



Metalico Aluminum Recovery, Inc.

6223 Thompson Road • Syracuse, NY 13206
P.O. Box 88 • East Syracuse, NY 13057
(315) 463-9500 • Fax (315) 463-9290
Facility #7106946

October 5, 2021

Eric Hausamann, P.E., Project Manager
New York State Department of Environmental Conservation
Remedial Section B, Remedial Bureau E, 12th Floor
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7017

Re: Former Roth Bros. Smelting Corp. Site
Corrective Action Management Unit (CAMU)
6223 Thompson Road, DeWitt, New York
Consent Order C7-0001-94-10

Dear Mr. Hausamann:

Enclosed please find one copy of the Corrective Action Management Unit (CAMU) Groundwater Performance Monitoring Report for the June 2021 annual monitoring event. The report has been copied electronically to as requested.

Barton & Loguidice, D.P.C. (B&L) prepared the report. The B&L technical contact is Jeff Reed and you may contact Mr. Reed directly if you have any questions regarding the report or any of the attached data.

Sincerely,

METALICO ALUMINUM RECOVERY, INC.

A handwritten signature in blue ink that reads "Ginny Hopkins".

Ginny Hopkins
EH&S Manager

MPS/GH

Enclosure

cc: Harry D. Warner, P.E. NYSDEC Region 7 (w/enclosure)
Margaret Sheen, Esq. NYSDEC Region 7(w/enclosure)

Groundwater Performance Monitoring Report

Roth Bros. Smelting Corp.
Corrective Action Management Unit (CAMU)

East Syracuse, Onondaga County, New York

Prepared for

Metalico Aluminum Recovery, Inc.

6223 Thompson Road

P.O. Box 88

East Syracuse, New York 13057

June 2021 Sampling

Roth Bros. Smelting Corp.
Corrective Action Management Unit (CAMU)
East Syracuse, Onondaga County, New York

Groundwater Performance Monitoring Report

June 2021 Sampling

Prepared for

Metalico Aluminum Recovery, Inc.
6223 Thompson Road
P.O. Box 88
East Syracuse, New York 13057

Prepared by

Barton & Loguidice, D.P.C.
443 Electronics Parkway
Liverpool, New York 13088



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1.0 INTRODUCTION

This report presents the results of the June 2021 groundwater monitoring performed at the Corrective Action Management Unit (CAMU) located at the former Wabash Aluminum Alloys, LLC (Wabash) facility located at 6223 Thompson Road, East Syracuse, Onondaga County, New York (Site). The Plant #2 portion of the site is owned by Metalico Syracuse Realty, Inc. (MSR), and Thompson Corners, LLC owns the Plant #1 portion of the Site.

Figure 1 shows the location of the Plant #1 and Plant #2 properties. The asphalt-paved CAMU area is located north of Plant #2. The monitoring locations associated with the CAMU groundwater performance monitoring, are included on Figure 1.

Metalico Aluminum Recovery, Inc. (MARI) currently operates a scrap metal recycling facility and formerly operated a secondary aluminum smelting operation at the MSR portion of the site. MARI discontinued the aluminum smelting operation in October 2015. By agreement with Wabash, MARI assumed “Wabash’s obligations to conduct ongoing environmental monitoring and testing at the Site” under a Consent Order with the New York State Department of Environmental Conservation (NYSDEC) that was entered into by Roth Bros. Smelting Corp. (Index # C7-0001-94-10), the owner of the Site at the time the CAMU was constructed. To satisfy this contractual obligation, MARI retained Barton & Loguidice, D.P.C., to prepare this report.

This report has been prepared in accordance with the site Operations and Maintenance Plan (Malcolm Pirnie, 1997) and the subsequent Sampling & Analysis Plan revisions [Appendix D to the Operations and Maintenance Plan] as a result of letter correspondence with NYSDEC in 2002, and the approval letter from NYSDEC in April 2011.

Groundwater sampling was performed on a quarterly basis prior to June 2005 after which semi-annual monitoring was performed through 2010. Beginning with the June 2011 monitoring event, sampling is now performed on an annual basis in June of each year. This report addresses the June 2021 annual monitoring event.

Barton & Loguidice, D.P.C. (B&L) collected samples from the eight (8) monitoring well locations that comprise the CAMU active monitoring network on June 8, 2021. All samples were submitted to ALS Environmental (ALS) in Rochester, New York for analysis.

2.0 CAMU GROUNDWATER PERFORMANCE MONITORING

2.1 Monitoring Well Inspection

The following monitoring wells are sampled as part of the CAMU Groundwater Monitoring Performance Program (see Figure 1):

B291	B281	B290	B401
B402R	B403	B404	MW-8R

Over the course of time, several CAMU monitoring wells have been inadvertently damaged, destroyed, or needed maintenance, including:

- Monitoring well B280, formerly located north of the CAMU, was destroyed in September 2000. Based on its adjacent location, monitoring well B291 replaced monitoring well B280.
- Between the June 2004 and September 2004 sampling events, monitoring well B402 was destroyed. Monitoring well B402R was installed in November 2005 and sampling began with the December 2005 sampling event. The destroyed well (B402) was properly decommissioned using a rotary drilling rig on April 24, 2007.
- Monitoring well MW-8, installed as part of the 2001 Groundwater Investigation, was destroyed during construction of scrap yard improvements. Subsequently, monitoring well MW-8R was installed adjacent to the MW-8 location for inclusion in the CAMU Groundwater Performance Monitoring Program. The wellhead for monitoring well MW-8R was replaced on April 24, 2007 due to deterioration as the flush mounted well was set in a high traffic working area.
- On April 24, 2007, the area surrounding well B291 was cleared of vegetation, and the existing damaged flush-mounted well cover was removed and replaced with a stick-up-type protective casing installed in a concrete base. The wellhead was vertically surveyed relative to well B402R, with the new reference elevation being calculated at 410.86. A new, lockable well plug was installed in the well opening.
- In an effort to avoid further well damage or loss prior to the December 2008 sampling event, all of the facility monitoring wells were painted, labeled and affixed with pole extensions and flagging. The wells were also fitted with new keyed alike locks. It was also noted that all the wells had old deteriorating polyethylene tubing dedicated to each well, which is not a standard field sampling practice. All of the old tubing was removed from the wells and disposed of. New tubing for each well is now utilized during each round of sampling and then removed and disposed of properly when sampling is completed.

- In late 2012, the drainage swale piping enclosure along the east side of the CAMU was extended. The extension of this enclosure eliminated access to the open surface water and sediment monitoring locations.

2.2 Groundwater Monitoring Work

This section describes the field and laboratory procedures that were followed during this monitoring event. Table 1 provides a summary of the sampling frequency and the analytical parameters for each monitoring well for the CAMU groundwater monitoring program that began in 1998.

(a) Groundwater Contour Map

Prior to the sampling of the groundwater monitoring wells, the static water level of each monitoring well was measured. This work was performed using an electronic water level sensor capable of measuring to an accuracy of +/- 0.01 foot. The water level probe was decontaminated between wells by washing in an Alconox/water solution and rinsing with distilled water.

Figure 1 presents a groundwater contour map that reflects the water level data, which is set forth in Table 2. Table 2 also includes historical water level data prior groundwater sampling events.

The contour map indicates that the general groundwater flow direction at the Site is to the northeast toward the South Branch of Ley Creek. This finding is consistent with historical groundwater contour data.

(b) Groundwater Sampling & Analysis

Each of the monitoring wells was purged prior to sampling. Water surface elevations and field parameters (pH and Specific Conductance) were measured immediately prior to sample collection.

Purging of monitoring wells was performed with disposable bailers until a minimum of three (3) well volumes were removed or until the well went dry. After the monitoring wells were allowed to recharge overnight, groundwater samples were collected using a low-flow peristaltic pump with non-dedicated tubing at each location.

Collected samples were placed into clean coolers and kept on ice at 4°C until delivery to the laboratory for analysis.

Appendix A includes the field sampling data sheets and chain of custody records associated with this round of sampling.

(c) Monitoring Results

Appendix B contains the analytical laboratory reports prepared by ALS Environmental (New York NELAC Laboratory I.D. # 10145). Table 3 provides an historical summary of the analytical groundwater data for this project, including the results of the June 2021 groundwater monitoring. Data are highlighted, as appropriate, to indicate detected concentrations that exceed the following NYSDEC Class GA Groundwater Standards:

Parameter	Class GA Standard
pH	6.5 – 8.5 Std. Units
Lead	0.025 mg/L
Arsenic	0.025 mg/L
Aroclor 1016	0.09 µg/L*
Aroclor 1221	0.09 µg/L*
Aroclor 1232	0.09 µg/L*
Aroclor 1242	0.09 µg/L*
Aroclor 1248	0.09 µg/L*
Aroclor 1254	0.09 µg/L*
Aroclor 1260	0.09 µg/L*
Aroclor 1262	0.09 µg/L*
Aroclor 1268	0.09 µg/L*
<u>Notes:</u> *Limit applies to sum of all Aroclors	

The results of the June 2021 sampling event indicate that the groundwater quality conditions at the CAMU have remained consistent since the last monitoring event and appear to generally correspond with historical groundwater quality data. Monitoring location MW-8R continues to show signs that the well integrity is compromised such that the well should be decommissioned and removed from the CAMU monitoring program. As noted on the 2021 field data sheet for MW-8R, the well cap was missing and the casing was damaged likely from heavy equipment operations in the scrap yard. The well plug was found intact and in place in the PVC riser. MARI will replace the well collar and cap to protect the PVC riser and plug, and to prevent surface infiltration from entering the monitoring well.

During the 2019 and 2020 sampling events it was noted that the ribbon drain between MW-8R and the metal turnings storage bays appeared to be compromised. This ribbon drain is designed to capture any liquid seeping from the materials located in the storage bays. MARI has made a concerted effort to keep the ribbon drain clear of scrap yard material and sediment, and is now maintained on a quarterly basis. As a result the

ribbon drain is now functioning as designed and any liquids seeping from the storage bays are being captured in the ribbon drain and flow to the adjacent collection tank.

The following sections summarize the analytical data collected during this sampling event:

pH – The Class GA standard for pH was not exceeded for any monitoring location.

PCBs – During the June 2021 monitoring event the NYSDEC Class GA groundwater standard for PCBs (0.09 µg/L) was exceeded at MW-8R (13 µg/L).

Monitoring location MW-8R is a flush mounted surface well which recharges slowly and is located in a high traffic working area of the facility up-gradient of the CAMU. This monitoring well is located directly adjacent to a car dismantling area, a former used engine block storage area, a metal turnings storage area, and is also near a former facility transformer location. Previous CAMU Annual Reports have documented damages to the MW-8R monitoring well cap and casing due to the high traffic volume and yard activities that occur at this location. During the 2021 annual monitoring event the well cap was observed to be missing and the well casing damaged. The integrity of the well screen has also been reported as a concern based on the inflow of gravel and debris observed in the purge water. MW-8R is also located up-gradient from the CAMU and is not needed as a CAMU monitoring well as B281 is also located up-gradient from the CAMU. Given the concerns with the integrity of MW-8R and its up-gradient location, we recommend that this well be properly pressure grouted, decommissioned and removed from the CAMU monitoring program.

No other PCB detections were reported within the remaining monitoring locations for the June 2021 monitoring event.

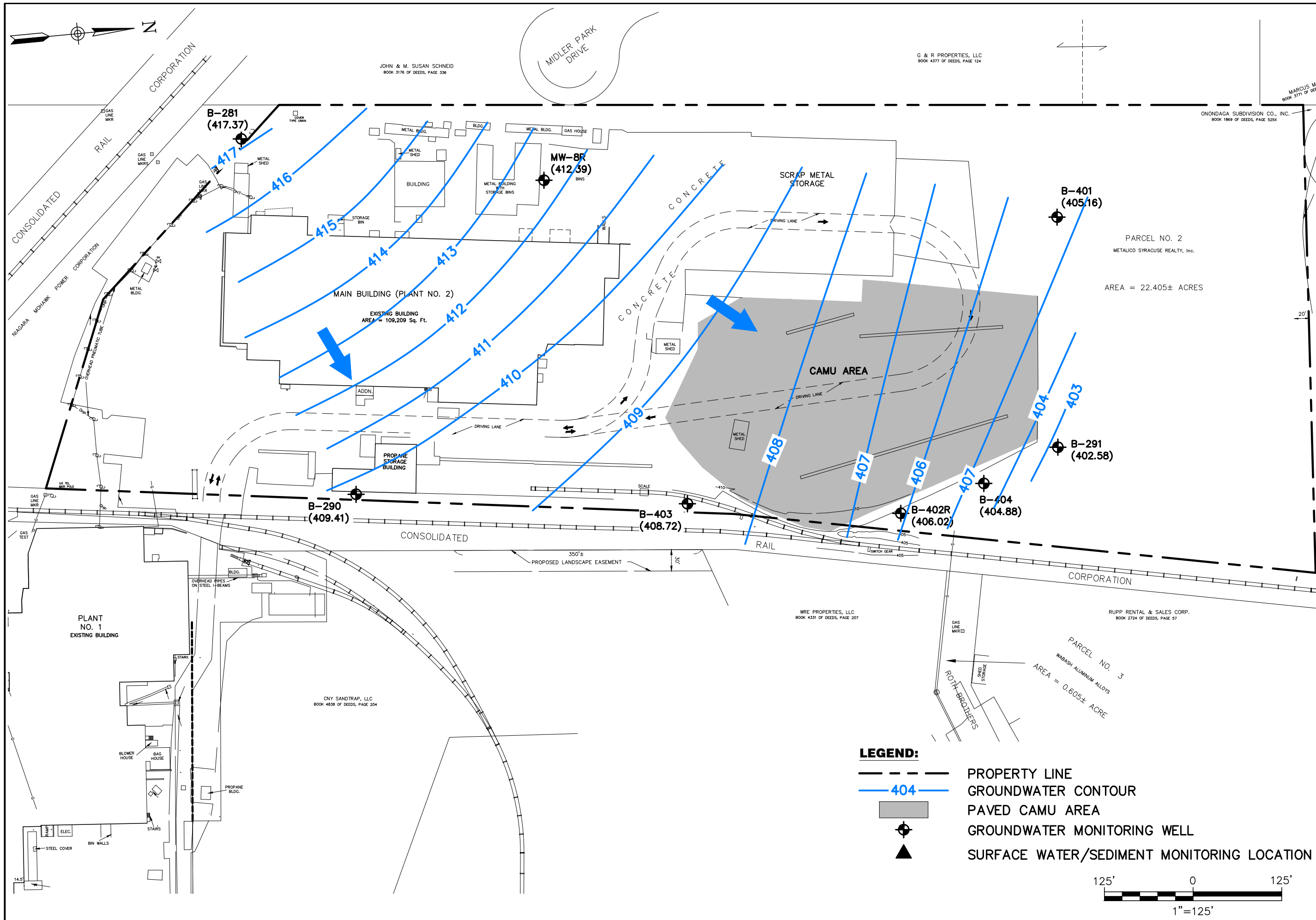
Specific Conductivity – Monitoring well location MW-8R exhibits elevated specific conductivity results when compared to other monitoring locations, but the 2021 value continues to demonstrate an overall decreasing trend since 2017. No Class GA standard for specific conductivity is currently established. Historically, salts used in various processes at the plant were stockpiled in a storage bay immediately adjacent to flush mounted MW-8R monitoring well. It is suspected that the surface contamination likely infiltrated the flush mounted well in the high traffic area resulting in elevated conductivity readings. Gravel and sediment in the bottom of the well suggest that its integrity has been compromised. As discussed above, we recommend that MW-8R be properly decommissioned and removed from the CAMU monitoring program.

Total & Dissolved Lead – During the June 2021 monitoring event, monitoring location MW-8R (0.052 mg/L) exceeded the Class GA standards of 0.025 mg/L for total lead. However, no dissolved lead was detected in the field filtered sample suggesting that lead is not present within the groundwater but rather is related to fine sediment entering through the well screen during sampling. Total and dissolved lead have previously been detected within monitoring locations B290, B402R, and MW-8R as indicated in the historical data included in Table 3.

Total & Dissolved Arsenic – During the June 2021 monitoring event monitoring location MW-8R exceeded the Class GA standard of 0.025 mg/L for both total arsenic (0.028 mg/L) and dissolved arsenic (0.033 mg/L). Total and dissolved arsenic have been detected at concentrations slightly above the groundwater standard within MW-8R during recent monitoring events. Total arsenic was also detected within MW-290 at a concentration of 0.022 mg/l, below the Class GA groundwater standard. No other locations demonstrated detections of total or dissolved arsenic during the 2021 annual monitoring event.

FIGURE 1
Groundwater Contour Map

Plotted: Aug 11, 2021 - 11:28AM SYR By: bas
 Z:\BL-Vault\ID2\18217AD2-1C71-4823-8927-99D5C4054147\0\2087000-2087999\2087409\L\1206002_CW CONTS_JUNE 2021.dwg



METALICO ALUMINUM RECOVERY, INC.
 FACILITY NO. 7102372
 JUNE 2021
 GROUNDWATER CONTOUR MAP
 ONONDAGA COUNTY, NEW YORK

Barton & Loguidice

Date	AUGUST 2021
Scale	1" = 125'
Figure Number	1
Project Number	1206.002.007

TABLE 1
CAMU Monitoring Schedule

Table 1
ROTH BROS. SMELTING CORP.
Corrective Action Management Unit (CAMU)
Monitoring Schedule

Sampling Frequency	Parameter	Analytical Method	MDL	Well Location
Annual (June)	Arsenic (Total and Dissolved)	EPA Method 6010C	10 ug/L	B281
	Lead (Total and Dissolved)		50 ug/L	B290
	PCB's	EPA Method 8082A	0.050 ug/L	B291 B401 B402R B403 B404 MW-8R

TABLE 2
Groundwater Level Data

Table 2
ROTH BROS. SMELTING CORP.
Corrective Action Management Unit (CAMU)
Groundwater Performance Monitoring
Groundwater Elevation Summary Table

Page 1 of 2

Monitoring Well	B281		B290		B291		B401	
WELL DEPTH (FT):	13.03		10.26		12.54		13.03	
REFERENCE ELEVATION:	423.39		414.61		410.86		413.54	
DATE	ELEVATION	SWL	ELEVATION	SWL	ELEVATION	SWL	ELEVATION	SWL
07-Jun-21	417.37	6.02	409.41	5.20	402.58	8.28	405.16	8.38
16-Jun-20	416.90	6.49	409.37	5.24	402.39	8.47	404.99	8.55
17-Jun-19	418.92	4.47	409.73	4.88	403.40	7.46	407.98	5.56
13-Jun-18	417.32	6.07	409.39	5.22	403.00	7.86	406.27	7.27
28-Jun-17	418.51	4.88	409.60	5.01	403.97	6.89	407.42	6.12
27-Jun-16	416.09	7.30	409.33	5.28	401.80	9.06	404.41	9.13
25-Jun-15	417.77	5.62	409.53	5.08	403.27	7.59	406.94	6.60
10-Jun-14	417.39	6.00	409.52	5.09	402.73	8.13	406.14	7.40
13-Jun-13	419.88	3.51	410.23	4.38	405.34	5.52	408.43	5.11
18-Jun-12	417.31	6.08	409.25	5.36	402.37	8.49	405.11	8.43
22-Jun-11	419.27	4.12	409.71	4.90	403.35	7.51	405.50	8.04
29-Dec-10	418.82	4.57	409.63	4.98	404.14	6.72	407.42	6.12
23-Jun-10	419.53	3.86	409.69	4.92	404.81	6.05	407.79	5.75
16-Dec-09	419.28	4.11	409.71	4.90	403.95	6.91	408.48	5.06
29-Jun-09	413.75	9.64	409.50	5.11	403.53	7.33	406.84	6.70
18-Dec-08	419.31	4.08	409.63	4.98	404.43	6.43	408.39	5.15
05-Jun-08	417.18	6.21	404.35	10.26	403.72	7.14	404.62	8.92
31-Dec-07	416.66	6.73	409.77	4.84	404.73	6.13	408.33	5.21
29-Jun-07	416.44	6.95	410.38	4.23	401.96	8.90	404.83	8.71
19-Dec-06	420.25	3.14	409.57	5.04	404.43	6.43	407.30	6.24

Table 2
ROTH BROS. SMELTING CORP.
Corrective Action Management Unit (CAMU)
Groundwater Performance Monitoring
Groundwater Elevation Summary Table

Page 2 of 2

Monitoring Well	B402R		B403		B404		MW-8R	
WELL DEPTH (FT):	12.24		11.26		16.14		10.00	
REFERENCE ELEVATION:	409.44		411.05		410.77		415.30	
DATE	ELEVATION	SWL	ELEVATION	SWL	ELEVATION	SWL	ELEVATION	SWL
07-Jun-21	406.02	3.42	408.72	2.33	404.88	5.89	412.39	2.91
16-Jun-20	405.84	3.60	407.47	3.58	404.50	6.27	411.20	4.10
17-Jun-19	407.11	2.33	408.47	2.58	407.46	3.31	411.90	3.40
13-Jun-18	406.12	3.32	407.79	3.26	404.90	5.87	411.68	3.62
28-Jun-17	406.66	2.78	408.03	3.02	406.79	3.98	411.71	3.59
27-Jun-16	405.04	4.40	406.74	4.31	403.89	6.88	411.31	3.99
25-Jun-15	406.24	3.20	407.61	3.44	405.14	5.63	412.62	2.68
10-Jun-14	405.98	3.46	407.37	3.68	405.14	5.63	412.21	3.09
13-Jun-13	406.69	2.75	408.26	2.79	408.37	2.40	412.95	2.35
18-Jun-12	405.03	4.41	406.95	4.10	404.33	6.44	412.46	2.84
22-Jun-11	405.73	3.71	407.94	3.11	406.08	4.69	412.54	2.76
29-Dec-10	406.64	2.80	407.98	3.07	406.73	4.04	412.18	3.12
23-Jun-10	406.62	2.82	408.23	2.82	407.84	2.93	412.64	2.66
16-Dec-09	406.64	2.80	408.11	2.94	407.56	3.21	411.92	3.38
29-Jun-09	406.46	2.98	408.05	3.00	406.66	4.11	412.72	2.58
18-Dec-08	406.81	2.63	407.91	3.14	406.92	3.85	412.59	2.71
05-Jun-08	405.56	3.88	407.42	3.63	405.42	5.35	411.88	3.42
31-Dec-07	406.97	2.47	408.08	2.97	407.27	3.50	412.45	2.85
29-Jun-07	405.32	4.12	407.20	3.85	404.27	6.50	411.93	3.37
19-Dec-06	405.47	3.97	408.01	3.04	406.76	4.01	412.00	3.30

TABLE 3
Groundwater Performance Monitoring Data

Table 3
ROTH BROS. SMELTING CORP.
Corrective Action Management Unit (CAMU)
Groundwater Performance Monitoring
Historical Laboratory Analytical Summary Table (Monitoring Well 8R)

	Total Arsenic	Dissolved Arsenic	Total Lead	Dissolved Lead	pH	Specific Conductivity	Aroclors									
							1016	1221	1232	1242	1248	1254	1260	1262	1268	
Units	mg/L	mg/L	mg/L	mg/L	s.u.	us/cm	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Class GA Standard	0.025	0.025	0.025	0.025	6.5-8.5	NA	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	
8R	Sep-02	-	-	0.004	0.001	9.21	933	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	-
	Dec-02	-	-	0.002	-	9.62	567	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	2.6	< 0.05	-	-
	Mar-03	-	-	0.001	0.002	8.82	551	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.30	< 0.05	-	-
	Jun-03	-	-	0.002	0.002	8.59	726	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.25	< 0.05	-	-
	Sep-03	-	-	0.002	< 0.001	8.05	441	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	5.9	< 0.05	-	-
	Dec-03	-	-	0.004	0.002	8.37	576	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	3.6	< 0.05	-	-
	Mar-04	-	-	0.002	< 0.001	7.91	531	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	2.6	< 0.05	-	-
	Jun-04	-	-	0.002	< 0.001	8.06	332	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.32	< 0.05	-	-
	Sep-04	-	-	< 0.001	0.002	7.14	811	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	-	-
	Dec-04	-	-	0.009	< 0.001	7.36	996	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.98	< 0.05	-	-
	Mar-05	-	-	< 0.001	< 0.001	7.76	1158	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1.2	< 0.05	-	-
	Jun-05	-	-	0.002	0.001	8.00	402	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	3.3	< 0.05	-	-
	Dec-05	-	-	0.001	0.001	7.67	893	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.63	< 0.05	-	-
	Jun-06	-	-	0.004	< 0.003	8.39	239	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.92	< 0.05	-	-
	Dec-06	-	-	0.210	< 0.003	7.46	549	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	9.3	< 0.05	-	-
	Jun-07	-	-	0.006	< 0.003	8.48	449	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	3.9	< 0.05	-	-
	Dec-07	-	-	< 0.003	< 0.003	8.47	1113	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.70	< 1.00	-	-
	Jun-08	-	-	0.210	< 0.003	7.81	1459	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	6.4	< 0.05	-	-
	Dec-08	-	-	< 0.003	< 0.003	7.68	2668	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	-	-
	Jun-09	-	-	< 0.003	< 0.003	7.30	780	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	16	< 1.00	< 1.00	< 1.00
	Dec-09	-	-	< 0.003	< 0.003	7.10	1010	< 1.10	< 1.10	< 1.10	< 1.10	< 1.10	6.9	< 1.10	< 1.10	< 1.10
Jun-10	-	-	< 0.003	< 0.003	7.40	22	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	9.2	< 2.00	-	-	
Dec-10	-	-	< 0.003	< 0.003	7.40	11200	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	1.70 J	< 1.00	-	-	
Jun-11	0.013	0.013	< 0.003	< 0.003	7.10	10400	< 10	< 10	< 10	< 10	< 10	23	< 10	< 10	< 10	
Jun-12	0.016	0.012	< 0.050	< 0.050	6.90	15300	-	-	-	< 0.47	< 0.47	15	< 0.47	-	-	
Aug-12	0.016	< 0.010	< 0.050	< 0.050	6.90	12500	< 0.05	< 0.05	< 0.05	< 0.47	0.80	1.3	0.18 P	-	-	
Jun-13	< 0.010	0.016	< 0.050	< 0.050	6.46	> 20000	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	4.3	< 0.24	-	-	
Jun-14	0.018	0.030	< 0.050	< 0.050	6.60	720000	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	4.3	< 0.24	-	-	
Jun-15	< 0.100	< 0.500	< 0.100	< 0.500	7.50	> 20000	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	620	< 0.24	-	-	
Sep-15	-	-	-	-	-	-	< 0.47	< 0.50	< 0.47	< 0.47	1.1 P	6.4	< 0.47	-	-	
Jun-16	0.039	0.036	< 0.100	< 0.500	6.70	> 20000	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	130	< 0.24	-	-	
Aug-16	0.060	0.058	0.130	0.065	6.70	13100	< 50	< 50	< 50	< 50	< 50	76	< 50	-	-	
Apr-17	0.039	0.029	0.035	0.015	-	-	< 25	< 25	< 25	< 25	< 25	30	< 25	-	-	
Jun-17	0.070	0.060	< 0.050	< 0.050	6.72	14000	< 25	< 25	< 25	< 25	< 25	2600	< 25	-	-	
Jul-17	0.038	0.037	0.024	0.004	6.77	13700	< 50	< 50	< 50	< 50	< 50	160	< 50	-	-	
Jun-18	0.057	0.059	0.280	0.190	6.60	6700	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	35	< 0.50	-	-	
Jun-19	0.018	0.028	< 0.050	< 0.050	6.70	5500	< 9.4	< 9.4	< 9.4	< 9.4	< 9.4	210	< 9.4	-	-	
Jun-20	0.024	0.013	< 0.050	< 0.050	7.16	8265	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	4.4	< 0.25	-	-	
Jun-21	0.028	0.033	0.052	< 0.050	7.17	5485	< 0.47	< 0.47	< 0.47	< 0.47	< 0.47	13	< 0.47	-	-	

APPENDIX A
**Field Sampling Data Sheets/
Field Instrument Calibration Records**

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** B-281 (MS/MSD)
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70°S
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>6.02</u>
Measured Well Depth (feet)*:	13.03
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>112</u>

Measuring Point: Top of Riser
 Measured by: GJK
 Date: 6/7/21
 Time: 1126

*depth from measuring point

End purge: 1133

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 3.36
 Actual Volume of Water Purged (gallons): 2.25

Did well purge dry? No Yes
 Did well recover? No Yes

Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: GJK/GEC Time: 1000 Date: 6/8/21

SAMPLING DATA

Sample Appearance
 Color: cloudy Sediment: Fines
 Odor: _____

Field Measured Parameters

pH (Standard Units)	<u>6.99</u>	Sp. Conductivity (umhos/cm)	<u>3542</u>
Temperature (F)	<u>58.2</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):
Four bottles - T-Pb,As; D-Pb,As; PCBs (2) ms/msd

Samples Delivered to: _____ **Time:** _____ **Date:** _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** B-290
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70.5
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>5.20</u>
Measured Well Depth (feet)*:	10.26
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>0.81</u>

Measuring Point: Top of Riser
Measured by: 634
Date: 6/7/21
Time: 1156
End Purge: 1200

*depth from measuring point

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 2.43
Actual Volume of Water Purged (gallons): 1.85

Did well purge dry? No Yes
Did well recover? No Yes

Recovery Time: Oversight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: 634/BEC **Time:** 1037 **Date:** 6/8/21

SAMPLING DATA

Sample Appearance
Color: clear **Sediment:** none
Odor: none

Field Measured Parameters

pH (Standard Units)	<u>6.97</u>	Sp. Conductivity (umhos/cm)	<u>346.3</u>
Temperature (F)	<u>60.5</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):
Four bottles - T-Pb,As; D-Pb,As; PCBs (2)

Samples Delivered to: _____ **Time:** _____ **Date:** _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** B-291
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70.5
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>8.28</u>
Measured Well Depth (feet)*:	12.54
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>0.68</u>

Measuring Point: Top of Riser
 Measured by: GSJ
 Date: 6/7/21
 Time: 1310
End of Aug @ 1313

*depth from measuring point

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 2.04
 Actual Volume of Water Purged (gallons): 0.75

Did well purge dry? No Yes
 Did well recover? No Yes

Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: GSJ/GEC Time: 1228 Date: 6/8/21

SAMPLING DATA

Sample Appearance
 Color: cloudy Sediment: Fines/Suspends
 Odor: None

Field Measured Parameters

pH (Standard Units)	<u>7.05</u>	Sp. Conductivity (umhos/cm)	<u>898</u>
Temperature (F)	<u>54.5</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):
 Four bottles - T-Pb,As; D-Pb,As; PCBs (2)

Samples Delivered to: _____ **Time:** _____ **Date:** _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** B-401
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70.5
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>9.38</u> 11.34
Measured Well Depth (feet)*:	11.34
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>0.47</u>

Measuring Point: Top of Riser
 Measured by: 6J4
 Date: 6/7/21
 Time: 1247

*depth from measuring point

End Purge @ 1252

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 1.42
 Actual Volume of Water Purged (gallons): 0.5

Did well purge dry? No Yes
 Did well recover? No Yes

Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: 6J4/GEC Time: 1150 Date: 6/8/21

SAMPLING DATA

Sample Appearance
 Color: Brown tint / Hazy Sediment: Fine black suspended
 Odor: None

Field Measured Parameters

pH (Standard Units)	<u>7.12</u>	Sp. Conductivity (umhos/cm)	<u>1176</u>
Temperature (F)	<u>57.7</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):
4 Bottles - T-ph, AS, D-ph, AS ; 2XMB

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road SAMPLE LOCATION: B-402R
CLIENT: Metalico Aluminum Recovery, Inc. JOB #: 1206.002.007
Weather Conditions: Cloudy Temperature: 70-5

SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>3.42</u>
Measured Well Depth (feet)*:	<u>12.24</u>
Well Casing Diameter (inches):	<u>2</u>
Calculated Volume in Well Casing (gallons):	<u>1.41</u>

*depth from measuring point

Measuring Point: Top of Riser
Measured by: 658
Date: 6/7/21
Time: 1400

End purge @ 1405

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
Non-dedicated Foot Valve Peristaltic Pump
Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 4.23

Actual Volume of Water Purged (gallons): 2.25

Did well purge dry? No Yes
Did well recover? No Yes

Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
Non-dedicated Foot Valve Peristaltic Pump
Dedicated Bladder Pump

Sampled by: 658/GEC Time: 1353 Date: 6/8/21

SAMPLING DATA

Sample Appearance
Color: Sl. Haze Sediment: Fines present
Odor: None

Field Measured Parameters

pH (Standard Units)	<u>7.65</u>	Sp. Conductivity (umhos/cm)	<u>1712</u>
Temperature (F)	<u>62.7</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	<u>-</u>

Samples Collected (Number/Type):
Four bottles - T-Pb,As; D-Pb,As; PCBs (2)

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** B-403
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: Cloudy **Temperature:** 70°S
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>2.33</u>
Measured Well Depth (feet)*:	11.26
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>1.43</u>

Measuring Point: Top of Riser
 Measured by: 654
 Date: 6/7/21
 Time: 1223

*depth from measuring point

End Purge: 1230

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 4.3

Actual Volume of Water Purged (gallons): 1.75

Did well purge dry? No Yes
 Did well recover? No Yes

Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: 654/6EC Time: 1114 Date: 6/8/21

SAMPLING DATA

Sample Appearance

Color: Yellowish/brown cloudy font Sediment: Fines present/settleables
 Odor: none

Field Measured Parameters

pH (Standard Units)	<u>7.22</u>	Sp. Conductivity (umhos/cm)	<u>1017</u>
Temperature (F)	<u>56.9</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):

Four bottles - T-Pb,As; D-Pb,As; PCBs (2)

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** B-404
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70.5
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>5.89</u>
Measured Well Depth (feet)*:	16.14
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>1.64</u>

Measuring Point: Top of Riser
 Measured by: 654
 Date: 6/7/21
 Time: 1335

*depth from measuring point

End Purge: 1346

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 4.92

Actual Volume of Water Purged (gallons): 5.0

Did well purge dry? No Yes

Did well recover? No Yes

Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: 654/GEC Time: 1314 Date: 6/8/21

SAMPLING DATA

Sample Appearance
 Color: Clear Sediment: Some settleables
 Odor: None

Field Measured Parameters

pH (Standard Units)	<u>6.99</u>	Sp. Conductivity (umhos/cm)	<u>373</u>
Temperature (F)	<u>62.5</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	

Samples Collected (Number/Type):

Four bottles - T-Pb,As; D-Pb,As; PCBs (2)

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** MW-8R ^{Dupe-X}
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70°S
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:	<u>2.91</u>
Measured Well Depth (feet)*:	10.00
Well Casing Diameter (inches):	2
Calculated Volume in Well Casing (gallons):	<u>613</u>

Measuring Point: Top of Riser
 Measured by: 634
 Date: 6/7/21
 Time: 1427

*depth from measuring point

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): 3.4
 Actual Volume of Water Purged (gallons): 2.5

Did well purge dry? No Yes
 Did well recover? No Yes Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: 634/6EC Time: 1427 Date: 6/8/21

SAMPLING DATA

Sample Appearance: _____
 Color: white haze/cloudy Sediment: lines
 Odor: cutting oil / petrol.

Field Measured Parameters

pH (Standard Units)	<u>7.17</u>	Sp. Conductivity (umhos/cm)	<u>5485</u>
Temperature (F)	<u>68.5</u>	Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type):
Eight bottles - T-Pb,As; D-Pb,As; PCBs (2) + Dupe-X

Samples Delivered to: _____ Time: _____ Date: _____

COMMENTS:

Flush mount cover missing - destroyed by machine
NO cover so well casing was filled with metal
shavings and other dirt/material

Barton & Loguidice

FIELD SAMPLING DATA SHEET

SITE: Metalico - Thompson Road **SAMPLE LOCATION:** Equipment Blank
CLIENT: Metalico Aluminum Recovery, Inc. **JOB #:** 1206.002.007
Weather Conditions: cloudy **Temperature:** 70's
SAMPLE TYPE: Groundwater Surface Water Other (specify): _____
 Sediment Leachate

WATER LEVEL DATA

Static Water Level (feet)*:		Measuring Point:	_____
Measured Well Depth (feet)*:		Measured by:	_____
Well Casing Diameter (inches):		Date:	_____
Calculated Volume in Well Casing (gallons):		Time:	_____

*depth from measuring point

PURGING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Calculated Volume Of Water To Be Purged (gallons): _____
 Actual Volume of Water Purged (gallons): _____

Did well purge dry? No Yes
 Did well recover? No Yes Recovery Time: _____

SAMPLING METHOD

Equipment: Bailer Submersible Pump Air Lift System
 Non-dedicated Foot Valve Peristaltic Pump
 Dedicated Bladder Pump

Sampled by: 6SK/GEC Time: 1402 Date: 6/8/21

SAMPLING DATA

Sample Appearance
 Color: - _____ Sediment: - _____
 Odor: - _____

Field Measured Parameters

pH (Standard Units)	<u>5.78</u>	Sp. Conductivity (umhos/cm)	<u>2.18</u>
Temperature (F)	<u>80.1</u>	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type):
Four bottles - T-Pb,As; D-Pb,As; PCBs (2)

Samples Delivered to: _____ **Time:** _____ **Date:** _____

COMMENTS:

Barton & Loguidice

Calibration Record

Project No: 1206.002.007
 Calibrated By: GSF

Date: 6/8/21
 Time: 0940

pH Instrument Model: Myron 6P

Standard Solution	Calibration Reading	Acceptable Range
pH 4:	3.98 → 4.00	(+/- 1.0 pH, pH 3.0 - 5.0) ✓
pH 7:	6.92 → 7.00	(+/- 1.5 pH, pH 5.5 - 8.5) ✓
pH 10:	10.09 → 10.00	(+/- 1.0 pH, pH 9.0 - 11.0) ✓

Sp. Conductivity Instrument Model: Myron 6P

Standard Solution	Calibration Reading	Acceptable Range
7000 uS	7013 → 7000	(+/- 1.0 % Error) ✓

~~ORP Instrument Model: Myron 6P~~

Standard Solution	Calibration Reading	Acceptable Range
		Myron 6p ORP calibration is calculated by pH and SPC values

~~Turbidimeter Model: Lamotte 2020t~~

Standard Solution	Calibration Reading	Acceptable Range
0.0	Blank	Blank 0.0 NTU
1.0		(0.5-1.5 NTU)
10.0		(8-12 NTU)

~~Dissolved Oxygen Meter Model: YSI EcoSense~~

Saturated Air	Air Pressure (MB)	Calibration Reading	Acceptable Range
100%			(+/- 5.0% Error, 95-105%)

Comments pH, Temp and Sp. cond only

Turb, ORP, Do not required

CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

SR#

T051259

014, 015, 016, 017, 018, 019, 020,
021, 022, 023

1565 Jefferson Road, Bldg 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 / FAX (585) 288-8475

www.alsglobal.com



Project Name: CAMU
 Project Number: 1206.006.007
 Company / Address: Barton & Loguidice, PC
 11 Centre Park Suite 203
 Rochester NY, 14614
 Report To: Dave Hannay / *Matt Stoddy*
 Phone #: 585-325-7198
 Sample Signature: *Grant Young*
 Samples Printed Name: Grant Young
 FAX #:
 NUMBER OF CONTAINERS: 7D, 180D

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	8082A / PCB LL	5010C / As D	5010C / As T	5010C / Pb D	5010C / Pb T	Remarks
1. B-281	QC	6/8/21	1000	Liquid	X	X	X	X	X	MS/MSD
2. B-290			1037	Liquid	X	X	X	X	X	
3. B-291			1228	Liquid	X	X	X	X	X	
4. B-401			1150	Liquid	X	X	X	X	X	
5. B-402R			1353	Liquid	X	X	X	X	X	
6. B-403			1114	Liquid	X	X	X	X	X	
7. B-404			1314	Liquid	X	X	X	X	X	
8. MW-8R			1427	Liquid	X	X	X	X	X	
9. Equipment Blank			1402	Liquid	X	X	X	X	X	
10. Dupe-X				Liquid	X	X	X	X	X	

Special Instructions/Comments:

Turnaround Requirements
 ___ RUSH (SURCHARGES APPLY)
 Standard
 REQUESTED FAX DATE _____
 Requested Report Date _____

Report Requirements
 I. Results Only
 II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
 ___ III. Results + QC and Calibration Summaries
 ___ IV. Data Validation Report with Raw Data
 EData ___ Yes ___ No

Invoice Information
 P.O.# _____
 Bill To: *Metekto*

Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: <i>Grant Young</i>	Signature: <i>Grant Young</i>	Signature: _____	Signature: _____
Printed Name: Grant Young	Printed Name: Grant Young	Printed Name: _____	Printed Name: _____
Firm: ALS	Firm: ALS	Firm: _____	Firm: _____
Date/Time: 6/8/21/1030	Date/Time: 6/8/21/1030	Date/Time: _____	Date/Time: _____

Handwritten signature

APPENDIX B
Analytical Laboratory Reports
(ALS Environmental)



June 30, 2021

Service Request No:R2105670

Mr. Jeff Reed
Barton & Loguidice, PC
443 Electronics Parkway
Liverpool, NY 13088

Laboratory Results for: CAMU

Dear Mr.Reed,

Enclosed are the results of the sample(s) submitted to our laboratory June 08, 2021
For your reference, these analyses have been assigned our service request number **R2105670**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7471. You may also contact me via email at Brady.Kalkman@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Brady Kalkman
Project Manager

CC: Ginny Hopkins

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | **FAX** +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Client: Metalico Aluminum Recovery
Project: CAMU
Sample Matrix: Water

Service Request: R2105670
Date Received: 06/08/2021

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty water samples were received for analysis at ALS Environmental on 06/08/2021. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatile GC:

Method 8082A, 06/17/2021: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.


Method 8082A, 06/17/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8082A, 06/30/2021: The control limit was exceeded for one or more surrogates in the Continuing Calibration Verification (CCV). The surrogates were within acceptance limits for the associated field samples. The data quality was not significantly affected and no further corrective action was taken.

Method 8082A, 729389s: The control limits were exceeded for one or more surrogates due to matrix interferences. A re-extraction and reanalysis was performed, but produced similar results. No further corrective action was required.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 06/30/2021



SAMPLE DETECTION SUMMARY

CLIENT ID: B-290	Lab ID: R2105670-003
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Total	22			10	ug/L	6010C

CLIENT ID: MW-8R	Lab ID: R2105670-015
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Total	28			10	ug/L	6010C
Lead, Total	52			50	ug/L	6010C
Aroclor 1254	13			0.47	ug/L	8082A

CLIENT ID: MW-8R Diss	Lab ID: R2105670-016
------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	33			10	ug/L	6010C

CLIENT ID: Dupe-X	Lab ID: R2105670-019
--------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Total	29			10	ug/L	6010C
Lead, Total	54			50	ug/L	6010C
Aroclor 1254	8.7			0.47	ug/L	8082A

CLIENT ID: Dupe-X Diss	Lab ID: R2105670-020
-------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	33			10	ug/L	6010C



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request:R2105670

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2105670-001	B-281	6/8/2021	1000
R2105670-002	B-281 Diss	6/8/2021	1000
R2105670-003	B-290	6/8/2021	1037
R2105670-004	B-290 Diss	6/8/2021	1037
R2105670-005	B-291	6/8/2021	1228
R2105670-006	B-291 Diss	6/8/2021	1228
R2105670-007	B-401	6/8/2021	1150
R2105670-008	B-401 Diss	6/8/2021	1150
R2105670-009	B-402R	6/8/2021	1353
R2105670-010	B-402R Diss	6/8/2021	1353
R2105670-011	B-403	6/8/2021	1114
R2105670-012	B-403 Diss	6/8/2021	1114
R2105670-013	B-404	6/8/2021	1314
R2105670-014	B-404 Diss	6/8/2021	1314
R2105670-015	MW-8R	6/8/2021	1427
R2105670-016	MW-8R Diss	6/8/2021	1427
R2105670-017	Equipment Blank	6/8/2021	1402
R2105670-018	Equipment Blank Diss	6/8/2021	1402
R2105670-019	Dupe-X	6/8/2021	
R2105670-020	Dupe-X Diss	6/8/2021	



CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

1565 Jefferson Road, Bldg 300, Suite 360, Rochester, NY 14623
 Phone (585) 288-5380 / FAX (585) 288-8475
 www.alsglobal.com

014, 015, 016, 017, 018, 019, 020,
 021, 022, 023

SR# _____

T051259

Project Name: CAMU		NUMBER OF CONTAINERS	7D		180D		Remarks	
Project Number: 1206.006.007	Report To: Dave Hanny / <i>Matt Strodel</i>		8082A / PCB LL	5010C / As D	5010C / As T	5010C / Pb D		5010C / Pb T
Company / Address: Barton & Loguidice, PC 11 Centre Park Suite 203 Rochester NY, 14614								
Phone #: 585-325-7189	FAX #:							
Sampler Signature: <i>Grant Young</i>	Sampler Printed Name: Grant Young							

CLIENT SAMPLE ID	LABID	SAMPLING Date Time	Matrix							
1. B-281	QC	6/8/21 1000	Liquid	8	X	X	X	X	X	MS/MSD
2. B-290		1037	Liquid	4	X	X	X	X	X	
3. B-291		1228	Liquid	4	X	X	X	X	X	
4. B-401		1150	Liquid	4	X	X	X	X	X	
5. B-402R		1353	Liquid	4	X	X	X	X	X	
6. B-403		1114	Liquid	4	X	X	X	X	X	
7. B-404		1314	Liquid	4	X	X	X	X	X	
8. MW-8R		1427	Liquid	4	X	X	X	X	X	
9. Equipment Blank		1402	Liquid	4	X	X	X	X	X	
10. Dupe-X		✓ -	Liquid	4	X	X	X	X	X	

Special Instructions/Comments:	Turnaround Requirements	Report Requirements	Invoice Information
	___ RUSH (SURCHARGES APPLY)	___ I. Results Only	P.O.# _____
	<input checked="" type="checkbox"/> Standard	<input checked="" type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required)	Bill To: <i>Metals</i>
	REQUESTED FAX DATE _____	___ III. Results + QC and Calibration Summaries	_____
Requested Report Date _____	___ IV. Data Validation Report with Raw Data	_____	
	EData ___ Yes ___ No	_____	

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature <i>Grant Young</i>	Signature <i>Grant Young</i>	Signature	Signature	Signature	Signature
Printed Name Grant Young	Printed Name Grant Young	Printed Name	Printed Name	Printed Name	Printed Name
Firm B+L	Firm ALS	Firm	Firm	Firm	Firm
Date/Time 6/8/21 @ 1030	Date/Time 6/8/21 / 1030	Date/Time	Date/Time	Date/Time	Date/Time

R2105670 **5**
 Barton & Loguidice, PC
 CAMU



Cooler Receipt and Preservation Check Form

R2105670

5

Barton & Loguidice, PC
CAMU



Project/Client B+L Folder Number _____

Cooler received on 6/8/21 by: @

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>(N)</u>
2	Custody papers properly completed (ink, signed)?	<u>(Y)</u> N
3	Did all bottles arrive in good condition (unbroken)?	<u>(Y)</u> N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>(Y)</u> N

5a	Perchlorate samples have required headspace?	Y N <u>(NA)</u>
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y N <u>(NA)</u>
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as: Bulk Encore 5035set	<u>(NA)</u>

3. Temperature Readings Date: 6/8/21 Time: 16:35 ID: IR#7 (IR#11) From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>19.3</u>	<u>11.4</u>	<u>12.3</u>				
Within 0-6°C?	Y <u>(N)</u>	Y <u>(N)</u>	Y <u>(N)</u>	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: Rm2 by @ on 6/8/21 at 1642
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 6/9/21 Time: 1346 by: AW

- 9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- 10. Did all bottle labels and tags agree with custody papers? YES NO
- 11. Were correct containers used for the tests indicated? YES NO
- 12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
- 13. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
<u>2</u>	<u>7234R</u>	HNO ₃	<u>✓</u>		<u>1120092</u>					
<u>2</u>		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 21-0325 042621-IDC

Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: AW
PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

<p>U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.</p> <p>J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).</p> <p>B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.</p> <p>E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.</p> <p>E Organics- Concentration has exceeded the calibration range for that specific analysis.</p> <p>D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.</p> <p>* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.</p> <p>H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.</p> <p># Spike was diluted out.</p>	<p>+ Correlation coefficient for MSA is <0.995.</p> <p>N Inorganics- Matrix spike recovery was outside laboratory limits.</p> <p>N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.</p> <p>S Concentration has been determined using Method of Standard Additions (MSA).</p> <p>W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.</p> <p>P Concentration >40% difference between the two GC columns.</p> <p>C Confirmed by GC/MS</p> <p>Q DoD reports: indicates a pesticide/Aroclor is not confirmed (>100% Difference between two GC columns).</p> <p>X See Case Narrative for discussion.</p> <p>MRL Method Reporting Limit. Also known as:</p> <p>LOQ Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.</p> <p>MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).</p> <p>LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.</p> <p>ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.</p>
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Rochester Lab ID # for State Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request: R2105670

Sample Name: B-281
Lab Code: R2105670-001
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: B-281 Diss
Lab Code: R2105670-002
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

Sample Name: B-290
Lab Code: R2105670-003
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: B-290 Diss
Lab Code: R2105670-004
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request: R2105670

Sample Name: B-291
Lab Code: R2105670-005
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: B-291 Diss
Lab Code: R2105670-006
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

Sample Name: B-401
Lab Code: R2105670-007
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: B-401 Diss
Lab Code: R2105670-008
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request: R2105670

Sample Name: B-402R
Lab Code: R2105670-009
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCUC

Analyzed By
NMANSEN
JMISIUREWICZ

Sample Name: B-402R
Lab Code: R2105670-009.R01
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
8082A

Extracted/Digested By
KSERCUC

Analyzed By
BALLGEIER

Sample Name: B-402R Diss
Lab Code: R2105670-010
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

Sample Name: B-403
Lab Code: R2105670-011
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCUC

Analyzed By
NMANSEN
BALLGEIER

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request: R2105670

Sample Name: B-403 Diss
Lab Code: R2105670-012
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

Sample Name: B-404
Lab Code: R2105670-013
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: B-404 Diss
Lab Code: R2105670-014
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

Sample Name: MW-8R
Lab Code: R2105670-015
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request: R2105670

Sample Name: MW-8R
Lab Code: R2105670-015.R01
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
8082A

Extracted/Digested By
KSERCU

Analyzed By
BALLGEIER

Sample Name: MW-8R Diss
Lab Code: R2105670-016
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

Sample Name: Equipment Blank
Lab Code: R2105670-017
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: Equipment Blank Diss
Lab Code: R2105670-018
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008

Service Request: R2105670

Sample Name: Dupe-X
Lab Code: R2105670-019
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C
8082A

Extracted/Digested By
NMANSEN
KSERCU

Analyzed By
NMANSEN
BALLGEIER

Sample Name: Dupe-X
Lab Code: R2105670-019.R01
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
8082A

Extracted/Digested By
KSERCU

Analyzed By
BALLGEIER

Sample Name: Dupe-X Diss
Lab Code: R2105670-020
Sample Matrix: Water

Date Collected: 06/8/21
Date Received: 06/8/21

Analysis Method
6010C

Extracted/Digested By
NMANSEN

Analyzed By
NMANSEN



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	



Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 10:00
Date Received: 06/08/21 16:30

Sample Name: B-281
Lab Code: R2105670-001

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 19:43	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 19:43	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 19:43	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 19:43	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 19:43	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 19:43	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 19:43	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	24	10 - 125	06/17/21 19:43	
Tetrachloro-m-xylene	44	18 - 126	06/17/21 19:43	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 10:37
Date Received: 06/08/21 16:30

Sample Name: B-290
Lab Code: R2105670-003

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 20:44	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 20:44	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 20:44	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 20:44	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 20:44	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 20:44	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 20:44	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	28	10 - 125	06/17/21 20:44	
Tetrachloro-m-xylene	49	18 - 126	06/17/21 20:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 12:28
Date Received: 06/08/21 16:30

Sample Name: B-291
Lab Code: R2105670-005

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 21:04	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 21:04	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 21:04	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 21:04	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 21:04	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 21:04	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 21:04	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	14	10 - 125	06/17/21 21:04	
Tetrachloro-m-xylene	38	18 - 126	06/17/21 21:04	

ALS Group USA, Corp.
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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 11:50
Date Received: 06/08/21 16:30

Sample Name: B-401
Lab Code: R2105670-007

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 21:24	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 21:24	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 21:24	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 21:24	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 21:24	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 21:24	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 21:24	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	22	10 - 125	06/17/21 21:24	
Tetrachloro-m-xylene	44	18 - 126	06/17/21 21:24	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 13:53
Date Received: 06/08/21 16:30

Sample Name: B-402R
Lab Code: R2105670-009

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 21:44	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 21:44	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 21:44	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 21:44	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 21:44	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 21:44	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 21:44	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	9 *	10 - 125	06/17/21 21:44	*
Tetrachloro-m-xylene	53	18 - 126	06/17/21 21:44	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 11:14
Date Received: 06/08/21 16:30

Sample Name: B-403
Lab Code: R2105670-011

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 08:31	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 08:31	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 08:31	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 08:31	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 08:31	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 08:31	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 08:31	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	14	10 - 125	06/17/21 08:31	
Tetrachloro-m-xylene	42	18 - 126	06/17/21 08:31	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 13:14
Date Received: 06/08/21 16:30

Sample Name: B-404
Lab Code: R2105670-013

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 08:50	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 08:50	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 08:50	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 08:50	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 08:50	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 08:50	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 08:50	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	37	10 - 125	06/17/21 08:50	
Tetrachloro-m-xylene	65	18 - 126	06/17/21 08:50	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 14:27
Date Received: 06/08/21 16:30

Sample Name: MW-8R
Lab Code: R2105670-015

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.47 U	0.47	10	06/22/21 19:04	6/10/21	
Aroclor 1221	0.47 U	0.47	10	06/22/21 19:04	6/10/21	
Aroclor 1232	0.47 U	0.47	10	06/22/21 19:04	6/10/21	
Aroclor 1242	0.47 U	0.47	10	06/22/21 19:04	6/10/21	
Aroclor 1248	0.47 U	0.47	10	06/22/21 19:04	6/10/21	
Aroclor 1254	13	0.47	10	06/22/21 19:04	6/10/21	
Aroclor 1260	0.47 U	0.47	10	06/22/21 19:04	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	9 *	10 - 125	06/22/21 19:04	*
Tetrachloro-m-xylene	5 *	18 - 126	06/22/21 19:04	*

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21 14:02
Date Received: 06/08/21 16:30

Sample Name: Equipment Blank
Lab Code: R2105670-017

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/17/21 09:30	6/10/21	
Aroclor 1221	0.047 U	0.047	1	06/17/21 09:30	6/10/21	
Aroclor 1232	0.047 U	0.047	1	06/17/21 09:30	6/10/21	
Aroclor 1242	0.047 U	0.047	1	06/17/21 09:30	6/10/21	
Aroclor 1248	0.047 U	0.047	1	06/17/21 09:30	6/10/21	
Aroclor 1254	0.047 U	0.047	1	06/17/21 09:30	6/10/21	
Aroclor 1260	0.047 U	0.047	1	06/17/21 09:30	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	34	10 - 125	06/17/21 09:30	
Tetrachloro-m-xylene	66	18 - 126	06/17/21 09:30	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21
Date Received: 06/08/21 16:30

Sample Name: Dupe-X
Lab Code: R2105670-019

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.47 U	0.47	10	06/22/21 19:23	6/10/21	
Aroclor 1221	0.47 U	0.47	10	06/22/21 19:23	6/10/21	
Aroclor 1232	0.47 U	0.47	10	06/22/21 19:23	6/10/21	
Aroclor 1242	0.47 U	0.47	10	06/22/21 19:23	6/10/21	
Aroclor 1248	0.47 U	0.47	10	06/22/21 19:23	6/10/21	
Aroclor 1254	8.7	0.47	10	06/22/21 19:23	6/10/21	
Aroclor 1260	0.47 U	0.47	10	06/22/21 19:23	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	0 *	10 - 125	06/22/21 19:23	*
Tetrachloro-m-xylene	2 *	18 - 126	06/22/21 19:23	*



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-281
Lab Code: R2105670-001

Service Request: R2105670
Date Collected: 06/08/21 10:00
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 00:17	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 00:17	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-281 Diss
Lab Code: R2105670-002

Service Request: R2105670
Date Collected: 06/08/21 10:00
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 00:33	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 00:33	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-290
Lab Code: R2105670-003

Service Request: R2105670
Date Collected: 06/08/21 10:37
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	22	ug/L	10	1	06/17/21 18:25	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 00:37	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-290 Diss
Lab Code: R2105670-004

Service Request: R2105670
Date Collected: 06/08/21 10:37
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 00:40	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 00:40	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-291
Lab Code: R2105670-005

Service Request: R2105670
Date Collected: 06/08/21 12:28
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 00:50	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 00:50	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-291 Diss
Lab Code: R2105670-006

Service Request: R2105670
Date Collected: 06/08/21 12:28
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 00:53	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 00:53	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-401
Lab Code: R2105670-007

Service Request: R2105670
Date Collected: 06/08/21 11:50
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 00:56	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 00:56	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-401 Diss
Lab Code: R2105670-008

Service Request: R2105670
Date Collected: 06/08/21 11:50
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 00:59	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 00:59	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-402R
Lab Code: R2105670-009

Service Request: R2105670
Date Collected: 06/08/21 13:53
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 01:03	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 01:03	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-402R Diss
Lab Code: R2105670-010

Service Request: R2105670
Date Collected: 06/08/21 13:53
Date Received: 06/08/21 16:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 01:06	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 01:06	06/14/21	

ALS Group USA, Corp.
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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-403
Lab Code: R2105670-011

Service Request: R2105670
Date Collected: 06/08/21 11:14
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 01:09	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 01:09	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-403 Diss
Lab Code: R2105670-012

Service Request: R2105670
Date Collected: 06/08/21 11:14
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 01:12	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 01:12	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-404
Lab Code: R2105670-013

Service Request: R2105670
Date Collected: 06/08/21 13:14
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 01:16	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 01:16	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: B-404 Diss
Lab Code: R2105670-014

Service Request: R2105670
Date Collected: 06/08/21 13:14
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 01:19	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 01:19	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: MW-8R
Lab Code: R2105670-015

Service Request: R2105670
Date Collected: 06/08/21 14:27
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	28	ug/L	10	1	06/16/21 01:29	06/14/21	
Lead, Total	6010C	52	ug/L	50	1	06/16/21 01:29	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: MW-8R Diss
Lab Code: R2105670-016

Service Request: R2105670
Date Collected: 06/08/21 14:27
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	33	ug/L	10	1	06/16/21 01:32	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 01:32	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: Equipment Blank
Lab Code: R2105670-017

Service Request: R2105670
Date Collected: 06/08/21 14:02
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 01:35	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 01:35	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: Equipment Blank Diss
Lab Code: R2105670-018

Service Request: R2105670
Date Collected: 06/08/21 14:02
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 01:39	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 01:39	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: Dupe-X
Lab Code: R2105670-019

Service Request: R2105670
Date Collected: 06/08/21
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	29	ug/L	10	1	06/16/21 01:42	06/14/21	
Lead, Total	6010C	54	ug/L	50	1	06/16/21 01:42	06/14/21	

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: Dupe-X Diss
Lab Code: R2105670-020

Service Request: R2105670
Date Collected: 06/08/21
Date Received: 06/08/21 16:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	33	ug/L	10	1	06/16/21 01:45	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 01:45	06/14/21	



QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Semivolatile Organic Compounds by GC

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ALS Group USA, Corp.
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QA/QC Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670

SURROGATE RECOVERY SUMMARY
Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Extraction Method: EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10-125	18-126
B-281	R2105670-001	24	44
B-290	R2105670-003	28	49
B-291	R2105670-005	14	38
B-401	R2105670-007	22	44
B-402R	R2105670-009	9*	53
B-403	R2105670-011	14	42
B-404	R2105670-013	37	65
MW-8R	R2105670-015	9*	5*
Equipment Blank	R2105670-017	34	66
Dupe-X	R2105670-019	0*	2*
Method Blank	RQ2106579-01	55	58
Lab Control Sample	RQ2106579-02	68	71
Duplicate Lab Control Sample	RQ2106579-03	61	61
B-281 MS	RQ2106579-04	47	68
B-281 DMS	RQ2106579-05	28	66

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: 06/08/21
Date Received: 06/08/21
Date Analyzed: 06/17/21
Date Extracted: 06/10/21

Duplicate Matrix Spike Summary
Low Level Polychlorinated Biphenyls (PCBs) by GC

Sample Name: B-281
Lab Code: R2105670-001
Analysis Method: 8082A
Prep Method: EPA 3510C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike RQ2106579-04		Duplicate Matrix Spike RQ2106579-05		% Rec Limits	RPD	RPD Limit	
			Spike Amount	% Rec	Result	Spike Amount				% Rec
Aroclor 1016	0.025 U	0.336	0.467	72	0.327	0.490	67	13-146	3	30
Aroclor 1260	0.025 U	0.329	0.467	70	0.357	0.490	73	10-135	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2106579-01

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.050 U	0.050	1	06/17/21 18:43	6/10/21	
Aroclor 1221	0.050 U	0.050	1	06/17/21 18:43	6/10/21	
Aroclor 1232	0.050 U	0.050	1	06/17/21 18:43	6/10/21	
Aroclor 1242	0.050 U	0.050	1	06/17/21 18:43	6/10/21	
Aroclor 1248	0.050 U	0.050	1	06/17/21 18:43	6/10/21	
Aroclor 1254	0.050 U	0.050	1	06/17/21 18:43	6/10/21	
Aroclor 1260	0.050 U	0.050	1	06/17/21 18:43	6/10/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	55	10 - 125	06/17/21 18:43	
Tetrachloro-m-xylene	58	18 - 126	06/17/21 18:43	

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QA/QC Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Analyzed: 06/17/21

Duplicate Lab Control Sample Summary
Low Level Polychlorinated Biphenyls (PCBs) by GC

Units:ug/L
Basis:NA

Analyte Name	Lab Control Sample				Duplicate Lab Control Sample					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	8082A	0.372	0.500	74	0.349	0.500	70	24-119	6	30
Aroclor 1260	8082A	0.402	0.500	80	0.363	0.500	73	23-115	10	30



Metals

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Analytical Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R2105670-MB

Service Request: R2105670
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Dissolved	6010C	10 U	ug/L	10	1	06/16/21 00:11	06/14/21	
Arsenic, Total	6010C	10 U	ug/L	10	1	06/16/21 00:11	06/14/21	
Lead, Dissolved	6010C	50 U	ug/L	50	1	06/16/21 00:11	06/14/21	
Lead, Total	6010C	50 U	ug/L	50	1	06/16/21 00:11	06/14/21	

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QA/QC Report

Client: Metalico Aluminum Recovery
Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request:R2105670
Date Collected:06/08/21
Date Received:06/08/21
Date Analyzed:6/16/21

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: B-281 **Units:**ug/L
Lab Code: R2105670-001 **Basis:**NA

Analyte Name	Method	Sample Result	Result	Matrix Spike R2105670-001MS		Duplicate Matrix Spike R2105670-001DMS		% Rec	% Rec Limits	RPD	RPD Limit
				Spike Amount	% Rec	Result	Spike Amount				
Arsenic, Total	6010C	6 U	40	40	100	42	40	105	75-125	5	20
Lead, Total	6010C	3 U	495	500	99	492	500	98	75-125	<1	20

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Project: CAMU/1206.006.008
Sample Matrix: Water

Service Request: R2105670
Date Analyzed: 06/16/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2105670-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Dissolved	6010C	39	40	96	80-120
Arsenic, Total	6010C	39	40	96	80-120
Lead, Dissolved	6010C	504	500	101	80-120
Lead, Total	6010C	504	500	101	80-120

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