutional of Engineering Controls	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and, al controls have not been altered and rem
<ul> <li>An Engineering a system and provision and the installation groundwater use repurposes).</li> <li>An Excavation W completed in a safe - A Site Monitoring - A Site-wide Inspective.</li> </ul> Description of Parcel	and Institutional Controls Plan. Engineering ons for evaluating the potential for soil vapo of soil vapor mitigation systems if warranter estrictions and use restrictions of the Site to /ork Plan to assure that future intrusive active e and environmentally responsible manner. Plan that includes: provisions for groundwa ection program to assure that the Institutional of Engineering Controls Engineering Controls	controls include a one-foot thick soil cove r intrusion to any new buildings construct d. Institutional controls at the site will inclu restricted use (i.e. commercial/industrial rities and soil/fill handling at the Site are ater monitoring; and, al controls have not been altered and rem

30	Box 5
	Periodic Review Report (PRR) Certification Statements
1,	I certify by checking "YES" below that:
	<ul> <li>a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;</li> </ul>
	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.
	engineering practices; and the information presented is accurate and compete. YES NO
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.
	YES_ NO
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS SITE NO. B00173	
3	Box 6
SITE OWNER OR DESIGNATED REPRESENTATIVE I certify that all information and statements in Boxes 1,2, and 3 are true. statement made herein is punishable as a Class "A" misdemeanor, purs Penal Law.	I understand that a false
I BRAD BEINTLEY at 454 N. WORK ST. print name print business add	FALCONER, NY 14733 ress
am certifying asOwner	(Owner or Remedial Party)
for the Site named in the Site Details Section of this form.	
Signature of Owner, Remedial Party, or Designated Representative	12/18/2019

IC/EC CERTIFICATIONS	
Professional Engineer Signature	Box 7
I certify that all information in Boxes 4 and 5 are true. I understand that a false punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Pe	nal Law.
I         DANTEL P. Noll         at         300 STATE ST, Roc           print name         print business address	HESTER NY
am certifying as a Professional Engineer for the	emedial Party)
STATE OF WEIN AO	4
* During	*
DP. 11 10.031996 6	1/13/20
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification (Required for PE	Date

- .Q



## **APPENDIX 5**

Groundwater Sampling Logs

LABELLA ASSOCIAT							
Environmental Engir	eering Co	nsultant	S			Well I.D.	MW-12
Site Location:	Roblin Stee	el Site, Dun	nkirk, NY		_	Job No.	
Sample Date:	12/5/2019		_			)	JAXVI
LaBella Representative:	CK		×			02	JUM
Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details
Time	9:00	98	GID	añ	920	Campic	Details
Time	1.00	101			100		
Depth of well	23.94'						
Depth to water	25						
Well diameter	2"						
Well volume (gallons)	26						
Purging device	P.P.						4
Containment device	Bucket						
Purge time							
Gallons purged		2.6	2,6	26			
Sample device							
Field Parameters							
Temperature	9.1	83	3,1	8.0	78		
pH measurement	7.07	7.11	6.98	$\sum_{i=1}^{n} O_{i}$	7,04		
Conductivity (mS/cm)	1,307	1412	1346	1415	1,332		
ORP/Eh (mV)	899	831	84.2	346	851		
Turbidity (NTUs)	14.0	12,1	112	11.1	10.7		
WEATHER:							
NOTES/FIELD OBSERVAT		-01					
	L - F	(1), r	krey				
Well Volume Purge: 1 Well Vol	150	10 <del></del>			Well Capacity	/	
(only if applicable) Well Capacity (Gallons per Foot): 0.		-ft.) X . gal/1 0.04 1.5"=	ft = 0.3056 ga $0.092 2"=0.$				
	<b>12"=</b> 5.88	0.04 1.5 -	0.092 2 -0.	10 5 -0.57			-
1. Stabilization Crite		f variation of	f last three co	nsecutive Rea	dings		
<b>pH:</b> <u>+</u> 0.2 units; <b>Temperatu</b>	re: <u>+</u> 0.5 <sup>0</sup> C; Sp	pecific Condu	ictance: <u>+</u> 10%	%; Turbidity:	≤ 50 NTU		
A minimum of three well volumes							
event that groundwater recharge is returned to its pre-purge level (or							
and does not reach its pre-purge level (or							
degree of recharge indicated in fie							

eering Co Roblin Stee 12/5/2019 CK Initial Readings 10', 20 16.7' 16.7'			3 Well Volume	Sample	Job No. Post Sample	Details
CK Initial Readings [ $\partial'_1 D$ 16.7'	Volume			Sample		Details
Initial Readings ()) ()) ()) ()) ()) ()) ()) ()) ()) ()	Volume			Sample		Details
Readings           []]           []]           16.7'	Volume			Sample		Details
[ <i>D</i> ] <i>]</i> 16.7'	1025	1030				Dotano
		1	> 1090	1045		
53'						
				-		
2"						
1,8						
P.P.						
Bucket						
	10	151	12			
	1,8	1,8	17			
						1
<u>NX</u>	7,7	$\gamma\gamma$	76	7.6		
1,37	7.31	7.33	7.31	7,29		
0,906	0911	0.898	2912	0914		
127	747		80)	1817		
3.3	2.1	2.6	dil	2.4		
ONS:						
= (ft	-ft.) X . gal/f	ft = 0.3056 ga	llons	Vell Capacity		
	0.04 <b>1.5"=</b> (	<b>J.092 2"=0.</b> ]	10 3 <sup>,</sup> =0.37			
	f variation of	last three cor	secutive Rea	dings		
e: <u>+</u> 0.5 <sup>0</sup> C; Sp	ecific Condu	ctance: <u>+</u> 10%	; Turbidity:	<u>&lt; 50 NTU</u>		
slow, the purgi vithin a maximu vel within two h	ng process wi im of two hou iours, then sai	ll continue unt urs), samples w mples can be c	il the well is p ill be collecte ollected after	ourged "dry". A	After the water level is slow t	r level has to recharge
	2" 2" P.P. Bucket Bucket 2 2 2 2 2 3 3 3 3 3 3 3 3	2" 2" 2" 2" P.P. Bucket 3 3 3 3 3 3 3 3 3 3 3 3 3	2" 2" 2" 2" 2" 2" 2" 2" 2" 2"	2" 2" 2" 2" 2" 2" 2" 2" 2" 2"	2"       2"         P.P.       9         Bucket       9         Bucket       9         1       1	2"       2"         P.P.       30         Bucket       30         18       18         18       10

LABELLA ASSOCIAT			-			M-111 D					
Environmental Engineering ConsultantsWell I.D.MW-7RSite Location:Roblin Steel Site, Dunkirk, NYJob No.											
Site Location:	Roblin Steel Site, Dunkirk, NY     Job No.       12/5/2019										
Sample Date:	12/5/2019 CK										
LaBella Representative:											
	Initial	1 Well	2 Well	3 Well	Comple	Post Sample	Details				
Well I.D.	Readings	Volume	Volumes	Volume	Sample	Sample	Details				
Time	<u>[]:</u>	11:05	11:10	11:20	_///30						
Depth of well	17.57'										
Depth to water	5,6										
Well diameter	2"										
Well volume (gallons)	19										
Purging device	P.P.										
Containment device	Bucket										
Purge time											
Gallons purged		19	1,9	1.9							
Sample device											
Field Parameters											
Temperature	8.2	3.1	81	7.7	7.4						
pH measurement	7,54	751	7.42	7,44	7.41						
Conductivity (mS/cm)	,658	1.661	1.512	1,49	1,511						
ORP/Eh (mV)	616	60.6	60.41	59.2	554						
Turbidity (NTUs)	2.53	2.44	2.12	216	2.91						
WEATHER: NOTES/FIELD OBSERVATI											
Well Volume Purge: 1 Well Volu	me = (Total W	_	-		Well Capacity	ŗ					
(only if applicable) Well Capacity (Gallons per Foot): 0.7		-it.) X . gal/1	ft = 0.3056 ga $0.092 2"=0.1$								
	2"=5.88										
1. Stabilization Criter	ria for range o	f variation of	last three cor	secutive Rea	dings						
<b>pH:</b> <u>+</u> 0.2 units; <b>Temperature</b>	e: <u>+</u> 0.5 <sup>0</sup> C; Sp	ecific Condu	ctance: <u>+</u> 10%	; Turbidity:	≤ 50 NTU						
A minimum of three well volumes a event that groundwater recharge is returned to its pre-purge level (or w and does not reach its pre-purge lev degree of recharge indicated in field	slow, the purgi rithin a maximu rel within two h	ng process wi um of two hou nours, then sar	ll continue unt urs), samples w mples can be c	til the well is p vill be collecte	ourged "dry". d. If the water	After the water level is slow t	r level has to recharge				

LABELLA ASSOCIAT Environmental Engin			S			Well I.D.	MW-4		
Site Location:		el Site, Dun			_	Job No.			
Sample Date:	12/5/2019								
LaBella Representative:	СК								
Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details		
Time	1140	145	1150	1200	1265	*			
Depth of well	16.04'								
Depth to water	47								
Well diameter	2"								
Well volume (gallons)	1.8.								
Purging device	P.P.	—							
Containment device	Bucket								
Purge time						-			
Gallons purged		18	18	1.8					
Sample device									
Field Parameters	10								
Temperature	1.8	8.0	2,7	$\overline{2}$	76				
pH measurement	).22	$\sum_{i=1}^{n}$	212	231	7.27				
Conductivity (mS/cm)	1.060	114	1.212	1917	1,238				
ORP/Eh (mV)	1,6	18.1	9.0	8.6	19,4				
Turbidity (NTUs)	43.1	42.2	407	398	39.6				
WEATHER: NOTES/FIELD OBSERVATI	ONS:								
Well Volume Purge: 1 Well Volu (only if applicable) Well Capacity (Gallons per Foot): 0.7	= (ft.	-	ft = 0.3056 ga	llons	Well Capacity	1			
<b>4"=</b> 0.65 <b>5"=</b> 1.02 <b>6"=</b> 1.47 1	2"=5.88	Eugeniation - 4	lost three set	nooutine De-	dingo				
1. Stabilization Crite	-	ove p							
<b>pH:</b> <u>+</u> 0.2 units; <b>Temperatur</b>	e: <u>+</u> 0.5 <sup>°</sup> C; Sp	ecific Condu	ctance: <u>+</u> 10%	; Turbidity:	<u>≤ 50 NTU</u>				
A minimum of three well volumes event that groundwater recharge is returned to its pre-purge level (or wand does not reach its pre-purge level degree of recharge indicated in field	slow, the purgi vithin a maximu vel within two h	ng process wi um of two hou nours, then sa	ll continue unt irs), samples w mples can be c	til the well is p vill be collecte ollected after	ourged "dry". A	After the wate level is slow	r level has to recharge		

LABELLA ASSOCIAT	-5		-				BANA/ 04	
Environmental Engin						Well I.D. Job No.	MW-01	
Site Location:	0.	Roblin Steel, Dunkirk, NY     Job No.       12/5/2019						
Sample Date: LaBella Representative:	CK	,	-					
Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details	
Time					Sec. 1			
Depth of well								
Depth to water								
Well diameter								
Well volume (gallons)								
Purging device								
Containment device								
Purge time								
Gallons purged				-	255 W			
Sample device	48.000 http://							
Field Parameters							[	
Temperature		NI WE						
pH measurement		2010						
Conductivity (mS/cm)								
ORP/Eh (mV)								
Turbidity (NTUs) WEATHER:	1.2	1 Dates of	<b>Satistuda</b>	1121.24	10 F 14 - 14	1944 (A) (4)		
NOTES/FIELD OBSERVATI	IONS:							
- LC    G ESCL Well Volume Purge: 1 Well Volu (only if applicable)	ume = (Fotal V	vell Depth –	CA be for , (a Static Depth T ft = 0.3056 gz	to water) A	petres mole to Well Capacity	(b), like	ky fror	
Well Capacity (Gallons per Foot): 0.7		=0.04 1.5"=	The D. D. D.					
	12"=5.88	<b>c</b>	61	na an tin D	ding-			
1. Stabilization Crite	ria for range o	or variation of	i last three co	nsecutive Rea	aings			
pH: ± 0.2 units; Temperatur	re: <u>+</u> 0.5 <sup>°</sup> C; S	pecific Condu	ictance: <u>+</u> 10%	<mark>%; Turbidity:</mark>	<u>≤ 50 NTU</u>			
A minimum of three well volumes event that groundwater recharge is returned to its pre-purge level (or v	slow, the purg	ing process w	ill continue un	til the well is	purged "dry".	After the wate	er level has	

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 ASSOCIA Environmental Engi	<b>.</b>		S			Well I.D.	EX-MW12		
Site Location:	Roblin Stee	el Site, Dun	<b>-</b> i	Job No.					
Sample Date:	12/5/2019								
LaBella Representative:	CK								
Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details		
Time	12:30	1235	1245	1250	1300				
Depth of well	23.1'								
Depth to water	6.2								
Well diameter	2"								
Well volume (gallons)	12.7	-							
Purging device	P.P.								
Containment device	Bucket								
Purge time		0							
Gallons purged		27	2,7	20					
Sample device						2			
<b>Field Parameters</b>									
Temperature	8.1	7,4	7.4	7.3	7.2				
pH measurement	7.24	7,21	7.20	7,19	7.21				
Conductivity (mS/cm)	0888	0,818	0.792	O.MI	0,811				
ORP/Eh (mV)	40,7	91.1	(1216	40.1	(12.2				
Turbidity (NTUs)	478	446	(181)	44.1	421				
WEATHER: NOTES/FIELD OBSERVA	TIONS:								
Well Volume Purge: 1 Well Vo (only if applicable)	•••••••••••••••••••••••••••••••••••••••	-	Static Depth 7 ft = 0.3056 ga		Well Capacity	y			
Well Capacity (Gallons per Foot): (	<b>).75"=</b> 0.02 1"= 12"=5.88	0.04 <b>1.5"</b> =	0.092 <b>2"=</b> 0.	16 <b>3"=</b> 0.37					
1. Stabilization Cri		f variation of	last three co	nsecutive Rea	dings				
<b>pH:</b> ± 0.2 units; <b>Temperat</b>	ure: $+0.5^{\circ}C$ S	ecific Condu	ctance: + 10%	: Turbidity:	< 50 NTU				
print of a units, Temperati		Condu		, an orange					
A minimum of three well volume event that groundwater recharge eturned to its pre-purge level (or nd does not reach its pre-purge l	is slow, the purgi	ng process wi 1m of two hou	ll continue un irs), samples w	til the well is p vill be collecte	ourged "dry". d. If the water	After the wate level is slow	r level has to recharge		
egree of recharge indicated in fi						8	,		

LABELLA ASSOCIATE Environmental Engine	1.2		S			Well I.D.	MW-2R		
Site Location:	Roblin Stee		Job No	0					
Sample Date:	12/5/2019								
LaBella Representative:	СК		-	r.					
Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details		
Time	1310	1315	1320	1330	1340				
Depth of well	23.25'								
Depth to water	95						λ		
Well diameter	2"								
Well volume (gallons)	3								
Purging device	P.P.								
Containment device	Bucket								
Purge time									
Gallons purged		3	3	3					
Sample device									
Field Parameters	~ ~		- +						
Temperature	)9	7.4	1.8	7.8	7.6				
pH measurement	231	),52	7,41	7,31	7.36				
Conductivity (mS/cm)	0.861	0.887	0.712	0769	0.778				
ORP/Eh (mV)	37.5	364	35.4	35.8	331				
Turbidity (NTUs)	13,7	12.4	12.1	12.2	12.3				
WEATHER: NOTES/FIELD OBSERVATIO	ONS:								
Well Volume Purge: 1 Well Volu (only if applicable)			Static Depth T ft = 0.3056 ga		Well Capacity				
Well Capacity (Gallons per Foot): 0.75		0.04 <b>1.5"</b> =							
1. Stabilization Criter		f variation of	f last three con	secutive Rea	dings				
<b>pH:</b> <u>+</u> 0.2 units; <b>Temperature</b>	: <u>+</u> 0.5 <sup>0</sup> C; Sp	ecific Condu	ctance: <u>+</u> 10%	; Turbidity:	≤ 50 NTU				
pH: $\pm$ 0.2 units; Temperature: $\pm$ 0.5 <sup>0</sup> C; Specific Conductance: $\pm$ 10%; Turbidity: $\leq$ 50 NTU minimum of three well volumes and a maximum of five well volumes are to be removed from each well prior to sampling. In the vent that groundwater recharge is slow, the purging process will continue until the well is purged "dry". After the water level has turned 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									

LABELLA ASSOCIAT Environmental Engin			5			Well I.D.	EX-MW11R			
Site Location:	Roblin Stee		Job No.							
Sample Date:	12/5/2019									
LaBella Representative:	CK									
Well I.D.	Initial Readings	1 Well Volume	2 Well Volumes	3 Well Volume	Sample	Post Sample	Details			
Time	1350	1400	1405	1410	1420					
Depth of well	18.65'					с. 				
Depth to water	61									
Well diameter	2"									
Well volume (gallons)	2									
Purging device	P.P.									
Containment device	Bucket									
Purge time		0								
Gallons purged		2	9	í)						
Sample device										
Field Parameters										
Temperature	8.1	7,9	$\gamma$	7.1	$\mathcal{D}_{i}$					
pH measurement	7.37	7.31	7.33	729	7.31					
Conductivity (mS/cm)	0,882	0.891	0812	())))	0,824					
ORP/Eh (mV)	42.7	434	44,1	43.6	4412					
Turbidity (NTUs)	2.34	277	3.14	312	3.09					
WEATHER: NOTES/FIELD OBSERVATI	ONS:									
Well Volume Purge: 1 Well Volu only if applicable)			Static Depth T it = 0.3056 ga		Vell Capacity	,				
Well Capacity (Gallons per Foot): 0.7	<b>5"=</b> 0.02 <b>1"</b> =	0.04   1.5" = 0		The second second second						
1. Stabilization Criter	2"=5.88 ria for range of	f variation of	last three con	secutive Rea	dings					
<b>pH:</b> <u>+</u> 0.2 units; <b>Temperatur</b>	e: <u>+</u> 0.5°C; Sp	ecific Condu	ctance: <u>+</u> 10%	o; Turbidity:	SUNIU					
A minimum of three well volumes event that groundwater recharge is eturned to its pre-purge level (or w and does not reach its pre-purge level	slow, the purgin vithin a maximu	ng process wi Im of two hou	ll continue uni rs), samples w	til the well is p vill be collecte	ourged "dry". d. If the water	After the water level is slow t	r level has to recharge			



# **APPENDIX 6**

Laboratory Analytical Results

# 🛟 eurofins

# Environment Testing TestAmerica

# **ANALYTICAL REPORT**

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

# Laboratory Job ID: 480-163694-1

Client Project/Site: Alumax & Roblin Periodic Review Reports

# For:

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

Attn: Chris Kibler

Aret

Authorized for release by: 12/12/2019 3:24:38 PM Alexander Gilbert, Project Management Assistant I alexander.gilbert@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management (716)504-9835 brian.fischer@testamericainc.com

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.



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# **Definitions/Glossary**

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

# Qualifiers

GC/MS VOA Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

# Glossary

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: 480-163694-1

### Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-163694-1

**Case Narrative** 

### Comments

No additional comments.

### Receipt

The samples were received on 12/5/2019 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

### GC/MS VOA

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-12 (480-163694-1), MW-07R (480-163694-4) and MW-04 (480-163694-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: EX-MW-11R (480-163694-8). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-508640 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-12 (480-163694-1), MW-07R (480-163694-4), MW-04 (480-163694-5), EX-MW12 (480-163694-6), MW-02R (480-163694-7), EX-MW-11R (480-163694-8), AL-2 (480-163694-9), AL-7 (480-163694-11) and TRIP BLANK (480-163694-12).

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 508737. The following samples were affected : MW-09R (480-163694-2), FIELD DUPLICATE (480-163694-3) and AL-1 (480-163694-10).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-508737 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-09R (480-163694-2), FIELD DUPLICATE (480-163694-3) and AL-1 (480-163694-10).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-09R (480-163694-2) and AL-1 (480-163694-10). 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

# **Client Sample ID: MW-12**

No Detections.

Client Sample ID: MW-	Lab San	nple ID: 4	80-163694-2				
Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Benzene	3.5 J	4.0	1.6	ug/L	4	8260C	Total/NA
cis-1,2-Dichloroethene	180	4.0	3.2	ug/L	4	8260C	Total/NA
Cyclohexane	9.3	4.0	0.72	ug/L	4	8260C	Total/NA
Methylcyclohexane	7.3	4.0	0.64	ug/L	4	8260C	Total/NA
Vinyl chloride	110	4.0	3.6	ug/L	4	8260C	Total/NA
Client Sample ID: FIEL	ient Sample ID: FIELD DUPLICATE						80-163694-3

# Client Sample ID: FIELD DUPLICATE

No Detections.

# Client Sample ID: MW-07R

						-	
Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene		4.0	3.2	ug/L	4	8260C	Total/NA
Vinyl chloride	19	4.0	3.6	ug/L	4	8260C	Total/NA

# Client Sample ID: MW-04

No Detections.

### Client Sample ID: EX-MW12

No Detections.

# Client Sample ID: MW-02R

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Benzene	1.2	1.0	0.41 ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene	21	1.0	0.81 ug/L	1	8260C	Total/NA
Cyclohexane	3.4	1.0	0.18 ug/L	1	8260C	Total/NA
Methylcyclohexane	0.99 J	1.0	0.16 ug/L	1	8260C	Total/NA
Vinyl chloride	37	1.0	0.90 ug/L	1	8260C	Total/NA

# Client Sample ID: EX-MW-11R

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
cis-1,2-Dichloroethene	950	20	16	ug/L	20		Total/NA
Cyclohexane	22	20	3.6	ug/L	20	8260C	Total/NA
Methylcyclohexane	11 J	20	3.2	ug/L	20	8260C	Total/NA
Vinyl chloride	330	20	18	ug/L	20	8260C	Total/NA

## **Client Sample ID: AL-2**

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Benzene		1.0	0.41	ug/L	1	8260C	Total/NA
cis-1,2-Dichloroethene	14	1.0	0.81	ug/L	1	8260C	Total/NA
Cyclohexane	1.8	1.0	0.18	ug/L	1	8260C	Total/NA
Methylcyclohexane	0.25 J	1.0	0.16	ug/L	1	8260C	Total/NA
Vinyl chloride	4.6	1.0	0.90	ug/L	1	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Job ID: 480-163694-1

Lab Sample ID: 480-163694-1

# 5

# Lab Sample ID: 480-163694-6

Lab Sample ID: 480-163694-7

Lab Sample ID: 480-163694-8

Lab Sample ID: 480-163694-9

Lab Sample ID: 480-163694-5

Lab Sample ID: 480-163694-4

# **Detection Summary**

RL

4.0

4.0

4.0

4.0

4.0

4.0

8.0

RL

1.0

1.0

1.0

1.0

MDL Unit

1.6 ug/L

3.2 ug/L

0.72 ug/L

0.64 ug/L

2.0 ug/L

3.6 ug/L

2.6 ug/L

MDL Unit

0.81 ug/L

0.18 ug/L

0.16 ug/L

0.90 ug/L

1

8260C

Lab Sample ID: 480-163694-12

**Result Qualifier** 

33

180

37

24

4.9

160

2.0

1.0

1.4

0.33 J

4.2 J

**Result Qualifier** 

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

# **Client Sample ID: AL-1**

Client Sample ID: AL-7

Analyte

Benzene

Toluene

Analyte

Cyclohexane

Vinyl chloride

Cyclohexane

Vinyl chloride

Xylenes, Total

cis-1,2-Dichloroethene

cis-1,2-Dichloroethene

Methylcyclohexane

Methylcyclohexane

_
5
8
9
_

Dil Fac	D Method	Prep Type	
4	8260C	Total/NA	4
4	8260C	Total/NA	
4	8260C	Total/NA	5
4	8260C	Total/NA	
4	8260C	Total/NA	6
4	8260C	Total/NA	
4	8260C	Total/NA	7
Lab Sam	ple ID: 4	80-163694-11	8
Dil Fac I	D Method	Prep Type	
1	8260C	Total/NA	9
1	8260C	Total/NA	
1	8260C	Total/NA	10

Total/NA

Lab Sample ID: 480-163694-10

# **Client Sample ID: TRIP BLANK**

No Detections.

This Detection Summary does not include radiochemical test results.

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

# Client Sample ID: MW-12 Date Collected: 12/05/19 09:20 Date Received: 12/05/19 16:45

loh	ın	480-	1636	94-1
500	ID.	400-	1030	34-1

# Lab Sample ID: 480-163694-1

Matrix: Water

5

Method: 8260C - Volatile Organ Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	2.0	1.6	ug/L			12/07/19 16:07	2
1,1,2,2-Tetrachloroethane	ND	2.0	0.42	ug/L			12/07/19 16:07	2
1,1,2-Trichloroethane	ND	2.0	0.46	ug/L			12/07/19 16:07	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	2.0	0.62	ug/L			12/07/19 16:07	2
1,1-Dichloroethane	ND	2.0	0.76	ug/L			12/07/19 16:07	2
1,1-Dichloroethene	ND	2.0	0.58	ug/L			12/07/19 16:07	2
1,2,4-Trichlorobenzene	ND	2.0	0.82	ug/L			12/07/19 16:07	2
1,2-Dibromo-3-Chloropropane	ND	2.0	0.78	-			12/07/19 16:07	2
1,2-Dichlorobenzene	ND	2.0	1.6	ug/L			12/07/19 16:07	2
1,2-Dichloroethane	ND	2.0	0.42	-			12/07/19 16:07	2
1,2-Dichloropropane	ND	2.0		ug/L			12/07/19 16:07	2
1,3-Dichlorobenzene	ND	2.0		ug/L			12/07/19 16:07	2
1,4-Dichlorobenzene	ND	2.0		ug/L			12/07/19 16:07	2
2-Butanone (MEK)	ND	20		ug/L			12/07/19 16:07	2
2-Hexanone	ND	10		ug/L			12/07/19 16:07	2
4-Methyl-2-pentanone (MIBK)	ND	10		ug/L			12/07/19 16:07	2
Acetone	ND	20		ug/L			12/07/19 16:07	2
Benzene	ND	2.0	0.82	-			12/07/19 16:07	2
Bromodichloromethane	ND	2.0	0.78	•			12/07/19 16:07	2
Bromoform	ND	2.0	0.70	-			12/07/19 16:07	2
Bromomethane	ND	2.0		ug/L			12/07/19 16:07	2
Carbon disulfide	ND	2.0	0.38	-			12/07/19 16:07	2
Carbon tetrachloride	ND	2.0	0.54	-			12/07/19 16:07	2
Chlorobenzene	ND	2.0		ug/L			12/07/19 16:07	2
Dibromochloromethane	ND	2.0		ug/L			12/07/19 16:07	2
	ND	2.0		-				
Chloroethane			0.64	-			12/07/19 16:07	2
Chloroform	ND	2.0		ug/L			12/07/19 16:07	2
Chloromethane	ND	2.0	0.70	•			12/07/19 16:07	2
cis-1,2-Dichloroethene	ND	2.0		ug/L			12/07/19 16:07	2
cis-1,3-Dichloropropene	ND	2.0	0.72	0			12/07/19 16:07	2
Cyclohexane	ND	2.0	0.36	-			12/07/19 16:07	2
Dichlorodifluoromethane	ND	2.0		ug/L			12/07/19 16:07	2
Ethylbenzene	ND	2.0		ug/L			12/07/19 16:07	2
1,2-Dibromoethane	ND	2.0		ug/L			12/07/19 16:07	2
Isopropylbenzene	ND	2.0		ug/L			12/07/19 16:07	2
Methyl acetate	ND	5.0		ug/L			12/07/19 16:07	2
Methyl tert-butyl ether	ND	2.0		ug/L			12/07/19 16:07	2
Methylcyclohexane	ND	2.0		ug/L			12/07/19 16:07	2
Methylene Chloride	ND	2.0		ug/L			12/07/19 16:07	2
Styrene	ND	2.0		ug/L			12/07/19 16:07	2
Tetrachloroethene	ND	2.0	0.72	ug/L			12/07/19 16:07	2
Toluene	ND	2.0		ug/L			12/07/19 16:07	2
trans-1,2-Dichloroethene	ND	2.0	1.8	ug/L			12/07/19 16:07	2
trans-1,3-Dichloropropene	ND	2.0	0.74	ug/L			12/07/19 16:07	2
Trichloroethene	ND	2.0	0.92	ug/L			12/07/19 16:07	2
Trichlorofluoromethane	ND	2.0	1.8	ug/L			12/07/19 16:07	2
Vinyl chloride	ND	2.0	1.8	ug/L			12/07/19 16:07	2
Xylenes, Total	ND	4.0	1.3	ug/L			12/07/19 16:07	2

Client: LaBella Associates DPC Project/Site: Alumax & Roblin Periodic Review Reports Job ID: 480-163694-1

**Matrix: Water** 

Lab Sample ID: 480-163694-2

# **Client Sample ID: MW-12** Date Collected: 12/05/19 09:20 Date Received: 12/05/19 16:45

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99	80 - 120		12/07/19 16:07	2
1,2-Dichloroethane-d4 (Surr)	100	77 - 120		12/07/19 16:07	2
4-Bromofluorobenzene (Surr)	99	73 - 120		12/07/19 16:07	2
Dibromofluoromethane (Surr)	99	75 - 123		12/07/19 16:07	2

# **Client Sample ID: MW-09R**

### Date Collected: 12/05/19 10:45 Date Received: 12/05/19 16:45

Analyte	Result Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	4.0	3.3	ug/L			12/09/19 11:32	4
1,1,2,2-Tetrachloroethane	ND	4.0	0.84	ug/L			12/09/19 11:32	4
1,1,2-Trichloroethane	ND	4.0	0.92	ug/L			12/09/19 11:32	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	1.2	ug/L			12/09/19 11:32	4
1,1-Dichloroethane	ND	4.0	1.5	ug/L			12/09/19 11:32	4
1,1-Dichloroethene	ND	4.0	1.2	ug/L			12/09/19 11:32	4
1,2,4-Trichlorobenzene	ND	4.0	1.6	ug/L			12/09/19 11:32	4
1,2-Dibromo-3-Chloropropane	ND	4.0	1.6	ug/L			12/09/19 11:32	4
1,2-Dichlorobenzene	ND	4.0	3.2	ug/L			12/09/19 11:32	4
1,2-Dichloroethane	ND	4.0	0.84	ug/L			12/09/19 11:32	4
1,2-Dichloropropane	ND	4.0	2.9	ug/L			12/09/19 11:32	4
1,3-Dichlorobenzene	ND	4.0	3.1	ug/L			12/09/19 11:32	4
1,4-Dichlorobenzene	ND	4.0	3.4	ug/L			12/09/19 11:32	4
2-Butanone (MEK)	ND *	40	5.3	ug/L			12/09/19 11:32	4
2-Hexanone	ND	20	5.0	ug/L			12/09/19 11:32	4
4-Methyl-2-pentanone (MIBK)	ND	20	8.4	ug/L			12/09/19 11:32	4
Acetone	ND	40	12	ug/L			12/09/19 11:32	4
Benzene	3.5 J	4.0	1.6	ug/L			12/09/19 11:32	4
Bromodichloromethane	ND	4.0	1.6	ug/L			12/09/19 11:32	4
Bromoform	ND	4.0	1.0	ug/L			12/09/19 11:32	4
Bromomethane	ND	4.0	2.8	ug/L			12/09/19 11:32	4
Carbon disulfide	ND	4.0	0.76	ug/L			12/09/19 11:32	4
Carbon tetrachloride	ND	4.0	1.1	ug/L			12/09/19 11:32	4
Chlorobenzene	ND	4.0	3.0	ug/L			12/09/19 11:32	4
Dibromochloromethane	ND	4.0	1.3	ug/L			12/09/19 11:32	4
Chloroethane	ND	4.0	1.3	ug/L			12/09/19 11:32	4
Chloroform	ND	4.0	1.4	ug/L			12/09/19 11:32	4
Chloromethane	ND	4.0	1.4	ug/L			12/09/19 11:32	4
cis-1,2-Dichloroethene	180	4.0	3.2	ug/L			12/09/19 11:32	4
cis-1,3-Dichloropropene	ND	4.0	1.4	ug/L			12/09/19 11:32	4
Cyclohexane	9.3	4.0	0.72	ug/L			12/09/19 11:32	4
Dichlorodifluoromethane	ND	4.0	2.7	ug/L			12/09/19 11:32	4
Ethylbenzene	ND	4.0	3.0	ug/L			12/09/19 11:32	4
1,2-Dibromoethane	ND	4.0	2.9	ug/L			12/09/19 11:32	4
Isopropylbenzene	ND	4.0		ug/L			12/09/19 11:32	4
Methyl acetate	ND	10		ug/L			12/09/19 11:32	4
Methyl tert-butyl ether	ND	4.0	0.64	ug/L			12/09/19 11:32	4
Methylcyclohexane	7.3	4.0	0.64	ug/L			12/09/19 11:32	4
Methylene Chloride	ND	4.0	1.8	ug/L			12/09/19 11:32	4

Eurofins TestAmerica, Buffalo

RL

4.0

4.0

4.0

4.0

4.0

4.0

4.0

4.0

8.0

Limits

80 - 120

77 - 120

73 - 120

75 - 123

MDL Unit

2.9 ug/L

1.4 ug/L

2.0 ug/L

3.6 ug/L

1.5 ug/L

1.8 ug/L

3.5 ug/L

3.6 ug/L

2.6 ug/L

D

Prepared

Prepared

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

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

**Result Qualifier** 

ND

ND

ND

ND

ND

ND

ND

110

ND

102

96

98

98

%Recovery

Qualifier

# Client Sample ID: MW-09R Date Collected: 12/05/19 10:45 Date Received: 12/05/19 16:45

Analyte

Styrene

Toluene

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Surrogate

trans-1,2-Dichloroethene

Trichlorofluoromethane

trans-1,3-Dichloropropene

Job ID: 480-163694-1

# Lab Sample ID: 480-163694-2

Analyzed

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

Analyzed

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

12/09/19 11:32

Lab Sample ID: 480-163694-3

**Matrix: Water** 

Dil Fac

4

4

4

4

4

4

4

4

4

4

4

4

4

Dil Fac

Matrix: Water

# Dibromofluoromethane (Surr) Client Sample ID: FIELD DUPLICATE Date Collected: 12/05/19 09:20

Date Received: 12/05/19 16:45

Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			12/09/19 11:57	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			12/09/19 11:57	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/09/19 11:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			12/09/19 11:57	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/09/19 11:57	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/09/19 11:57	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			12/09/19 11:57	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			12/09/19 11:57	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			12/09/19 11:57	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/09/19 11:57	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/09/19 11:57	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			12/09/19 11:57	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			12/09/19 11:57	1
2-Butanone (MEK)	ND *	10	1.3	ug/L			12/09/19 11:57	1
2-Hexanone	ND	5.0	1.2	ug/L			12/09/19 11:57	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			12/09/19 11:57	1
Acetone	ND	10	3.0	ug/L			12/09/19 11:57	1
Benzene	ND	1.0	0.41	ug/L			12/09/19 11:57	1
Bromodichloromethane	ND	1.0	0.39	ug/L			12/09/19 11:57	1
Bromoform	ND	1.0	0.26	ug/L			12/09/19 11:57	1
Bromomethane	ND	1.0	0.69	ug/L			12/09/19 11:57	1
Carbon disulfide	ND	1.0	0.19	ug/L			12/09/19 11:57	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			12/09/19 11:57	1
Chlorobenzene	ND	1.0	0.75	ug/L			12/09/19 11:57	1
Dibromochloromethane	ND	1.0	0.32	ug/L			12/09/19 11:57	1
Chloroethane	ND	1.0	0.32	ug/L			12/09/19 11:57	1
Chloroform	ND	1.0	0.34	ug/L			12/09/19 11:57	1
Chloromethane	ND	1.0	0.35	ug/L			12/09/19 11:57	1

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

# **Client Sample ID: FIELD DUPLICATE** Date Collected: 12/05/19 09:20 Date Received: 12/05/19 16:45

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JOD	ID:	480-163694-	L

# Lab Sample ID: 480-163694-3

**Matrix: Water** 

cis-1,2-Dichloroethene		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND		1.0	0.81	ug/L			12/09/19 11:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/09/19 11:57	1
Cyclohexane	ND		1.0	0.18	ug/L			12/09/19 11:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/09/19 11:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/09/19 11:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/09/19 11:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/09/19 11:57	1
Methyl acetate	ND		2.5	1.3	ug/L			12/09/19 11:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/09/19 11:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/09/19 11:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/09/19 11:57	1
Styrene	ND		1.0	0.73	ug/L			12/09/19 11:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/09/19 11:57	1
Toluene	ND		1.0	0.51	ug/L			12/09/19 11:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/09/19 11:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/09/19 11:57	1
Trichloroethene	ND		1.0	0.46	ug/L			12/09/19 11:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/09/19 11:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/09/19 11:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/09/19 11:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/09/19 11:57	1
1,2-Dichloroethane-d4 (Surr)	96		77 - 120		12/09/19 11:57	1
4-Bromofluorobenzene (Surr)	95		73 - 120		12/09/19 11:57	1
Dibromofluoromethane (Surr)	97		75 - 123		12/09/19 11:57	1

### Client Sample ID: MW-07R Date Collected: 12/05/19 11:30 Date Received: 12/05/19 16:45

### Method: 8260C - Volatile Organic Compounds by GC/MS Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac ND 1,1,1-Trichloroethane 4.0 3.3 12/07/19 17:19 ug/L 4 1,1,2,2-Tetrachloroethane ND 4.0 12/07/19 17:19 0.84 ug/L 4 1,1,2-Trichloroethane ND 4.0 0.92 ug/L 12/07/19 17:19 4 1,1,2-Trichloro-1,2,2-trifluoroethane ND 4.0 1.2 ug/L 12/07/19 17:19 4 1,1-Dichloroethane ND 4.0 1.5 ug/L 4 12/07/19 17:19 1,1-Dichloroethene ND 4.0 1.2 ug/L 12/07/19 17:19 4 1,2,4-Trichlorobenzene ND 4.0 4 1.6 ug/L 12/07/19 17:19 1,2-Dibromo-3-Chloropropane ND 4.0 1.6 ug/L 12/07/19 17:19 4 1,2-Dichlorobenzene ND 4.0 3.2 ug/L 4 12/07/19 17:19 1,2-Dichloroethane ND 4.0 0.84 ug/L 12/07/19 17:19 4 1,2-Dichloropropane ND 4.0 2.9 ug/L 12/07/19 17:19 4 3.1 ug/L ND 1,3-Dichlorobenzene 4.0 12/07/19 17:19 4 1.4-Dichlorobenzene ND 4.0 3.4 ug/L 12/07/19 17:19 4 2-Butanone (MEK) ND 40 5.3 ug/L 12/07/19 17:19 4 2-Hexanone ND 20 5.0 ug/L 12/07/19 17:19 4 ND 20 4-Methyl-2-pentanone (MIBK) 8.4 ug/L 12/07/19 17:19 4 Acetone ND 40 12 ug/L 12/07/19 17:19 4

Eurofins TestAmerica, Buffalo

Lab Sample ID: 480-163694-4

Matrix: Water

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

# Client Sample ID: MW-07R Date Collected: 12/05/19 11:30 Date Received: 12/05/19 16:45

Job	ID:	480-	163694-1	1
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# Lab Sample ID: 480-163694-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.0	1.6	ug/L			12/07/19 17:19	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/07/19 17:19	4
Bromoform	ND		4.0	1.0	ug/L			12/07/19 17:19	4
Bromomethane	ND		4.0	2.8	ug/L			12/07/19 17:19	4
Carbon disulfide	ND		4.0	0.76	ug/L			12/07/19 17:19	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			12/07/19 17:19	4
Chlorobenzene	ND		4.0	3.0	ug/L			12/07/19 17:19	4
Dibromochloromethane	ND		4.0	1.3	ug/L			12/07/19 17:19	4
Chloroethane	ND		4.0	1.3	ug/L			12/07/19 17:19	4
Chloroform	ND		4.0	1.4	ug/L			12/07/19 17:19	4
Chloromethane	ND		4.0	1.4	ug/L			12/07/19 17:19	4
cis-1,2-Dichloroethene	16		4.0	3.2	ug/L			12/07/19 17:19	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			12/07/19 17:19	4
Cyclohexane	ND		4.0	0.72	ug/L			12/07/19 17:19	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			12/07/19 17:19	4
Ethylbenzene	ND		4.0	3.0	ug/L			12/07/19 17:19	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			12/07/19 17:19	4
Isopropylbenzene	ND		4.0	3.2	ug/L			12/07/19 17:19	4
Methyl acetate	ND		10	5.2	ug/L			12/07/19 17:19	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			12/07/19 17:19	4
Methylcyclohexane	ND		4.0	0.64	ug/L			12/07/19 17:19	4
Methylene Chloride	ND		4.0	1.8	ug/L			12/07/19 17:19	4
Styrene	ND		4.0	2.9	ug/L			12/07/19 17:19	4
Tetrachloroethene	ND		4.0	1.4	ug/L			12/07/19 17:19	4
Toluene	ND		4.0	2.0	ug/L			12/07/19 17:19	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			12/07/19 17:19	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			12/07/19 17:19	4
Trichloroethene	ND		4.0	1.8	ug/L			12/07/19 17:19	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			12/07/19 17:19	4
Vinyl chloride	19		4.0	3.6	ug/L			12/07/19 17:19	4
Xylenes, Total	ND		8.0	2.6	ug/L			12/07/19 17:19	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					12/07/19 17:19	4
1,2-Dichloroethane-d4 (Surr)	100		77 - 120					12/07/19 17:19	4

# Client Sample ID: MW-04

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Date Collected: 12/05/19 12:05 Date Received: 12/05/19 16:45

Method: 8260C - Volatile Orga	nic 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			12/07/19 17:43	4
1,1,2,2-Tetrachloroethane	ND	4.0	0.84 ug/L			12/07/19 17:43	4
1,1,2-Trichloroethane	ND	4.0	0.92 ug/L			12/07/19 17:43	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	1.2 ug/L			12/07/19 17:43	4
1,1-Dichloroethane	ND	4.0	1.5 ug/L			12/07/19 17:43	4
1,1-Dichloroethene	ND	4.0	1.2 ug/L			12/07/19 17:43	4

73 - 120

75 - 123

95

99

Eurofins TestAmerica, Buffalo

12/07/19 17:19

12/07/19 17:19

Lab Sample ID: 480-163694-5

4

4

Matrix: Water

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

# Client Sample ID: MW-04 Date Collected: 12/05/19 12:05 Date Received: 12/05/19 16:45

Job	ID:	480-163694-1	
000	·D.	400 100004 1	

# Lab Sample ID: 480-163694-5

Matrix: Water

5

Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		4.0		ug/L			12/07/19 17:43	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			12/07/19 17:43	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			12/07/19 17:43	4
1,2-Dichloroethane	ND		4.0	0.84	-			12/07/19 17:43	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			12/07/19 17:43	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			12/07/19 17:43	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			12/07/19 17:43	4
2-Butanone (MEK)	ND		40	5.3	ug/L			12/07/19 17:43	4
2-Hexanone	ND		20	5.0	ug/L			12/07/19 17:43	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			12/07/19 17:43	4
Acetone	ND		40	12	ug/L			12/07/19 17:43	4
Benzene	ND		4.0	1.6	ug/L			12/07/19 17:43	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/07/19 17:43	4
Bromoform	ND		4.0		ug/L			12/07/19 17:43	4
Bromomethane	ND		4.0		ug/L			12/07/19 17:43	2
Carbon disulfide	ND		4.0	0.76	-			12/07/19 17:43	· · · · · · · · · · · · · · · · · · ·
Carbon tetrachloride	ND		4.0		ug/L			12/07/19 17:43	4
Chlorobenzene	ND		4.0		ug/L			12/07/19 17:43	2
Dibromochloromethane	ND		4.0		ug/L			12/07/19 17:43	4
Chloroethane	ND		4.0		ug/L			12/07/19 17:43	4
Chloroform	ND		4.0		ug/L			12/07/19 17:43	4
Chloromethane	ND		4.0		ug/L			12/07/19 17:43	4
cis-1,2-Dichloroethene	ND		4.0		ug/L			12/07/19 17:43	4
cis-1,3-Dichloropropene	ND		4.0		ug/L			12/07/19 17:43	4
Cyclohexane	ND		4.0	0.72				12/07/19 17:43	4
Dichlorodifluoromethane	ND		4.0		ug/L			12/07/19 17:43	4
Ethylbenzene	ND		4.0		ug/L			12/07/19 17:43	2
1,2-Dibromoethane	ND		4.0		ug/L			12/07/19 17:43	4
sopropylbenzene	ND		4.0		ug/L			12/07/19 17:43	4
Methyl acetate	ND		10		ug/L			12/07/19 17:43	4
Methyl tert-butyl ether	ND		4.0	0.64				12/07/19 17:43	4
Methylcyclohexane	ND		4.0	0.64	-			12/07/19 17:43	
Methylene Chloride	ND		4.0		ug/L			12/07/19 17:43	
Styrene	ND		4.0		ug/L			12/07/19 17:43	
Tetrachloroethene	ND		4.0		ug/L			12/07/19 17:43	-
					-				4
Toluene	ND		4.0		ug/L ug/L			12/07/19 17:43 12/07/19 17:43	,
rans-1,2-Dichloroethene	ND		4.0		-				4
trans-1,3-Dichloropropene Trichloroethene	ND		4.0		ug/L			12/07/19 17:43	4
Trichloroethene	ND		4.0		ug/L			12/07/19 17:43	
	ND		4.0		ug/L			12/07/19 17:43	2
Vinyl chloride Xylenes, Total	ND ND		4.0 8.0		ug/L ug/L			12/07/19 17:43 12/07/19 17:43	2
		Qualifier			··•		Bronered		
Surrogate Toluene-d8 (Surr)	%Recovery	Quaimer	Limits 80 - 120				Prepared	Analyzed 12/07/19 17:43	Dil Fa
( )									4
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					12/07/19 17:43	2
4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr)	99 104		73 - 120 75 - 123					12/07/19 17:43 12/07/19 17:43	

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

# Client Sample ID: EX-MW12 Date Collected: 12/05/19 13:00 Date Received: 12/05/19 16:45

.lob	١D·	480-1	163694-1	1
000	10.	700 1	100004	

# Lab Sample ID: 480-163694-6

Matrix: Water

5

6

Method: 8260C - Volatile Organ	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82				12/07/19 18:08	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	-			12/07/19 18:08	1
1,1,2-Trichloroethane	ND	1.0	0.23	-			12/07/19 18:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			12/07/19 18:08	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/07/19 18:08	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/07/19 18:08	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			12/07/19 18:08	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			12/07/19 18:08	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			12/07/19 18:08	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/07/19 18:08	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/07/19 18:08	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			12/07/19 18:08	1
1,4-Dichlorobenzene	ND	1.0		ug/L			12/07/19 18:08	1
2-Butanone (MEK)	ND	10		ug/L			12/07/19 18:08	1
2-Hexanone	ND	5.0		ug/L			12/07/19 18:08	1
4-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			12/07/19 18:08	
Acetone	ND	10		ug/L			12/07/19 18:08	1
Benzene	ND	1.0	0.41	-			12/07/19 18:08	1
Bromodichloromethane	ND	1.0	0.39				12/07/19 18:08	
Bromoform	ND	1.0	0.26	-			12/07/19 18:08	1
Bromomethane	ND	1.0	0.20	-			12/07/19 18:08	1
Carbon disulfide	ND	1.0	0.09	0			12/07/19 18:08	1
Carbon tetrachloride	ND	1.0	0.13	-			12/07/19 18:08	1
	ND	1.0	0.27	-			12/07/19 18:08	1
Chlorobenzene				-				
Dibromochloromethane	ND	1.0	0.32	-			12/07/19 18:08	1
Chloroethane	ND	1.0	0.32	-			12/07/19 18:08	1
Chloroform	ND	1.0	0.34	-			12/07/19 18:08	1
Chloromethane	ND	1.0	0.35	-			12/07/19 18:08	1
cis-1,2-Dichloroethene	ND	1.0	0.81	-			12/07/19 18:08	1
cis-1,3-Dichloropropene	ND	1.0	0.36	-			12/07/19 18:08	1
Cyclohexane	ND	1.0		ug/L			12/07/19 18:08	1
Dichlorodifluoromethane	ND	1.0	0.68	-			12/07/19 18:08	1
Ethylbenzene	ND	1.0		ug/L			12/07/19 18:08	1
1,2-Dibromoethane	ND	1.0		ug/L			12/07/19 18:08	1
sopropylbenzene	ND	1.0		ug/L			12/07/19 18:08	1
Methyl acetate	ND	2.5	1.3	ug/L			12/07/19 18:08	1
Methyl tert-butyl ether	ND	1.0	0.16	ug/L			12/07/19 18:08	1
Methylcyclohexane	ND	1.0	0.16	ug/L			12/07/19 18:08	1
Methylene Chloride	ND	1.0	0.44	ug/L			12/07/19 18:08	1
Styrene	ND	1.0	0.73	ug/L			12/07/19 18:08	1
Tetrachloroethene	ND	1.0	0.36	ug/L			12/07/19 18:08	1
Toluene	ND	1.0	0.51	ug/L			12/07/19 18:08	1
rans-1,2-Dichloroethene	ND	1.0	0.90	ug/L			12/07/19 18:08	1
rans-1,3-Dichloropropene	ND	1.0		ug/L			12/07/19 18:08	1
Trichloroethene	ND	1.0		ug/L			12/07/19 18:08	1
Trichlorofluoromethane	ND	1.0		ug/L			12/07/19 18:08	1
Vinyl chloride	ND	1.0		ug/L			12/07/19 18:08	1
Xylenes, Total	ND	2.0	0.66	-			12/07/19 18:08	1

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

# Client Sample ID: EX-MW12 Date Collected: 12/05/19 13:00 Date Received: 12/05/19 16:45

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98	80 - 120		12/07/19 18:08	1
1,2-Dichloroethane-d4 (Surr)	98	77 - 120		12/07/19 18:08	1
4-Bromofluorobenzene (Surr)	96	73 - 120		12/07/19 18:08	1
Dibromofluoromethane (Surr)	98	75 - 123		12/07/19 18:08	1

# Client Sample ID: MW-02R

### Date Collected: 12/05/19 13:40 Date Received: 12/05/19 16:45

Analyte	Result Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			12/07/19 18:32	1
1,1,2,2-Tetrachloroethane	ND	1.0		ug/L			12/07/19 18:32	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/07/19 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			12/07/19 18:32	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/07/19 18:32	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/07/19 18:32	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			12/07/19 18:32	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			12/07/19 18:32	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			12/07/19 18:32	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/07/19 18:32	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/07/19 18:32	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			12/07/19 18:32	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			12/07/19 18:32	1
2-Butanone (MEK)	ND	10	1.3	ug/L			12/07/19 18:32	1
2-Hexanone	ND	5.0	1.2	ug/L			12/07/19 18:32	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			12/07/19 18:32	1
Acetone	ND	10	3.0	ug/L			12/07/19 18:32	1
Benzene	1.2	1.0	0.41	ug/L			12/07/19 18:32	1
Bromodichloromethane	ND	1.0	0.39	ug/L			12/07/19 18:32	1
Bromoform	ND	1.0	0.26	ug/L			12/07/19 18:32	1
Bromomethane	ND	1.0	0.69	ug/L			12/07/19 18:32	1
Carbon disulfide	ND	1.0	0.19	ug/L			12/07/19 18:32	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			12/07/19 18:32	1
Chlorobenzene	ND	1.0	0.75	ug/L			12/07/19 18:32	1
Dibromochloromethane	ND	1.0	0.32	ug/L			12/07/19 18:32	1
Chloroethane	ND	1.0	0.32	ug/L			12/07/19 18:32	1
Chloroform	ND	1.0	0.34	ug/L			12/07/19 18:32	1
Chloromethane	ND	1.0	0.35	ug/L			12/07/19 18:32	1
cis-1,2-Dichloroethene	21	1.0	0.81	ug/L			12/07/19 18:32	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			12/07/19 18:32	1
Cyclohexane	3.4	1.0	0.18	ug/L			12/07/19 18:32	1
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			12/07/19 18:32	1
Ethylbenzene	ND	1.0	0.74	ug/L			12/07/19 18:32	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			12/07/19 18:32	1
Isopropylbenzene	ND	1.0	0.79	ug/L			12/07/19 18:32	1
Methyl acetate	ND	2.5	1.3	ug/L			12/07/19 18:32	1
Methyl tert-butyl ether	ND	1.0	0.16	ug/L			12/07/19 18:32	1
Methylcyclohexane	0.99 J	1.0	0.16	ug/L			12/07/19 18:32	1
Methylene Chloride	ND	1.0	0.44	ug/L			12/07/19 18:32	1

Job ID: 480-163694-1

Matrix: Water

**Matrix: Water** 

Lab Sample ID: 480-163694-6

Lab Sample ID: 480-163694-7

RL

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

2.0

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

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

**Result Qualifier** 

ND

ND

ND

ND

ND

ND

ND

37

ND

# Client Sample ID: MW-02R Date Collected: 12/05/19 13:40 Date Received: 12/05/19 16:45

Analyte

Styrene

Toluene

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylenes, Total

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Trichlorofluoromethane

Lab Sample ID: 480-163694-7
Matrix: Water

D

Prepared

MDL Unit

0.73 ug/L

0.36 ug/L

0.51 ug/L

0.90 ug/L

0.37 ug/L

0.46 ug/L

0.88 ug/L

0.90 ug/L

0.66 ug/L

Dil Fac

Job ID: 480-163694-1

Analyzed

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

12/07/19 18:32

Matrix: Water

Lab Sample ID: 480-163694-8

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99	80 - 120		12/07/19 18:32	1
1,2-Dichloroethane-d4 (Surr)	100	77 - 120		12/07/19 18:32	1
4-Bromofluorobenzene (Surr)	98	73 - 120		12/07/19 18:32	1
Dibromofluoromethane (Surr)	99	75 - 123		12/07/19 18:32	1

### Client Sample ID: EX-MW-11R Date Collected: 12/05/19 14:20 Date Received: 12/05/19 16:45

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	20	16	ug/L			12/07/19 18:56	20
1,1,2,2-Tetrachloroethane	ND	20	4.2	ug/L			12/07/19 18:56	20
1,1,2-Trichloroethane	ND	20	4.6	ug/L			12/07/19 18:56	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20	6.2	ug/L			12/07/19 18:56	20
1,1-Dichloroethane	ND	20	7.6	ug/L			12/07/19 18:56	20
1,1-Dichloroethene	ND	20	5.8	ug/L			12/07/19 18:56	20
1,2,4-Trichlorobenzene	ND	20	8.2	ug/L			12/07/19 18:56	20
1,2-Dibromo-3-Chloropropane	ND	20	7.8	ug/L			12/07/19 18:56	20
1,2-Dichlorobenzene	ND	20	16	ug/L			12/07/19 18:56	20
1,2-Dichloroethane	ND	20	4.2	ug/L			12/07/19 18:56	20
1,2-Dichloropropane	ND	20	14	ug/L			12/07/19 18:56	20
1,3-Dichlorobenzene	ND	20	16	ug/L			12/07/19 18:56	20
1,4-Dichlorobenzene	ND	20	17	ug/L			12/07/19 18:56	20
2-Butanone (MEK)	ND	200	26	ug/L			12/07/19 18:56	20
2-Hexanone	ND	100	25	ug/L			12/07/19 18:56	20
4-Methyl-2-pentanone (MIBK)	ND	100	42	ug/L			12/07/19 18:56	20
Acetone	ND	200	60	ug/L			12/07/19 18:56	20
Benzene	ND	20	8.2	ug/L			12/07/19 18:56	20
Bromodichloromethane	ND	20	7.8	ug/L			12/07/19 18:56	20
Bromoform	ND	20	5.2	ug/L			12/07/19 18:56	20
Bromomethane	ND	20	14	ug/L			12/07/19 18:56	20
Carbon disulfide	ND	20	3.8	ug/L			12/07/19 18:56	20
Carbon tetrachloride	ND	20	5.4	ug/L			12/07/19 18:56	20
Chlorobenzene	ND	20	15	ug/L			12/07/19 18:56	20
Dibromochloromethane	ND	20	6.4	ug/L			12/07/19 18:56	20
Chloroethane	ND	20		ug/L			12/07/19 18:56	20
Chloroform	ND	20		ug/L			12/07/19 18:56	20
Chloromethane	ND	20		ug/L			12/07/19 18:56	20

RL

MDL Unit

D

Prepared

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

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

Result Qualifier

# Client Sample ID: EX-MW-11R Date Collected: 12/05/19 14:20 Date Received: 12/05/19 16:45

Analyte

# Lab Sample ID: 480-163694-8

Analyzed

Matrix: Water

Surrogate	%Recoverv Qualifier	Limits			Prepared Analyzed	Dil Fac
Xylenes, Total	ND	40	13	ug/L	12/07/19 18:	56 20
Vinyl chloride	330	20		ug/L	12/07/19 18:	
Trichlorofluoromethane	ND	20	18	ug/L	12/07/19 18:	56 20
Trichloroethene	ND	20	9.2	ug/L	12/07/19 18:	56 20
trans-1,3-Dichloropropene	ND	20	7.4	ug/L	12/07/19 18:	56 20
trans-1,2-Dichloroethene	ND	20	18	ug/L	12/07/19 18:	56 20
Toluene	ND	20	10	ug/L	12/07/19 18:	56 20
Tetrachloroethene	ND	20	7.2	ug/L	12/07/19 18:	56 20
Styrene	ND	20	15	ug/L	12/07/19 18:	56 20
Methylene Chloride	ND	20	8.8	ug/L	12/07/19 18:	56 20
Methylcyclohexane	11 J	20	3.2	ug/L	12/07/19 18:	56 20
Methyl tert-butyl ether	ND	20	3.2	ug/L	12/07/19 18:	56 20
Methyl acetate	ND	50		ug/L	12/07/19 18:	56 20
Isopropylbenzene	ND	20		ug/L	12/07/19 18:	56 20
1,2-Dibromoethane	ND	20		ug/L	12/07/19 18:	56 20
Ethylbenzene	ND	20	15	ug/L	12/07/19 18:	56 20
Dichlorodifluoromethane	ND	20		ug/L	12/07/19 18:	56 20
Cyclohexane	22	20	3.6	ug/L	12/07/19 18:	56 20
cis-1,3-Dichloropropene	ND	20		ug/L	12/07/19 18:	56 20
cis-1,2-Dichloroethene	950	20	16	ug/L	12/07/19 18:	56 20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/07/19 18:56	20
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		12/07/19 18:56	20
4-Bromofluorobenzene (Surr)	100		73 - 120		12/07/19 18:56	20
Dibromofluoromethane (Surr)	102		75 - 123		12/07/19 18:56	20

### Client Sample ID: AL-2 Date Collected: 12/05/19 15:10 Date Received: 12/05/19 16:45

# Lab Sample ID: 480-163694-9

**Matrix: Water** 

Method: 8260C - Volatile Organ Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			12/07/19 19:20	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			12/07/19 19:20	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/07/19 19:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			12/07/19 19:20	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/07/19 19:20	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/07/19 19:20	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			12/07/19 19:20	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			12/07/19 19:20	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			12/07/19 19:20	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/07/19 19:20	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/07/19 19:20	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			12/07/19 19:20	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			12/07/19 19:20	1
2-Butanone (MEK)	ND	10	1.3	ug/L			12/07/19 19:20	1
2-Hexanone	ND	5.0	1.2	ug/L			12/07/19 19:20	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			12/07/19 19:20	1
Acetone	ND	10	3.0	ug/L			12/07/19 19:20	1

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

### Job ID: 480-163694-1

**Matrix: Water** 

Lab Sample ID: 480-163694-9

5 6

**Client Sample ID: AL-2** Date Collected: 12/05/19 15:10 Date Received: 12/05/19 16:45

Method: 8260C - Volatile O Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	11		1.0	0.41	ug/L			12/07/19 19:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/07/19 19:20	1
Bromoform	ND		1.0	0.26	ug/L			12/07/19 19:20	1
Bromomethane	ND		1.0	0.69	ug/L			12/07/19 19:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/07/19 19:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/07/19 19:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/07/19 19:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/07/19 19:20	1
Chloroethane	ND		1.0	0.32	ug/L			12/07/19 19:20	1
Chloroform	ND		1.0	0.34	ug/L			12/07/19 19:20	1
Chloromethane	ND		1.0	0.35	ug/L			12/07/19 19:20	1
cis-1,2-Dichloroethene	14		1.0	0.81	ug/L			12/07/19 19:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/07/19 19:20	1
Cyclohexane	1.8		1.0	0.18	ug/L			12/07/19 19:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/07/19 19:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/07/19 19:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/07/19 19:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/07/19 19:20	1
Methyl acetate	ND		2.5	1.3	ug/L			12/07/19 19:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/07/19 19:20	1
Methylcyclohexane	0.25	J	1.0	0.16	ug/L			12/07/19 19:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/07/19 19:20	1
Styrene	ND		1.0	0.73	ug/L			12/07/19 19:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/07/19 19:20	1
Toluene	ND		1.0	0.51	ug/L			12/07/19 19:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/07/19 19:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/07/19 19:20	1
Trichloroethene	ND		1.0	0.46	ug/L			12/07/19 19:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/07/19 19:20	1
Vinyl chloride	4.6		1.0	0.90	ug/L			12/07/19 19:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/07/19 19:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120			-		12/07/19 19:20	1
1,2-Dichloroethane-d4 (Surr)	99		77 - 120					12/07/19 19:20	1
4-Bromofluorobenzene (Surr)	101		73 - 120					12/07/19 19:20	1

### **Client Sample ID: AL-1** Date Collected: 12/05/19 15:45

Dibromofluoromethane (Surr)

Date Received: 12/05/19 16:45

Method: 8260C - Volatile Orga	ethod: 8260C - Volatile Organic Compounds by GC/MS							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<u></u>	4.0	3.3	ug/L			12/09/19 12:21	4
1,1,2,2-Tetrachloroethane	ND	4.0	0.84	ug/L			12/09/19 12:21	4
1,1,2-Trichloroethane	ND	4.0	0.92	ug/L			12/09/19 12:21	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	1.2	ug/L			12/09/19 12:21	4
1,1-Dichloroethane	ND	4.0	1.5	ug/L			12/09/19 12:21	4
1,1-Dichloroethene	ND	4.0	1.2	ug/L			12/09/19 12:21	4

75 - 123

99

Eurofins TestAmerica, Buffalo

12/07/19 19:20

Lab Sample ID: 480-163694-10

1

Matrix: Water

RL

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

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

Result Qualifier

**Client Sample ID: AL-1** Date Collected: 12/05/19 15:45 Date Received: 12/05/19 16:45

Analyte

6

# Lab Sample ID: 480-163694-10

MDL Unit

D

Prepared

1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L		12/09/19 12:21	4
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L		12/09/19 12:21	4
1.2-Dichlorobenzene	ND		4.0		ug/L		12/09/19 12:21	4
1,2-Dichloroethane	ND		4.0	0.84	-		12/09/19 12:21	4
1,2-Dichloropropane	ND		4.0		ug/L		12/09/19 12:21	4
1,3-Dichlorobenzene	ND		4.0		ug/L		12/09/19 12:21	4
1,4-Dichlorobenzene	ND		4.0		ug/L		12/09/19 12:21	4
2-Butanone (MEK)	ND	*	40		ug/L		12/09/19 12:21	4
2-Hexanone	ND		20		ug/L		12/09/19 12:21	4
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L		12/09/19 12:21	4
Acetone	ND		40		ug/L		12/09/19 12:21	4
Benzene	33		4.0		ug/L		12/09/19 12:21	4
Bromodichloromethane	ND		4.0		ug/L		12/09/19 12:21	4
Bromoform	ND		4.0		ug/L		12/09/19 12:21	4
Bromomethane	ND		4.0		ug/L		12/09/19 12:21	4
Carbon disulfide	ND		4.0	0.76	-		12/09/19 12:21	4
Carbon tetrachloride	ND		4.0		ug/L		12/09/19 12:21	4
Chlorobenzene	ND		4.0	3.0	ug/L		12/09/19 12:21	4
Dibromochloromethane	ND		4.0		ug/L		12/09/19 12:21	4
Chloroethane	ND		4.0		ug/L		12/09/19 12:21	4
Chloroform	ND		4.0	1.4	ug/L		12/09/19 12:21	4
Chloromethane	ND		4.0	1.4	ug/L		12/09/19 12:21	4
cis-1,2-Dichloroethene	180		4.0	3.2	ug/L		12/09/19 12:21	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L		12/09/19 12:21	4
Cyclohexane	37		4.0	0.72	ug/L		12/09/19 12:21	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L		12/09/19 12:21	4
Ethylbenzene	ND		4.0	3.0	ug/L		12/09/19 12:21	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L		12/09/19 12:21	4
lsopropylbenzene	ND		4.0	3.2	ug/L		12/09/19 12:21	4
Methyl acetate	ND		10	5.2	ug/L		12/09/19 12:21	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L		12/09/19 12:21	4
Methylcyclohexane	24		4.0	0.64	ug/L		12/09/19 12:21	4
Methylene Chloride	ND		4.0	1.8	ug/L		12/09/19 12:21	4
Styrene	ND		4.0	2.9	ug/L		12/09/19 12:21	4
Tetrachloroethene	ND		4.0	1.4	ug/L		12/09/19 12:21	4
Toluene	4.9		4.0		ug/L		12/09/19 12:21	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L		12/09/19 12:21	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L		12/09/19 12:21	4
Trichloroethene	ND		4.0		ug/L		12/09/19 12:21	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L		12/09/19 12:21	4
Vinyl chloride	160		4.0		ug/L		12/09/19 12:21	4
Xylenes, Total	4.2	J	8.0	2.6	ug/L		12/09/19 12:21	4
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120				12/09/19 12:21	4
1,2-Dichloroethane-d4 (Surr)	99		77 - 120				12/09/19 12:21	4
4-Bromofluorobenzene (Surr)	96		73 - 120				12/09/19 12:21	4
Dibromofluoromethane (Surr)	97		75 - 123				12/09/19 12:21	4

Matrix: Water

Dil Fac

Job ID: 480-163694-1

Analyzed

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

# Client Sample ID: AL-7 Date Collected: 12/05/19 16:30 Date Received: 12/05/19 16:45

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000	ю.	400-103034-1

# Lab Sample ID: 480-163694-11

Matrix: Water

5

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			12/07/19 20:09	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			12/07/19 20:09	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/07/19 20:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			12/07/19 20:09	1
1,1-Dichloroethane	ND	1.0	0.38	-			12/07/19 20:09	1
1,1-Dichloroethene	ND	1.0	0.29	-			12/07/19 20:09	1
1,2,4-Trichlorobenzene	ND	1.0	0.41				12/07/19 20:09	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			12/07/19 20:09	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			12/07/19 20:09	1
,2-Dichloroethane	ND	1.0	0.21	•			12/07/19 20:09	
I,2-Dichloropropane	ND	1.0	0.72	-			12/07/19 20:09	1
,3-Dichlorobenzene	ND	1.0	0.78	•			12/07/19 20:09	1
I,4-Dichlorobenzene	ND	1.0	0.84	-			12/07/19 20:09	
2-Butanone (MEK)	ND	1.0		ug/L			12/07/19 20:09	1
2-Hexanone	ND	5.0		ug/L			12/07/19 20:09	1
-Methyl-2-pentanone (MIBK)	ND	5.0		ug/L			12/07/19 20:09	· · · · · .
Acetone	ND	10		ug/L ug/L			12/07/19 20:09	
Benzene	ND	1.0	0.41	-			12/07/19 20:09	
Bromodichloromethane	ND	1.0	0.39	-			12/07/19 20:09	
Bromoform	ND	1.0	0.26	-			12/07/19 20:09	
romomethane	ND	1.0	0.69	•			12/07/19 20:09	
Carbon disulfide	ND	1.0	0.19	-			12/07/19 20:09	
Carbon tetrachloride	ND	1.0	0.27	-			12/07/19 20:09	
Chlorobenzene	ND	1.0	0.75	-			12/07/19 20:09	
Dibromochloromethane	ND	1.0	0.32	-			12/07/19 20:09	
Chloroethane	ND	1.0	0.32	-			12/07/19 20:09	
Chloroform	ND	1.0	0.34	-			12/07/19 20:09	
Chloromethane	ND	1.0	0.35	-			12/07/19 20:09	
sis-1,2-Dichloroethene	2.0	1.0	0.81	-			12/07/19 20:09	
is-1,3-Dichloropropene	ND	1.0	0.36	-			12/07/19 20:09	
Cyclohexane	1.0	1.0	0.18	-			12/07/19 20:09	
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			12/07/19 20:09	
thylbenzene	ND	1.0	0.74	ug/L			12/07/19 20:09	
,2-Dibromoethane	ND	1.0	0.73	ug/L			12/07/19 20:09	
sopropylbenzene	ND	1.0	0.79	ug/L			12/07/19 20:09	
/lethyl acetate	ND	2.5	1.3	ug/L			12/07/19 20:09	
lethyl tert-butyl ether	ND	1.0	0.16	ug/L			12/07/19 20:09	
lethylcyclohexane	0.33 J	1.0	0.16	ug/L			12/07/19 20:09	
1ethylene Chloride	ND	1.0	0.44	ug/L			12/07/19 20:09	
tyrene	ND	1.0	0.73	ug/L			12/07/19 20:09	
etrachloroethene	ND	1.0	0.36	ug/L			12/07/19 20:09	
oluene	ND	1.0	0.51	-			12/07/19 20:09	
rans-1,2-Dichloroethene	ND	1.0	0.90	-			12/07/19 20:09	
rans-1,3-Dichloropropene	ND	1.0	0.37	-			12/07/19 20:09	
Trichloroethene	ND	1.0	0.46	-			12/07/19 20:09	
richlorofluoromethane	ND	1.0	0.88				12/07/19 20:09	· · · · · · · .
/inyl chloride	1.4	1.0	0.90	-			12/07/19 20:09	
Kylenes, Total	ND	2.0		ug/L			12/07/19 20:09	

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

# Client Sample ID: AL-7 Date Collected: 12/05/19 16:30 Date Received: 12/05/19 16:45

Surrogate	%Recovery Qualifier	Limits	Prepared Anal	lyzed Dil Fac	
Toluene-d8 (Surr)	99	80 - 120	12/07/1	9 20:09 1	
1,2-Dichloroethane-d4 (Surr)	102	77 - 120	12/07/1	9 20:09 1	
4-Bromofluorobenzene (Surr)	96	73 - 120	12/07/1	9 20:09 1	
Dibromofluoromethane (Surr)	101	75 - 123	12/07/1	19 20:09 1	

# Client Sample ID: TRIP BLANK Date Collected: 12/05/19 00:00 Date Received: 12/05/19 16:45

Method: 8260C - Volatile Organ Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.82	ug/L			12/07/19 20:33	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			12/07/19 20:33	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/07/19 20:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	0.31	ug/L			12/07/19 20:33	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/07/19 20:33	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/07/19 20:33	1
1,2,4-Trichlorobenzene	ND	1.0	0.41	ug/L			12/07/19 20:33	1
1,2-Dibromo-3-Chloropropane	ND	1.0	0.39	ug/L			12/07/19 20:33	1
1,2-Dichlorobenzene	ND	1.0	0.79	ug/L			12/07/19 20:33	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/07/19 20:33	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/07/19 20:33	1
1,3-Dichlorobenzene	ND	1.0	0.78	ug/L			12/07/19 20:33	1
1,4-Dichlorobenzene	ND	1.0	0.84	ug/L			12/07/19 20:33	1
2-Butanone (MEK)	ND	10	1.3	ug/L			12/07/19 20:33	1
2-Hexanone	ND	5.0	1.2	ug/L			12/07/19 20:33	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			12/07/19 20:33	1
Acetone	ND	10	3.0	ug/L			12/07/19 20:33	1
Benzene	ND	1.0	0.41	ug/L			12/07/19 20:33	1
Bromodichloromethane	ND	1.0	0.39	ug/L			12/07/19 20:33	1
Bromoform	ND	1.0	0.26	ug/L			12/07/19 20:33	1
Bromomethane	ND	1.0	0.69	ug/L			12/07/19 20:33	1
Carbon disulfide	ND	1.0	0.19	ug/L			12/07/19 20:33	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			12/07/19 20:33	1
Chlorobenzene	ND	1.0	0.75	ug/L			12/07/19 20:33	1
Dibromochloromethane	ND	1.0	0.32	ug/L			12/07/19 20:33	1
Chloroethane	ND	1.0	0.32	ug/L			12/07/19 20:33	1
Chloroform	ND	1.0	0.34	ug/L			12/07/19 20:33	1
Chloromethane	ND	1.0	0.35	ug/L			12/07/19 20:33	1
cis-1,2-Dichloroethene	ND	1.0	0.81	ug/L			12/07/19 20:33	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			12/07/19 20:33	1
Cyclohexane	ND	1.0	0.18	ug/L			12/07/19 20:33	1
Dichlorodifluoromethane	ND	1.0	0.68	ug/L			12/07/19 20:33	1
Ethylbenzene	ND	1.0	0.74	ug/L			12/07/19 20:33	1
1,2-Dibromoethane	ND	1.0	0.73	ug/L			12/07/19 20:33	1
Isopropylbenzene	ND	1.0	0.79	ug/L			12/07/19 20:33	1
Methyl acetate	ND	2.5	1.3	ug/L			12/07/19 20:33	1
Methyl tert-butyl ether	ND	1.0	0.16	ug/L			12/07/19 20:33	1
Methylcyclohexane	ND	1.0	0.16	ug/L			12/07/19 20:33	1
Methylene Chloride	ND	1.0	0.44	ug/L			12/07/19 20:33	1

Eurofins TestAmerica, Buffalo

**Matrix: Water** 

**Matrix: Water** 

Lab Sample ID: 480-163694-11

Lab Sample ID: 480-163694-12

RL

1.0

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

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

**Result Qualifier** 

ND

# Client Sample ID: TRIP BLANK Date Collected: 12/05/19 00:00 Date Received: 12/05/19 16:45

Analyte

Styrene

# Job ID: 480-163694-1

# Lab Sample ID: 480-163694-12 Matrix: Water

Analyzed

12/07/19 20:33

Dil Fac

1

Tetrachloroethene ND 1.0 0.36 ug/L 12/07/19 20:33 1 Toluene ND 0.51 ug/L 1.0 12/07/19 20:33 1 trans-1,2-Dichloroethene ND 1.0 0.90 ug/L 12/07/19 20:33 1 trans-1,3-Dichloropropene ND 0.37 ug/L 12/07/19 20:33 1.0 1 Trichloroethene ND 0.46 ug/L 1.0 12/07/19 20:33 1 Trichlorofluoromethane ND 0.88 ug/L 1.0 12/07/19 20:33 1 Vinyl chloride ND 1.0 0.90 ug/L 12/07/19 20:33 1 ND Xylenes, Total 2.0 0.66 ug/L 12/07/19 20:33 1 Qualifier Surrogate %Recovery Limits Prepared Analyzed Dil Fac Toluene-d8 (Surr) 12/07/19 20:33 99 80 - 120 1 1,2-Dichloroethane-d4 (Surr) 97 77 - 120 12/07/19 20:33 1 4-Bromofluorobenzene (Surr) 97 73 - 120 12/07/19 20:33 1 Dibromofluoromethane (Surr) 99 75 - 123 12/07/19 20:33 1

MDL Unit

0.73 ug/L

D

Prepared

# **Surrogate Summary**

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

			Pe	ercent Surro	ogate Recovery (Ac	ceptance Limits)
		TOL	DCA	BFB	DBFM	
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)	
480-163694-1	MW-12	99	100	99	99	
480-163694-2	MW-09R	102	96	98	98	
480-163694-3	FIELD DUPLICATE	98	96	95	97	
480-163694-4	MW-07R	99	100	95	99	
480-163694-5	MW-04	99	101	99	104	
480-163694-6	EX-MW12	98	98	96	98	
480-163694-7	MW-02R	99	100	98	99	
480-163694-8	EX-MW-11R	100	98	100	102	
480-163694-9	AL-2	101	99	101	99	
480-163694-10	AL-1	102	99	96	97	
480-163694-11	AL-7	99	102	96	101	
480-163694-12	TRIP BLANK	99	97	97	99	
LCS 480-508640/5	Lab Control Sample	102	101	95	103	
LCS 480-508737/5	Lab Control Sample	97	98	96	97	
LCSD 480-508737/28	Lab Control Sample Dup	100	97	98	98	
MB 480-508640/7	Method Blank	100	100	97	100	
MB 480-508737/7	Method Blank	100	98	98	99	
Surrogate Legend						

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

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

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

### Job ID: 480-163694-1

# 7 8 9 10

13		
13		
13		
		3

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

Lab Sample ID: MB 480-508640/7 Matrix: Water Analysis Batch: 508640

Analysis Datch. 300040	MB	MB							
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/07/19 13:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/07/19 13:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/07/19 13:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/07/19 13:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/07/19 13:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/07/19 13:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/07/19 13:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/07/19 13:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/07/19 13:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/07/19 13:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/07/19 13:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/07/19 13:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/07/19 13:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/07/19 13:10	1
2-Hexanone	ND		5.0	1.2	ug/L			12/07/19 13:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/07/19 13:10	1
Acetone	ND		10	3.0	ug/L			12/07/19 13:10	1
Benzene	ND		1.0	0.41	ug/L			12/07/19 13:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/07/19 13:10	1
Bromoform	ND		1.0	0.26	ug/L			12/07/19 13:10	1
Bromomethane	ND		1.0	0.69	ug/L			12/07/19 13:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/07/19 13:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/07/19 13:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/07/19 13:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/07/19 13:10	1
Chloroethane	ND		1.0	0.32	ug/L			12/07/19 13:10	1
Chloroform	ND		1.0	0.34	ug/L			12/07/19 13:10	1
Chloromethane	ND		1.0	0.35	ug/L			12/07/19 13:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/07/19 13:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/07/19 13:10	1
Cyclohexane	ND		1.0	0.18	ug/L			12/07/19 13:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/07/19 13:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/07/19 13:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/07/19 13:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/07/19 13:10	1
Methyl acetate	ND		2.5	1.3	ug/L			12/07/19 13:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/07/19 13:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/07/19 13:10	1
Methylene Chloride	ND		1.0	0.44				12/07/19 13:10	1
Styrene	ND		1.0	0.73	ug/L			12/07/19 13:10	1
Tetrachloroethene	ND		1.0	0.36				12/07/19 13:10	1
Toluene	ND		1.0	0.51	-			12/07/19 13:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			12/07/19 13:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37				12/07/19 13:10	1
Trichloroethene	ND		1.0	0.46	-			12/07/19 13:10	1
Trichlorofluoromethane	ND		1.0	0.88				12/07/19 13:10	1
Vinyl chloride	ND		1.0	0.90	-			12/07/19 13:10	1
Xylenes, Total	ND		2.0		ug/L			12/07/19 13:10	1

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

100

### Lab Sample ID: MB 480-508640/7 Matrix: Water

### Analysis Batch: 508640

	MB MB				
Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100	80 - 120		12/07/19 13:10	1
1,2-Dichloroethane-d4 (Surr)	100	77 - 120		12/07/19 13:10	1
4-Bromofluorobenzene (Surr)	97	73 - 120		12/07/19 13:10	1

75 - 123

# Lab Sample ID: LCS 480-508640/5 Matrix: Water

Analysis Batch: 508640

Dibromofluoromethane (Surr)

Analyte         Added         Result         Qualifier         Unit         D         %Acc         Limits           1,1,1-Trichioroethane         25.0         26.1         ugl,         104         73.126           1,1,2.7 trichioroethane         25.0         25.6         ugl,         102         76.120           1,1,2.Trichioroethane         25.0         22.0         ugl,         106         77.120           1,1.Dichioroethane         25.0         26.6         ugl,         106         77.120           1,2.Dichioroethane         25.0         26.9         ugl,         104         79.122           1,2.Dichioroethane         25.0         26.9         ugl,         104         79.122           1.2.Dichioroethane         25.0         26.9         ugl,         107         80.134           1.2.Dichioroethane         25.0         26.9         ugl,         107         76.120           1.2.Dichioroethane         25.0         26.1         ugl,         107         76.120           1.2.Dichioroethane         25.0         26.1         ugl,         108.124         120           1.2.Dichioroethane         25.0         26.1         ugl,         116         76.120	Analysis Balch. 500040	Spike	LCS	LCS				%Rec.	
1,11-Trichloroethane       25.0       26.1       ugl       10.4       73.128         1,12.2.Trichloroethane       25.0       27.1       ugl       108       76.122         1,12.Trichloroethane       25.0       22.0       ugl       88       61.148         re       1.1.2.Trichloroethane       25.0       22.0       ugl       88       61.148         re       1.1.Dichloroethane       25.0       26.6       ugl       106       77.120         1.1.Dichloroethane       25.0       26.7       ugl       104       79.122         1.2.Dichloroethane       25.0       25.9       ugl       104       79.122         1.2.Dichloroethane       25.0       25.9       ugl       104       75.120         1.2.Dichloroethane       25.0       25.9       ugl       104       75.120         1.2.Dichloroethane       25.0       25.7       ugl       104       75.120         1.2.Dichloroethane       25.0       25.7       ugl       104       75.120         1.2.Dichloroethane       25.0       25.7       ugl       103       80.120         2.4-Baanone       125       143       ugl       111       85.127	Analyte		_		Unit	D	%Rec		
1.1.2-Trichloroethane       26.0       25.6       ng/L       102       76.122         1.1.2-Trichloro-1.2.2-Influoroethane       25.0       22.0       ug/L       88       61.148         ne       1.1.Dehtoroethane       25.0       26.6       ug/L       106       77.120         1.1.Dehtoroethene       25.0       25.9       ug/L       104       79.122         1.2.Dehtoroethene       25.0       26.9       ug/L       107       80.124         1.2.Dehtoroethene       25.0       26.9       ug/L       107       80.124         1.2.Dehtoroethane       25.0       25.9       ug/L       104       75.120         1.2.Dehtoroethene       25.0       25.7       ug/L       105       76.120         1.3.Dehtoroethene       25.0       25.7       ug/L       103       80.120         1.4.Dehtoroethene       25.0       25.7       ug/L       103       80.120         2.4.Butanone (MEK)       125       143       ug/L       113       56.134         2.4.Butanone (MEK)       125       148       ug/L       113       71.124         Benzene       25.0       26.1       ug/L       104       71.124      Boromotho	-								
1.1.2-Trichloro-1.2.2-trifluoroethan         25.0         22.0         ug/L         88         61 - 148           ne         1.1-Dichloroethane         25.0         26.6         ug/L         106         77 - 120           1.1-Dichloroethane         25.0         24.7         ug/L         99         66.127           1.2-Dichromo-3-Chloropropane         25.0         25.9         ug/L         104         79 - 122           1.2-Dichloroethane         25.0         26.8         ug/L         107         80.124           1.2-Dichloroethane         25.0         25.9         ug/L         107         80.124           1.2-Dichloroethane         25.0         25.7         ug/L         105         77.120           1.3-Dichlorobenzene         25.0         25.7         ug/L         105         80.120           2-Bitanone (MEK)         125         143         ug/L         114         57.140           2-Hexanone         125         144         ug/L         116         66.127           Actone         125         144         ug/L         116         80.120           2-Bitanone (MEK)         125         141         ug/L         111         56.142           2-Hexanone	1,1,2,2-Tetrachloroethane	25.0	27.1		ug/L		108	76 - 120	
ne         1,1-Dichloroethane         25.0         24.7         ug/L         99         66.127           1,1-Dichloroethane         25.0         24.7         ug/L         104         79-122           1,2-Dichlorobenzene         25.0         25.9         ug/L         104         79-122           1,2-Dichlorobenzene         25.0         28.3         ug/L         113         56.134           1,2-Dichlorobenzene         25.0         25.9         ug/L         104         75.120           1,2-Dichlorobenzene         25.0         27.4         ug/L         105         77.120           1,4-Dichlorobenzene         25.0         25.7         ug/L         103         80.120           2-Butanone (MEK)         125         143         ug/L         114         57.140           2-Hexanone         125         144         ug/L         113         71.125           4-Methyl-2-pentanone (MIBK)         125         141         ug/L         113         71.124           Bromodichloromethane         25.0         27.5         ug/L         110         80.122           Bromodichloromethane         25.0         28.1         ug/L         101         80.122           Bromodichl	1,1,2-Trichloroethane	25.0	25.6		ug/L		102	76 - 122	
ne         number of the second s	1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	22.0		ug/L		88	61 - 148	
1.1-Dichloroethene       25.0       24.7       ug/L       99       66.127         1.2.4-Trichlorobenzene       25.0       25.9       ug/L       113       55.134         1.2-Dichoro-S-Chloropopane       25.0       26.9       ug/L       107       80.124         1.2-Dichoro-S-Chloropopane       25.0       25.9       ug/L       107       80.124         1.2-Dichoroethane       25.0       25.7       ug/L       107       75.120         1.3-Dichorobenzene       25.0       25.7       ug/L       103       80.120         2-Butanone (MEK)       125       143       ug/L       119       65.127         2-Hexanone       125       144       ug/L       113       71.125         Acetone       125       144       ug/L       113       71.125         Acetone       25.0       27.5       ug/L       104       71.124         Bromodichloromethane       25.0       28.5       ug/L       110       80.122         Bromodichloromethane       25.0       28.5       ug/L       101       80.122         Bromodichloromethane       25.0       28.5       ug/L       103       80.122         Bromodichloromethane					-				
1.2.4-Trichlorobenzene       25.0       25.9       ug/L       104       79.122         1.2.Dichlorobenzene       25.0       26.3       ug/L       113       56.134         1.2.Dichlorobenzene       25.0       25.9       ug/L       107       80.124         1.2.Dichlorobenzene       25.0       25.9       ug/L       104       75.120         1.2.Dichlorobenzene       25.0       27.4       ug/L       105       77.120         1.4.Dichlorobenzene       25.0       26.1       ug/L       103       80.120         2.Butanone (MEK)       125       143       ug/L       114       57.140         2.Hexanone       125       143       ug/L       114       57.140         2.Hexanone       125       139       ug/L       114       56.142         Benzene       25.0       26.1       ug/L       104       61.132         Bromodichloromethane       25.0       25.5       ug/L       104       61.132         Bromodichloromethane       25.0       25.4       ug/L       102       59.134         Carbon tetrachloride       25.0       25.4       ug/L       103       75.125         Chlorobenzene       25.0	1,1-Dichloroethane		26.6		-			77 - 120	
1.2-Dibromo-3-Chloropropane       25.0       28.3       ug/L       113       56.134         1.2-Dichloroberzene       25.0       26.9       ug/L       107       80.124         1.2-Dichloroberzene       25.0       25.9       ug/L       104       75.120         1.2-Dichloroberzene       25.0       25.7       ug/L       103       80.120         1.4-Dichloroberzene       25.0       25.7       ug/L       113       80.120         2-Butanone (MEK)       125       143       ug/L       113       80.120         2-Hexanone (MEK)       125       144       ug/L       113       71.125         2-Hexanone (MIBK)       125       141       ug/L       114       87.140         2-Hexanone (MIBK)       125       141       ug/L       113       71.125         Acetone       125       144       ug/L       104       87.142         Bromodichloromethane       25.0       27.5       ug/L       104       87.142         Bromodichloromethane       25.0       28.5       ug/L       104       87.142         Carbon disulfide       25.0       28.4       ug/L       107       72.134         Chlorobenzene	1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127	
1.2-Dichlorobenzene       25.0       26.9       ug/L       107       80.124         1.2-Dichloroptropane       25.0       25.9       ug/L       110       75.120         1.2-Dichloroptropane       25.0       27.4       ug/L       110       76.120         1.3-Dichlorobenzene       25.0       26.1       ug/L       103       80.120         2-Butanone (MEK)       125       143       ug/L       114       57.7         2-Hexanone       125       144       ug/L       113       71.125         4-Methyl-2-pentanone (MIBK)       125       144       ug/L       113       71.125         Acetone       125       139       ug/L       114       66.127         4-Methyl-2-pentanone (MIBK)       125       141       ug/L       110       80.122         Bromodichloromethane       25.0       26.1       ug/L       104       71.124         Bromodichloromethane       25.0       27.5       ug/L       110       80.122         Bromodichloromethane       25.0       28.4       ug/L       107       72.134         Carbon disulfide       25.0       26.8       ug/L       107       72.134         Chloroethane	1,2,4-Trichlorobenzene		25.9		ug/L		104	79 - 122	
1,2-Dichlorogenane       25.0       25.9       ug/L       104       75.120         1,3-Dichloropopane       25.0       27.4       ug/L       110       76.120         1,3-Dichlorobenzene       25.0       26.1       ug/L       105       77.120         1,4-Dichlorobenzene       25.0       25.7       ug/L       103       80.120         2-Butanone (MEK)       125       143       ug/L       114       57.140         2-Hexanone       125       144       ug/L       113       71.125         Acetone       125       139       ug/L       104       71.124         Benzene       25.0       26.1       ug/L       104       71.124         Bromodichloromethane       25.0       27.5       ug/L       104       71.124         Bromodichloromethane       25.0       28.5       ug/L       104       71.124         Bromodofibar       25.0       28.5       ug/L       104       71.124         Bromodichloromethane       25.0       28.5       ug/L       101       80.122         Bromodofibar       25.0       28.4       ug/L       102       59.134         Carbon disulifde       25.0       28.	1,2-Dibromo-3-Chloropropane				-		113	56 - 134	
1.2-Dichloropropane       25.0       27.4       ug/L       110       76.120         1.3-Dichlorobenzene       25.0       26.1       ug/L       105       77.120         1.4-Dichlorobenzene       25.0       26.7       ug/L       103       80.120         2-Butanone (MEK)       125       143       ug/L       114       57.140         2-Hexanone       125       144       ug/L       113       71.125         A-Methyl-2-pentanone (MIBK)       125       141       ug/L       113       71.125         Acetone       125       139       ug/L       114       56.142         Benzene       25.0       26.1       ug/L       104       71.124         Bromodichloromethane       25.0       27.5       ug/L       110       80.122         Bromoform       25.0       28.5       ug/L       114       61.132         Bromoform       25.0       28.4       ug/L       102       59.134         Carbon disulfide       25.0       26.4       ug/L       107       72.134         Chlorobenzene       25.0       24.7       ug/L       97       69.136         Chloroothiforomethane       25.0       26.0 <td>1,2-Dichlorobenzene</td> <td>25.0</td> <td>26.9</td> <td></td> <td>ug/L</td> <td></td> <td>107</td> <td>80 - 124</td> <td></td>	1,2-Dichlorobenzene	25.0	26.9		ug/L		107	80 - 124	
1,3-Dichlorobenzene25.026.1ug/L10577.1201.4-Dichlorobenzene25.025.7ug/L10380.1202-Butanone (MEK)125143ug/L11457.1402-Hexanone125148ug/L11965.1274-Methyl-2-pentanone (MIBK)125141ug/L11371.125Acetone125139ug/L11156.142Benzene25.026.1ug/L10471.124Bromodichloromethane25.027.5ug/L11461.132Bromodichloromethane25.025.4ug/L10259.134Carbon disulfide25.026.4ug/L10259.134Carbon disulfide25.028.1ug/L11375.125Chlorobenzene25.028.1ug/L11375.125Dibromochloromethane25.028.1ug/L10772.134Chlorobenzene25.028.1ug/L10373.127Chloroform25.025.8ug/L10373.127Chloroform25.025.8ug/L10374.124cis-1,3-Dichloroptopene25.027.0ug/L10874.124cis-1,2-Dichloroptopene25.027.0ug/L10374.124cis-1,2-Dichloroptopene25.027.0ug/L10374.124cis-1,3-Dichloroptopene25.027.0ug/L10374.124cis-1,2-Dichloroptenene	1,2-Dichloroethane	25.0	25.9		ug/L		104	75 - 120	
1.4-Dichlorobenzene       25.0       25.7       ug/L       103       80.120         2-Butanone (MEK)       125       143       ug/L       114       57.140         2-Hexanone       125       148       ug/L       119       65.127         4-Methyl-2-pentanone (MIBK)       125       141       ug/L       113       71.125         Acetone       125       139       ug/L       111       56.142         Benzene       25.0       26.1       ug/L       104       71.124         Bromodichloromethane       25.0       27.5       ug/L       110       80.120         Bromoform       25.0       28.5       ug/L       110       80.122         Bromoform       25.0       28.5       ug/L       104       71.124         Bromoform       25.0       28.5       ug/L       102       59.134         Carbon tetrachloride       25.0       26.4       ug/L       102       59.134         Carbon tetrachloride       25.0       28.1       ug/L       113       75.125         Chlorobenzene       25.0       24.7       ug/L       99       80.120         Dibromochloromethane       25.0       25.0	1,2-Dichloropropane	25.0	27.4		ug/L		110	76 - 120	
2-Butanone (MEK)       125       143       ug/L       114       57.140         2-Hexanone       125       148       ug/L       119       65.127         4-Methyl-2-pentanone (MIBK)       125       141       ug/L       113       71.125         Acetone       125       139       ug/L       111       56.142         Benzene       25.0       26.1       ug/L       104       71.124         Bromodichloromethane       25.0       27.5       ug/L       110       80.122         Bromoform       25.0       28.5       ug/L       110       80.122         Bromothane       25.0       28.5       ug/L       102       59.134         Carbon lisulfide       25.0       26.4       ug/L       102       59.134         Carbon tetrachloride       25.0       26.4       ug/L       107       72.134         Chlorobenzene       25.0       28.1       ug/L       113       75.125         Chlorobenzene       25.0       25.6       ug/L       103       73.127         Chloromethane       25.0       25.6       ug/L       103       73.127         Chloromethane       25.0       25.6       ug/L<	1,3-Dichlorobenzene	25.0	26.1		ug/L		105	77 - 120	
2-Hexanone125148ug/L11965-1274-Methyl-2-pentanone (MIBK)125141ug/L11371-125Acetone125139ug/L11156-142Benzene25.026.1ug/L10471-124Bromodichloromethane25.027.5ug/L11080-122Bromodichloromethane25.028.5ug/L10259-134Carbon disulfide25.025.4ug/L10259-134Carbon disulfide25.026.8ug/L10259-134Carbon tetrachloride25.026.4ug/L10259-134Chlorobenzene25.026.4ug/L10772-134Dibromochloromethane25.028.1ug/L10373-127Chloroform25.025.6ug/L10373-127Chloroform25.025.8ug/L10374-124cis-1,2-Dichloroptene25.027.0ug/L10874-124Cyclohexane25.023.5ug/L10374-124Cyclohexane25.025.7ug/L10877-123J,2-Dichloromethane25.025.7ug/L10377-122Isopropylbenzene25.025.7ug/L10377-122Isopropylbenzene25.025.7ug/L10977-122Isopropylbenzene25.027.7ug/L10977-122Isopropylbenzene25.027.7 <td< td=""><td>1,4-Dichlorobenzene</td><td>25.0</td><td>25.7</td><td></td><td>ug/L</td><td></td><td>103</td><td>80 - 120</td><td></td></td<>	1,4-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 120	
4-Methyl-2-pentanone (MIBK)       125       141       ug/L       113       71 - 125         Acetone       125       139       ug/L       111       56 - 142         Benzene       25.0       26.1       ug/L       104       71 - 124         Bromodichloromethane       25.0       27.5       ug/L       110       80 - 122         Bromoform       25.0       28.5       ug/L       114       61 - 132         Bromomethane       25.0       23.0       ug/L       92       55 - 144         Carbon disulfide       25.0       26.4       ug/L       102       59 - 134         Carbon tetrachloride       25.0       26.8       ug/L       107       72 - 134         Chlorobenzene       25.0       24.7       ug/L       103       75 - 125         Chlorobenzene       25.0       24.1       ug/L       113       75 - 125         Chlorothane       25.0       24.2       ug/L       103       73 - 127         Chloroform       25.0       25.6       ug/L       103       74 - 124         cis-1,2-Dichloropthene       25.0       25.0       27.0       ug/L       108       74 - 124         Cyclohexane	2-Butanone (MEK)	125	143		ug/L		114	57 - 140	
Acetone125139ug/L11156 · 142Benzene25.026.1ug/L10471 · 124Bromodichloromethane25.027.5ug/L11080 · 122Bromoform25.028.5ug/L11461 · 132Bromomethane25.028.5ug/L9255 · 144Carbon disulfide25.026.4ug/L10259 · 134Carbon tetrachloride25.026.8ug/L10772 · 134Chlorobenzene25.024.7ug/L9980 · 120Dibromochloromethane25.028.1ug/L11375 · 125Chlorothane25.026.6ug/L10373 · 127Chlorothane25.025.6ug/L10373 · 127Chloromethane25.025.027.0ug/L10874 · 124cis-1,2-Dichlorothene25.025.023.5ug/L10374 · 124cis-1,2-Dichloromethane25.025.027.0ug/L10874 · 124Cyclohexane25.025.027.0ug/L10874 · 124Cyclohexane25.025.026.0ug/L10477 · 123I.2-Dichloromethane25.025.026.0ug/L10477 · 123Dichlorodifluoromethane25.025.7ug/L10377 · 120Isopropylbenzene25.025.7ug/L10377 · 120Isopropylbenzene25.02	2-Hexanone	125	148		ug/L		119	65 - 127	
Benzene25.026.1ug/L10471.124Bromodichloromethane25.027.5ug/L11080.122Bromoform25.028.5ug/L11461-132Bromomethane25.023.0ug/L9255.144Carbon disulfide25.025.4ug/L10259.134Carbon tetrachloride25.026.8ug/L10772.134Chlorobenzene25.024.7ug/L9980.120Dibromochloromethane25.028.1ug/L11375.125Chlorobenzena25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.025.8ug/L10374.124cis-1,2-Dichloroptene25.027.0ug/L10874.124cis-1,3-Dichloroptene25.027.0ug/L10874.124Cyclohexane25.027.0ug/L10374.124Dichlorodifluoromethane25.027.0ug/L10874.124Cyclohexane25.027.5ug/L10374.124Dichlorodifluoromethane25.025.7ug/L10377.120Isopropylbenzene25.025.7ug/L10377.120Isopropylbenzene25.025.7ug/L10377.120Isopropylbenzene25.027.7ug/L10377.120Isopropylbenzene25.027.7	4-Methyl-2-pentanone (MIBK)	125	141		ug/L		113	71 - 125	
Bromodichloromethane         25.0         27.5         ug/L         110         80.122           Bromoform         25.0         28.5         ug/L         114         61.132           Bromomethane         25.0         23.0         ug/L         92         55.144           Carbon disulfide         25.0         25.4         ug/L         102         59.134           Carbon tetrachloride         25.0         26.8         ug/L         107         72.134           Chlorobenzene         25.0         24.7         ug/L         13         75.125           Chloroethane         25.0         24.7         ug/L         99         80.120           Dibromochloromethane         25.0         24.2         ug/L         97         69.136           Chloroethane         25.0         25.6         ug/L         103         73.127           Chloroform         25.0         25.8         ug/L         103         74.124           cis-1,2-Dichloroethene         25.0         25.8         ug/L         108         74.124           Cyclohexane         25.0         27.0         ug/L         108         74.124           Cyclohexane         25.0         25.0         2	Acetone	125	139		ug/L		111	56 - 142	
Bromoform25.028.5ug/L11461 - 132Bromomethane25.023.0ug/L9255 - 144Carbon disulfide25.025.4ug/L10259 - 134Carbon tetrachloride25.026.8ug/L10772 - 134Chlorobenzene25.024.7ug/L9980 - 120Dibromochloromethane25.024.7ug/L9769 - 136Chlorobenzene25.024.2ug/L9769 - 136Chlorothane25.025.6ug/L10373 - 127Chloromethane25.025.8ug/L10373 - 127Chloromethane25.025.8ug/L10374 - 124cis-1,2-Dichloroptene25.025.8ug/L10874 - 124cis-1,3-Dichloroptene25.027.0ug/L10874 - 124Cyclohexane25.025.7ug/L10477 - 123Dichlorodifluoromethane25.025.7ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.025.7ug/L10377 - 120Isopropylbenzene25.025.7ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Benzene	25.0	26.1		ug/L		104	71 - 124	
Bromomethane25.023.0ug/L9255.144Carbon disulfide25.025.4ug/L10259.134Carbon tetrachloride25.026.8ug/L10772.134Chlorobenzene25.024.7ug/L9980.120Dibromochloromethane25.028.1ug/L11375.125Chloroethane25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.025.023.3ug/L9368.124cis-1,2-Dichloroethene25.025.8ug/L10374.124cis-1,3-Dichloropropene25.023.5ug/L10874.124Cyclohexane25.027.0ug/L10477.123Dichlorodifluoromethane25.025.7ug/L10377.120Isopropylbenzene25.025.7ug/L10377.120Isopropylbenzene25.027.2ug/L10977.122Methyl acetate50.054.4ug/L10974.133	Bromodichloromethane	25.0	27.5		ug/L		110	80 - 122	
Carbon disulfide25.025.4ug/L10259.134Carbon tetrachloride25.026.8ug/L10772.134Chlorobenzene25.024.7ug/L9980.120Dibromochloromethane25.028.1ug/L11375.125Chlorobetnane25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.025.023.3ug/L9368.124cis-1,2-Dichloroethene25.025.8ug/L10374.124cis-1,3-Dichloropropene25.027.0ug/L10874.124Cyclohexane25.023.5ug/L9459.135Dichlorodifluoromethane25.025.027.0ug/L10477.1231,2-Dibromoethane25.025.7ug/L10377.120Isopropylbenzene25.027.2ug/L10977.122Methyl acetate50.054.4ug/L10974.133Methyl tert-butyl ether25.027.0ug/L10877.120	Bromoform	25.0	28.5		ug/L		114	61 - 132	
Carbon tetrachloride25.026.8ug/L10772.134Chlorobenzene25.024.7ug/L9980.120Dibromochloromethane25.028.1ug/L11375.125Chloroethane25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.023.3ug/L9368.124cis-1,2-Dichloroethene25.025.8ug/L10374.124cis-1,3-Dichloropropene25.027.0ug/L10874.124Cyclohexane25.023.5ug/L9459.135Dichlorodifluoromethane25.025.023.5ug/L701,2-Dibromoethane25.025.7ug/L10377.120Isopropylbenzene25.025.7ug/L10377.120Isopropylbenzene25.027.2ug/L10977.122Methyl acetate50.054.4ug/L10974.133Methyl tert-butyl ether25.027.0ug/L10877.120	Bromomethane	25.0	23.0		ug/L		92	55 - 144	
Chlorobenzene25.024.7ug/L9980.120Dibromochloromethane25.028.1ug/L11375.125Chloroethane25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.025.3ug/L9368.124cis-1,2-Dichloroethene25.025.8ug/L10374.124cis-1,3-Dichloropropene25.027.0ug/L10874.124Cyclohexane25.023.5ug/L9459.135Dichlorodifluoromethane25.025.026.0ug/L70Lyblenzene25.026.0ug/L10477.1231,2-Dibromoethane25.025.7ug/L10377.120Isopropylbenzene25.027.2ug/L10977.122Methyl acetate50.054.4ug/L10974.133Methyl tert-butyl ether25.027.0ug/L10877.120	Carbon disulfide	25.0	25.4		ug/L		102	59 - 134	
Dibromochloromethane25.028.1ug/L11375.125Chloroethane25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.023.3ug/L9368.124cis-1,2-Dichloroethene25.025.8ug/L10374.124cis-1,3-Dichloropropene25.027.0ug/L10874.124Cyclohexane25.023.5ug/L9459.135Dichlorodifluoromethane25.027.0ug/L7059.135Ethylbenzene25.026.0ug/L10477.1231,2-Dibromoethane25.025.7ug/L10377.120Isopropylbenzene25.027.2ug/L10977.122Methyl acetate50.054.4ug/L10974.133Methyl tert-butyl ether25.027.0ug/L10877.120	Carbon tetrachloride	25.0	26.8		ug/L		107	72 - 134	
Chloroethane25.024.2ug/L9769.136Chloroform25.025.6ug/L10373.127Chloromethane25.023.3ug/L9368.124cis-1,2-Dichloroethene25.025.8ug/L10374.124cis-1,3-Dichloropropene25.027.0ug/L10874.124Cyclohexane25.023.5ug/L9459.135Dichlorodifluoromethane25.025.017.5ug/L7059.135Ethylbenzene25.026.0ug/L10477.1231,2-Dibromoethane25.025.7ug/L10377.120Isopropylbenzene25.027.2ug/L10977.122Methyl acetate50.054.4ug/L10974.133Methyl tert-butyl ether25.027.0ug/L10877.120	Chlorobenzene	25.0	24.7		ug/L		99	80 - 120	
Chloroform25.025.6ug/L10373 - 127Chloromethane25.023.3ug/L9368 - 124cis-1,2-Dichloroethene25.025.8ug/L10374 - 124cis-1,3-Dichloropropene25.027.0ug/L10874 - 124Cyclohexane25.023.5ug/L9459 - 135Dichlorodifluoromethane25.017.5ug/L7059 - 135Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Dibromochloromethane	25.0	28.1		ug/L		113	75 - 125	
Chloromethane25.023.3ug/L9368 - 124cis-1,2-Dichloroethene25.025.8ug/L10374 - 124cis-1,3-Dichloropropene25.027.0ug/L10874 - 124Cyclohexane25.023.5ug/L9459 - 135Dichlorodifluoromethane25.017.5ug/L7059 - 135Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Chloroethane	25.0	24.2		ug/L		97	69 - 136	
cis-1,2-Dichloroethene25.025.8ug/L10374 - 124cis-1,3-Dichloropropene25.027.0ug/L10874 - 124Cyclohexane25.023.5ug/L9459 - 135Dichlorodifluoromethane25.017.5ug/L7059 - 135Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Chloroform	25.0	25.6		ug/L		103	73 - 127	
cis-1,3-Dichloropropene25.027.0ug/L10874 - 124Cyclohexane25.023.5ug/L9459 - 135Dichlorodifluoromethane25.017.5ug/L7059 - 135Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Chloromethane	25.0	23.3		ug/L		93	68 - 124	
Cyclohexane25.023.5ug/L9459 - 135Dichlorodifluoromethane25.017.5ug/L7059 - 135Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	74 <sub>-</sub> 124	
Dichlorodifluoromethane25.017.5ug/L7059 - 135Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	74 - 124	
Ethylbenzene25.026.0ug/L10477 - 1231,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Cyclohexane	25.0	23.5		ug/L		94	59 <sub>-</sub> 135	
1,2-Dibromoethane25.025.7ug/L10377 - 120Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Dichlorodifluoromethane	25.0	17.5		ug/L		70	59 - 135	
Isopropylbenzene25.027.2ug/L10977 - 122Methyl acetate50.054.4ug/L10974 - 133Methyl tert-butyl ether25.027.0ug/L10877 - 120	Ethylbenzene	25.0	26.0		ug/L		104	77 - 123	
Methyl acetate         50.0         54.4         ug/L         109         74 - 133           Methyl tert-butyl ether         25.0         27.0         ug/L         108         77 - 120	1,2-Dibromoethane	25.0	25.7				103	77 - 120	
Methyl acetate         50.0         54.4         ug/L         109         74 - 133           Methyl tert-butyl ether         25.0         27.0         ug/L         108         77 - 120	Isopropylbenzene	25.0	27.2		ug/L		109	77 _ 122	
Methyl tert-butyl ether         25.0         27.0         ug/L         108         77 - 120	Methyl acetate	50.0	54.4		-		109	74 - 133	
	Methyl tert-butyl ether	25.0	27.0		ug/L		108	77 - 120	
	Methylcyclohexane	25.0	23.1		ug/L		93	68 - 134	

Eurofins TestAmerica, Buffalo

Prep Type: Total/NA

**Client Sample ID: Method Blank** 

12/07/19 13:10

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

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

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

MD MD

### Lab Sample ID: LCS 480-508640/5 Matrix: Water

# Analysis Batch: 508640

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Methylene Chloride	25.0	26.7		ug/L		107	75 - 124
Styrene	25.0	27.1		ug/L		109	80 - 120
Fetrachloroethene	25.0	24.9		ug/L		100	74 <sub>-</sub> 122
Toluene	25.0	24.9		ug/L		100	80 - 122
rans-1,2-Dichloroethene	25.0	26.8		ug/L		107	73 - 127
ans-1,3-Dichloropropene	25.0	27.6		ug/L		110	80 - 120
richloroethene	25.0	25.6		ug/L		103	74 - 123
richlorofluoromethane	25.0	20.5		ug/L		82	62 - 150
/inyl chloride	25.0	22.6		ug/L		90	65 - 133

	LUS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	95		73 - 120
Dibromofluoromethane (Surr)	103		75 - 123

### Lab Sample ID: MB 480-508737/7 Matrix: Water Analysis Batch: 508737

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/09/19 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/09/19 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/09/19 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/09/19 10:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/09/19 10:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/09/19 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/09/19 10:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/09/19 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/09/19 10:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/09/19 10:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/09/19 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/09/19 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/09/19 10:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/09/19 10:59	1
2-Hexanone	ND		5.0	1.2	ug/L			12/09/19 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/09/19 10:59	1
Acetone	ND		10	3.0	ug/L			12/09/19 10:59	1
Benzene	ND		1.0	0.41	ug/L			12/09/19 10:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/09/19 10:59	1
Bromoform	ND		1.0	0.26	ug/L			12/09/19 10:59	1
Bromomethane	ND		1.0	0.69	ug/L			12/09/19 10:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/09/19 10:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/09/19 10:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/09/19 10:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/09/19 10:59	1
Chloroethane	ND		1.0	0.32	ug/L			12/09/19 10:59	1
Chloroform	ND		1.0	0.34	ug/L			12/09/19 10:59	1

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

14 15

Job ID: 480-163694-1

**Prep Type: Total/NA** 

**Client Sample ID: Lab Control Sample** 

# 7 8

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

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

### Lab Sample ID: MB 480-508737/7 Matrix: Water

Analysis Batch: 508737

-	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			12/09/19 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/09/19 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/09/19 10:59	1
Cyclohexane	ND		1.0	0.18	ug/L			12/09/19 10:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/09/19 10:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/09/19 10:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/09/19 10:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/09/19 10:59	1
Methyl acetate	ND		2.5	1.3	ug/L			12/09/19 10:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/09/19 10:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/09/19 10:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/09/19 10:59	1
Styrene	ND		1.0	0.73	ug/L			12/09/19 10:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/09/19 10:59	1
Toluene	ND		1.0	0.51	ug/L			12/09/19 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/09/19 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/09/19 10:59	1
Trichloroethene	ND		1.0	0.46	ug/L			12/09/19 10:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/09/19 10:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/09/19 10:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/09/19 10:59	1
	110	MD							

	MB MB					
Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac	
Toluene-d8 (Surr)	100	80 - 120		12/09/19 10:59	1	
1,2-Dichloroethane-d4 (Surr)	98	77 - 120		12/09/19 10:59	1	
4-Bromofluorobenzene (Surr)	98	73 - 120		12/09/19 10:59	1	
Dibromofluoromethane (Surr)	99	75 - 123		12/09/19 10:59	1	

### Lab Sample ID: LCS 480-508737/5 **Matrix: Water** Analysis Batch: 508737

· ······	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	73 - 126	-
1,1,2,2-Tetrachloroethane	25.0	25.4		ug/L		102	76 - 120	
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	76 - 122	
1,1,2-Trichloro-1,2,2-trifluoroetha	25.0	23.3		ug/L		93	61 - 148	
ne								
1,1-Dichloroethane	25.0	26.1		ug/L		104	77 - 120	
1,1-Dichloroethene	25.0	24.4		ug/L		98	66 - 127	
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	79 - 122	
1,2-Dibromo-3-Chloropropane	25.0	28.1		ug/L		112	56 - 134	
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	80 - 124	
1,2-Dichloroethane	25.0	23.6		ug/L		95	75 <sub>-</sub> 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	24.8		ug/L		99	80 - 120	
2-Butanone (MEK)	125	235	*	ug/L		188	57 - 140	
2-Hexanone	125	139		ug/L		112	65 - 127	

Eurofins TestAmerica, Buffalo

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Job ID: 480-163694-1

Prep Type: Total/NA

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

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

# Lab Sample ID: LCS 480-508737/5

### Matrix: Water Analysis Batch: 508737

Analysis Datch. 300737	Spike	1.09	LCS			%Rec.	
Analyte	Added		Qualifier	Unit	D %Rec	Limits	
4-Methyl-2-pentanone (MIBK)		134	Quaimer		$-\frac{1}{2}$ $\frac{107}{107}$	71 - 125	
Acetone	125	132		ug/L	105	56 - 142	
Benzene	25.0	24.4		ug/L	97	71 - 124	
Bromodichloromethane	25.0	25.2		ug/L	101	80 - 122	
Bromoform	25.0	26.8		ug/L	107	61 - 132	
Bromomethane	25.0	19.1		ug/L	76	55 <u>-</u> 144	8
Carbon disulfide	25.0	24.8		ug/L	99	59 - 134	
Carbon tetrachloride	25.0	25.8		ug/L	103	72 - 134	9
Chlorobenzene	25.0	23.7		ug/L	95	80 - 120	
Dibromochloromethane	25.0	26.5		ug/L	106	75 - 125	
Chloroethane	25.0	20.3		ug/L	81	69 - 136	
Chloroform	25.0	23.9		ug/L	96	73 - 127	
Chloromethane	25.0	24.4		ug/L	98	68 - 124	
cis-1,2-Dichloroethene	25.0	23.9		ug/L	96	74 - 124	
cis-1,3-Dichloropropene	25.0	25.9		ug/L	104	74 <sub>-</sub> 124	
Cyclohexane	25.0	26.2		ug/L	105	59 <sub>-</sub> 135	
Dichlorodifluoromethane	25.0	22.3		ug/L	89	59 - 135	
Ethylbenzene	25.0	25.0		ug/L	100	77 - 123	
1,2-Dibromoethane	25.0	24.3		ug/L	97	77 - 120	
Isopropylbenzene	25.0	26.2		ug/L	105	77 - 122	
Methyl acetate	50.0	51.6		ug/L	103	74 <sub>-</sub> 133	
Methyl tert-butyl ether	25.0	24.1		ug/L	97	77 - 120	
Methylcyclohexane	25.0	25.7		ug/L	103	68 - 134	
Methylene Chloride	25.0	24.2		ug/L	97	75 - 124	
Styrene	25.0	25.6		ug/L	102	80 - 120	
Tetrachloroethene	25.0	25.0		ug/L	100	74 - 122	
Toluene	25.0	23.7		ug/L	95	80 - 122	
trans-1,2-Dichloroethene	25.0	24.6		ug/L	99	73 - 127	
trans-1,3-Dichloropropene	25.0	25.6		ug/L	102	80 - 120	
Trichloroethene	25.0	24.6		ug/L	98	74 - 123	
Trichlorofluoromethane	25.0	21.9		ug/L	88	62 - 150	
Vinyl chloride	25.0	23.0		ug/L	92	65 - 133	

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

### Lab Sample ID: LCSD 480-508737/28 Matrix: Water Analysis Batch: 508737

### Spike LCSD LCSD %Rec. RPD Added Result Qualifier Unit Limits RPD Analyte D %Rec Limit 1,1,1-Trichloroethane 25.0 24.4 ug/L 98 73 - 126 0 15 1,1,2,2-Tetrachloroethane 25.0 24.8 ug/L 99 76 - 120 3 15 25.0 23.8 76 - 122 1,1,2-Trichloroethane ug/L 95 15 1 1,1,2-Trichloro-1,2,2-trifluoroetha 25.0 22.3 ug/L 89 61 - 148 4 20 ne

# Eurofins TestAmerica, Buffalo

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

3 4 5

# 8 9 10

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

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

### Lab Sample ID: LCSD 480-508737/28 Matrix: Water

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

Analysis Batch: 508737							Prep Ty	pe: Tot	al/NA
Analysis Baten. 000707	Spike		LCSD				%Rec.		RPD
Analyte	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1-Dichloroethane	25.0	24.7		ug/L		99	77 - 120	6	20
1,1-Dichloroethene	25.0	23.6		ug/L		94	66 - 127	3	16
1,2,4-Trichlorobenzene	25.0	25.1		ug/L		100	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	25.0	27.5		ug/L		110	56 - 134	2	15
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124	2	20
1,2-Dichloroethane	25.0	23.1		ug/L		92	75 - 120	2	20
1,2-Dichloropropane	25.0	24.9		ug/L		100	76 - 120	2	20
1,3-Dichlorobenzene	25.0	24.6		ug/L		98	77 _ 120	2	20
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 120	3	20
2-Butanone (MEK)	125	231	*	ug/L		185	57 - 140	2	20
2-Hexanone	125	140		ug/L		112	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125	2	35
Acetone	125	128		ug/L		103	56 - 142	3	15
Benzene	25.0	23.9		ug/L		96	71 - 124	2	13
Bromodichloromethane	25.0	25.8		ug/L		103	80 - 122	2	15
Bromoform	25.0	27.2		ug/L		109	61 - 132	2	15
Bromomethane	25.0	18.2		ug/L		73	55 - 144	5	15
Carbon disulfide	25.0	23.2		ug/L		93	59 - 134	7	15
Carbon tetrachloride	25.0	25.3		ug/L		101	72 - 134	2	15
Chlorobenzene	25.0	24.2		ug/L		97	80 - 120	2	25
Dibromochloromethane	25.0	27.6		ug/L		111	75 - 125	4	15
Chloroethane	25.0	17.8		ug/L		71	69 - 136	14	15
Chloroform	25.0	23.5		ug/L		94	73 - 127	2	20
Chloromethane	25.0	23.1		ug/L		92	68 - 124	6	15
cis-1,2-Dichloroethene	25.0	22.8		ug/L		91	74 <sub>-</sub> 124	5	15
cis-1,3-Dichloropropene	25.0	25.6		ug/L		103	74 <sub>-</sub> 124	1	15
Cyclohexane	25.0	24.6		ug/L		98	59 - 135	6	20
Dichlorodifluoromethane	25.0	22.2		ug/L		89	59 <sub>-</sub> 135	1	20
Ethylbenzene	25.0	25.1		ug/L		100	77 - 123	1	15
1,2-Dibromoethane	25.0	25.3		ug/L		101	77 - 120	4	15
Isopropylbenzene	25.0	25.5		ug/L		102	77 - 122	3	20
Methyl acetate	50.0	50.5		ug/L		101	74 - 133	2	20
Methyl tert-butyl ether	25.0	23.4		ug/L		94	77 - 120	3	37
Methylcyclohexane	25.0	24.6		ug/L		98	68 - 134	4	20
Methylene Chloride	25.0	23.2		ug/L		93	75 - 124	4	15
Styrene	25.0	25.7		ug/L		103	80 - 120	1	20
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122	0	20
Toluene	25.0	23.7		ug/L		95	80 - 122	0	15
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	73 - 127	3	20
trans-1,3-Dichloropropene	25.0	26.7		ug/L		107	80 - 120	4	15
Trichloroethene	25.0	23.4		ug/L		94	74 - 123	5	16
Trichlorofluoromethane	25.0	21.5		ug/L		86	62 - 150	2	20
Vinyl chloride	25.0	22.5		ug/L		90	65 <sub>-</sub> 133	2	15
				-					

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120

Lab Sample ID: LCSD 48	0-508737/28			Client Sample ID: Lab Control Sample Dup	
Matrix: Water Analysis Batch: 508737	0-500757720			Prep Type: Total/NA	
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits		5
Dibromofluoromethane (Surr)	98		75 - 123		
					8

# **QC** Association Summary

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

# Job ID: 480-163694-1

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atch	

Analysis	Batch:	508640
Analysis	Duton.	000040

**GC/MS VOA** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-163694-1	MW-12	Total/NA	Water	8260C	
480-163694-4	MW-07R	Total/NA	Water	8260C	
480-163694-5	MW-04	Total/NA	Water	8260C	
480-163694-6	EX-MW12	Total/NA	Water	8260C	
480-163694-7	MW-02R	Total/NA	Water	8260C	
480-163694-8	EX-MW-11R	Total/NA	Water	8260C	
480-163694-9	AL-2	Total/NA	Water	8260C	
480-163694-11	AL-7	Total/NA	Water	8260C	
480-163694-12	TRIP BLANK	Total/NA	Water	8260C	
MB 480-508640/7	Method Blank	Total/NA	Water	8260C	
LCS 480-508640/5	Lab Control Sample	Total/NA	Water	8260C	

# Analysis Batch: 508737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-163694-2	MW-09R	Total/NA	Water	8260C	
480-163694-3	FIELD DUPLICATE	Total/NA	Water	8260C	
480-163694-10	AL-1	Total/NA	Water	8260C	
MB 480-508737/7	Method Blank	Total/NA	Water	8260C	
LCS 480-508737/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-508737/28	Lab Control Sample Dup	Total/NA	Water	8260C	

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

Job ID: 480-163694-1

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Client Sam							Lab Sa		480-163694-
ate Collecte									Matrix: Wate
	u. 12/05/19 1	0.45							
	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	_
Total/NA	Analysis	8260C		2	508640	12/07/19 16:07	RJF	TAL BUF	
Client Sam	ole ID: MW	-09R					Lab Sa	mple ID:	480-163694-2
Date Collecte									Matrix: Wate
Date Received	d: 12/05/19 1	6:45							
-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	- 8260C		$-\frac{1000}{4}$	508737	12/09/19 11:32	-	TAL BUF	-
	, inaryolo	02000			000101	12/00/10 11:02	511		
Client Sam	ole ID: FIE		ATE				Lab Sa	imple ID:	480-163694-3
Date Collecte	d: 12/05/19 0	9:20							Matrix: Wate
Date Received	d: 12/05/19 1	6:45							
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	8260C			508737	12/09/19 11:57	BTP	TAL BUF	-
-									
Client Sami	ole ID: MW	-07R					Lab Sa	imple ID:	480-163694-
Date Collecte	d: 12/05/19 1	1:30							Matrix: Wate
Date Collecte	d: 12/05/19 1	1:30							Matrix: Wate
Date Collecte	d: 12/05/19 1	1:30		Dilution	Batch	Prepared			Matrix: Wate
Date Collecter Date Received	d: 12/05/19 1 d: 12/05/19 1	1:30 6:45	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab	Matrix: Wate
Date Collecte	d: 12/05/19 1 d: 12/05/19 1 Batch	1:30 6:45 Batch	Run			•	•	Lab TAL BUF	Matrix: Wate
Date Collecter Date Received Prep Type Total/NA	d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis	1:30 6:45 Batch Method 8260C	Run	Factor	Number	or Analyzed	RJF	TAL BUF	Matrix: Wate
Date Collecter Date Received Prep Type Total/NA Client Samp	d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis	1:30 6:45 Batch Method 8260C	Run	Factor	Number	or Analyzed	RJF	TAL BUF	480-163694-
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Date Collected Date Received Prep Type Total/NA Client Samp Date Collected	d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis ole ID: MW d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05	Run	Factor	Number	or Analyzed	RJF	TAL BUF	480-163694-
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Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected	d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: EX- d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MWV12 3:00		Factor       4       Dilution       Factor	Number 508640 Batch Number	or Analyzed 12/07/19 17:19 Prepared or Analyzed	RJF Lab Sa Analyst RJF	TAL BUF	480-163694- Matrix: Wate
Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected	d: 12/05/19 1 Batch Type Analysis DIE ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: EX- d: 12/05/19 1 d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MWV12 3:00 6:45		Factor       4       Dilution       Factor       4	Number 508640 Batch Number 508640	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43	RJF Lab Sa Analyst RJF	TAL BUF	480-163694- Matrix: Wate
Date Collecter Date Received Total/NA Client Samp Date Collecter Date Received Total/NA Client Samp Date Collecter Date Collecter Date Collecter Date Collecter Date Received	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 Hard State Analysis	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch	Run	Dilution Dilution Dilution	Number 508640 Batch Number 508640 Batch	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared	RJF Lab Sa Analyst RJF Lab Sa	TAL BUF	480-163694- Matrix: Wate
Prep Type Total/NA Client Samp Date Collected Date Received Total/NA Client Samp Date Collected Date Received Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Prep Type	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 d: 12/05/19 1 Batch Type	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch Method		Factor         4         Dilution         Factor         4         Dilution         Factor         4	Number 508640 Batch Number 508640 Batch Number	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed	RJF Lab Sa Analyst RJF Lab Sa Analyst	Lab TAL BUF	480-163694- Matrix: Wate
Prep Type Total/NA Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Collected Date Collected	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 Hard State Analysis	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch	Run	Dilution Dilution Dilution	Number 508640 Batch Number 508640 Batch	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared	RJF Lab Sa Analyst RJF Lab Sa Analyst	TAL BUF	480-163694- Matrix: Wate
Date Collecter Date Received Total/NA Client Samp Date Collecter Date Received Total/NA Client Samp Date Collecter Date Collecter Date Received Date Received Date Received Date Received	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 d: 12/05/19 1 d: 12/05/19 1 d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch Method 8260C	Run	Factor         4         Dilution         Factor         4         Dilution         Factor         4	Number 508640 Batch Number 508640 Batch Number	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed	RJF Lab Sa Analyst RJF Lab Sa Analyst RJF	TAL BUF	480-163694- Matrix: Wate 480-163694- Matrix: Wate
Prep Type Total/NA Client Samp Date Collected Date Collected Date Collected Date Collected Date Collected Date Collected Date Collected Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Client Samp Date Collected Date Received	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1	1:30 6:45 Batch Method 8260C -04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch Batch Method 8260C	Run	Factor         4         Dilution         Factor         4         Dilution         Factor         4	Number 508640 Batch Number 508640 Batch Number	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed	RJF Lab Sa Analyst RJF Lab Sa Analyst RJF	TAL BUF	480-163694- Matrix: Wate 480-163694- Matrix: Wate
Prep Type Total/NA Client Samp Date Collected Date Collected Date Collected Date Collected Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Collected Date Collected Date Collected Date Collected Date Collected Date Collected	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 Die ID: MW d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch Method 8260C 7-02R 3:40	Run	Factor         4         Dilution         Factor         4         Dilution         Factor         4	Number 508640 Batch Number 508640 Batch Number	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed	RJF Lab Sa Analyst RJF Lab Sa Analyst RJF	TAL BUF	480-163694- Matrix: Wate 480-163694- Matrix: Wate
Date Collected Date Received Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received	d: 12/05/19 1 Batch Type Analysis DIE ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: EX- d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: EX- d: 12/05/19 1 d: 12/05/19 1 d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch Method 8260C 7-02R 3:40 6:45	Run	Factor         4         0         1         0	Number 508640 Batch Number 508640 Batch Number 508640	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed 12/07/19 18:08	RJF Lab Sa Analyst RJF Lab Sa Analyst RJF	TAL BUF	480-163694- Matrix: Wate 480-163694- Matrix: Wate
Date Collected Date Received Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received	d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 Die ID: MW d: 12/05/19 1 Batch Type Analysis Die ID: EX- d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 Batch Type Analysis Die ID: MW d: 12/05/19 1 Batch Type Analysis	1:30 6:45 Batch Method 2:05 6:45 Batch Method 8260C MVV12 3:00 6:45 Batch Method 8260C C V-02R 3:40 6:45 Batch Batch Batch	Run	Factor         4         0         Dilution         Factor         4         0	Number 508640 Batch Number 508640 Batch Batch	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed 12/07/19 18:08 Prepared	RJF Lab Sa Analyst RJF Lab Sa Analyst RJF Lab Sa	TAL BUF	Matrix: Wate 480-163694- Matrix: Wate 480-163694- Matrix: Wate
Date Collected Date Received Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received Prep Type Total/NA Client Samp Date Collected Date Received	d: 12/05/19 1 Batch Type Analysis DIE ID: MW d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: EX- d: 12/05/19 1 d: 12/05/19 1 Batch Type Analysis DIE ID: EX- d: 12/05/19 1 d: 12/05/19 1 d: 12/05/19 1	1:30 6:45 Batch Method 8260C 7-04 2:05 6:45 Batch Method 8260C MW12 3:00 6:45 Batch Method 8260C 7-02R 3:40 6:45	Run	Factor         4         0         1         0	Number 508640 Batch Number 508640 Batch Number Batch Number	or Analyzed 12/07/19 17:19 Prepared or Analyzed 12/07/19 17:43 Prepared or Analyzed 12/07/19 18:08	RJF Lab Sa Analyst RJF Lab Sa Analyst RJF Lab Sa	TAL BUF	480-163694- Matrix: Wate 480-163694- Matrix: Wate

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

163694-1	Job ID: 48				i	ew Reports			Client: LaBella A Project/Site: Alu
63694-8 ix: Water	ple ID: 480 M	Lab Sar					4:20	12/05/19 14	Client Sampl Date Collected: Date Received:
			Prepared	Batch	Dilution		Batch	Batch	Γ
	ab	Analyst	or Analyzed	Number	Factor	Run	Method	Туре	Prep Type
	AL BUF	RJF	12/07/19 18:56	508640	20		8260C	Analysis	Total/NA
63694-9	ple ID: 480	Lab Sar					2	e ID: AL-	<b>Client Sampl</b>
ix: Water	M						5:10	12/05/19 1	Date Collected:
							6:45	12/05/19 10	Date Received:
			Prepared	Batch	Dilution		Batch	Batch	
	ab	Analyst	or Analyzed	Number	Factor	Run	Method	Туре	Prep Type
	AL BUF	RJF	12/07/19 19:20	508640			8260C	Analysis	Total/NA
3694-10	le ID: 480-	ab Sam	L				1	e ID: AL-	<b>Client Sampl</b>
ix: Water	М								Date Collected: Date Received:
			Prepared	Batch	Dilution		Batch	Batch	Γ
	ab	Analyst	or Analyzed	Number	Factor	Run	Method	Туре	Prep Type
	AL BUF	BTP	12/09/19 12:21	508737	4		8260C	Analysis	Total/NA
3694-11	le ID: 480-	ab Sam	L				7	e ID: AL-	<b>Client Sampl</b>
ix: Water	Μ								Date Collected:
							6:45	12/05/19 10	Date Received:
			Prepared	Batch	Dilution		Batch	Batch	
	ab	Analyst	or Analyzed	Number	Factor	Run	Method	Туре	Prep Type
	AL BUF	RJF	12/07/19 20:09	508640	1		8260C	Analysis	Total/NA
3694-12	le ID: 480-	ab Sam	L				P BLANK	e ID: TRII	<b>Client Sampl</b>
ix: Water	Μ								Date Collected:
							6:45	12/05/19 10	Date Received:
			Prepared	Batch	Dilution		Batch	Batch	
	ab	Analyst	or Analyzed	Number	Factor	Run	Method	Туре	Prep Type
	AL BUF	RJF	12/07/19 20:33	508640	1		8260C	Analysis	Total/NA

Lab Chronicle

Laboratory References:

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

12/12/2019

# Project/Site: Alumax & Roblin Periodic Review Reports Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Prog	ram Identif	ication Number Expi	ration Date
New York	NELA	P 10026	03-31	-20

Client: LaBella Associates DPC

Job ID: 480-163694-1

# **Method Summary**

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

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

### **Protocol References:**

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

### Laboratory References:

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

# Sample Summary

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

Job ID: 480-163694-1

ab Sample ID	Client Sample ID	Matrix	Collected	Received	Ass
30-163694-1	MW-12	Water	12/05/19 09:20	12/05/19 16:45	
30-163694-2	MW-09R	Water	12/05/19 10:45	12/05/19 16:45	
30-163694-3	FIELD DUPLICATE	Water	12/05/19 09:20	12/05/19 16:45	
30-163694-4	MW-07R	Water	12/05/19 11:30	12/05/19 16:45	
30-163694-5	MW-04	Water	12/05/19 12:05	12/05/19 16:45	
80-163694-6	EX-MW12	Water	12/05/19 13:00	12/05/19 16:45	
80-163694-7	MW-02R	Water	12/05/19 13:40	12/05/19 16:45	
0-163694-8	EX-MW-11R	Water	12/05/19 14:20	12/05/19 16:45	
80-163694-9	AL-2	Water	12/05/19 15:10	12/05/19 16:45	
30-163694-10	AL-1	Water	12/05/19 15:45	12/05/19 16:45	
30-163694-11	AL-7	Water	12/05/19 16:30	12/05/19 16:45	
30-163694-12	TRIP BLANK	Water	12/05/19 00:00	12/05/19 16:45	

uffalo	
nerica, B	
TestAm	d Drive
Eurofins	10 Hazelwood

Chain of Custody Record

Curofins Environment Testing

Client Information	Sampler:	Lab PM: Fischer, Brian J	Srian J	Carrier Tracking No(s):	COC No: 480-139004-28077.1
lient contact Chris Kibler	Phone: 716-78-4	OC E-Mail: brian.fisc	E-Mail: brian.fischer@testamericainc.com	-	Page: Page 1 of
company: _aBella Associates DPC		-	Analysis		HQ00 CT # 400
kdress: 300 Pearl Street Suite 130	Due Date Requested: JAC	day			
Sity: Buffalo	TAT Requested (days):				- nexane - None - AsNaO2
state, Zip: NY, 14202	al-shape	annesk:	/	700-163694 Chain of Custo	P - Na204S Q - Na2203
Phone: 7)(L-7C8-4906	Po #. Purchase Order Requested	(0		Apoien	T - TSP Dodecahydrate
Email: CKibler@labellapc.com	,# OW	a company of the second second	(on	12	J - DI Water
Project Name: Former Roblin Steel & Alumax Ext Sites	Project #: 48015183	CALL COLORISON	10 58	Ienist	K - EDIA L - EDA
Forner Robin + Alunex Ext Sith	Ssow#.	and the second second	The second second	01 COT	Other:
	Sample	Matrix (w=water, S=solid, O=waste/oli,	9170 - 701 W	admuN leso	
sample identification	Sampre Date Imme G-9	-	1 2		Special Instructions/Note:
MU-12	12-5-19 920 6	Water	X		
. APLUM	12-5-PI 10-5 G	Water	×		0.0
Field Rulicite.	125-9 920	G Water	×		K VECKCAR
P	12-5-19 1130 (	- Water	X	~	and school of
- FIC	12-5-19 1205 (	Water	X		Trip Blank
EX-MURY.	12-5-9 300	5 Ucter	×		RIVJUL WYS
MU-02R	1340 1340	5 Water	×		(2000)
EX-DU-11R.	1420	6 Loter	×		
AL-J.	V	itater	X		~
91-1	54 1545 (	5 Loted	×		0
, C-JA	125-19/1630 (	5 Water	×		0
ant	Poison B Unknown	Radiological	Sample Disposal ( A fee may	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Mon	tained longer than 1 month) Archive For Months
, III, IV, Other (specify)	ASP Cet B	0	Special Instructions/QC Requirements.	Also regues	( E00'S
linquished by:		Tin	Time:		
Relinquished by:	DateTime: 13 5-61 / 16 45	Company	Received by: WWW W	OW CILLO PATRIME. 12	CL Liedundo 9161/201
Relinquisheeby:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Custody Seal No.: $\Delta$ Yes $\Delta$ No			Cooler Temperature(s) °C and Other Remarks:	er Remarks: 2,5 th	31 4
					Ver: 01/16/2019

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12/12/2019

### Client: LaBella Associates DPC

### Login Number: 163694 List Number: 1 Creator: Stopa, Erik S

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.	N/A	
Chlorine Residual checked.	N/A	

List Source: Eurofins TestAmerica, Buffalo